

The Planning Act 2008

North Falls Offshore Wind Farm

Examining Authority's/ Inspector's Report
of Findings and Conclusions
and

Recommendation to the Secretary of State for
Energy Security and Net Zero

Examining Authority

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OVERVIEW

File Ref: EN010119.

The Application, dated 26 July 2024, was made under section 37 of the Planning Act 2008.

The Applicant is North Falls Offshore Wind Farm Ltd. The Application was accepted for Examination on 22 August 2024. The Preliminary Meeting took place on 28 January 2025 and the Examination closed on 28 July 2025.

The Proposed Development comprises an offshore wind farm with up to 57 wind turbines and up to two offshore substation platforms and up to one offshore converter platform, which would be located off the East Anglian coastline in the southern North Sea. Landfall would be on the Essex coastline with onshore export cables connecting to the proposed onshore substation, with a connection to the new East Anglian Connection Node (EACN) which is proposed by National Grid Electricity Transmission Plc (NGET) as part of its Norwich to Tilbury project.

The North Falls Offshore Wind Farm (NFOWF) shares the same proposed National Grid connection point and connection date of October 2030 with the Five Estuaries Offshore Wind Farm (VEOWF). The draft Development Consent Order (dDCO) [\[REP8-005\]](#) for NFOWF includes an alternative Option 3 for an offshore electrical connection, supplied by a third party. Both NFOWF and VEOWF are being developed as two distinct projects but have worked together to align landfall locations for the export cables to come ashore, develop a shared onshore export cable corridor and select a single site for both onshore substations to co-locate. The Examination of the VEOWF began on 18 September 2024 and was completed on 17 March 2025. An application from NGET for the Norwich to Tilbury project, which includes the EACN, was accepted for Examination on 26 September 2025.

SUMMARY OF RECOMMENDATION:

The Examining Authority recommends that the Secretary of State should make the Order in the form attached, subject to the considerations identified in the Final Conclusions.

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ERRATA SHEET – North Falls Offshore Wind Farm Ref. EN010119

Examining authority's Report of Findings and Conclusions and Recommendation to the Secretary of State for the Department of Energy Security and Net Zero, dated 28 October 2025

Corrections agreed by the Examining Authority prior to a decision being made

PDF Page No.	Para	Error	Correction
15	3.1.3	"North Falls Offshore <u>Windfarm</u> "	"North Falls Offshore <u>Wind Farm</u> "
48	4.2.17	Hyperlink to [RR-203] is incorrect; it is not from Little Bromley Parish as indicated in the paragraph.	The link should be inserted to the Little Bromley Parish Council Relevant Representation: Relevant Representations Representation by Little Bromley Parish Council
91	4.5.20	Paragraph number missing after 4.5.20.	The paragraph number should be added after the bullet points of paragraph 4.5.20.
91	4.5.23	"Relevant Representations (RRs) were made by persons with land interests and members of the public in respect of the impact of the Proposed Development on mental health. RRs from T & R Fairley Farming Partnership [RR-324] and T Fairley & Sons Ltd [RR-326] raised concerns about the impact on physical and mental health living next to a substation"	Should include a full stop at the end of the paragraph. "Relevant Representations (RRs) were made by persons with land interests and members of the public in respect of the impact of the Proposed Development on mental health. RRs from T & R Fairley Farming Partnership [RR-324] and T Fairley & Sons Ltd [RR-326] raised concerns about the impact on physical and mental health living next to a substation."
92	4.5.26	"The ExA in ExQ2 Q13.0.2 [PD-012] asked the Applicant what opportunities there	Should include a full stop at the end of the paragraph.

PDF Page No.	Para	Error	Correction
		would be to enhance health and wellbeing. The Applicant responded to ExQ2 Q13.0.2 [REP5-054] that the assessment in ES Chapter 28 [APP-042] was that the improvements to the socio-economic circumstances of residents, namely the opportunities for employment, as a result of the Proposed Development would have a positive benefit on mental and physical health”	“The ExA in ExQ2 Q13.0.2 [PD-012] asked the Applicant what opportunities there would be to enhance health and wellbeing. The Applicant responded to ExQ2 Q13.0.2 [REP5-054] that the assessment in ES Chapter 28 [APP-042] was that the improvements to the socio-economic circumstances of residents, namely the opportunities for employment, as a result of the Proposed Development would have a positive benefit on mental and physical health.”
92	4.5.27	“The ExA is satisfied that the Applicant has adequately addressed the potential impact on mental health and that the measures proposed to mitigate the impacts on mental health and manage the effects of disruption on local residents are sufficient so that there would not be significant effects on mental health.”	There should be no space at the end of the paragraph before the full stop. “The ExA is satisfied that the Applicant has adequately addressed the potential impact on mental health and that the measures proposed to mitigate the impacts on mental health and manage the effects of disruption on local residents are sufficient so that there would not be significant effects on mental health.”
92	4.5.31	“The ExA concurs with ES Chapter 28 Human Health [APP-042] that the significance of the Proposed Development on human health would not be significant”	Should include a full stop at the end of the paragraph. “The ExA concurs with ES Chapter 28 Human Health [APP-042] that the significance of the Proposed Development on human health would not be significant.”
93	4.5.34	The weighting assigned to human health topic in section 4.5, paragraph 4.5.34 is a “little	Last sentence in the paragraph should be replaced with the following sentence:

PDF Page No.	Para	Error	Correction
		negative weight” and this does not match the weighting assigned to topic in chapter 8 which is “neutral”.	“However, the proposed embedded mitigation provides measures to avoid or reduce the impacts and the ExA conclusion is that matters relating to health attaches neutral weight in the overall planning balance.”
106	4.6.49	“In response, ECC [REP2-036] agreed with the LVIA conclusion that <u>some the</u> long term landscape effects are significant in EIA terms.”	“In response, ECC [REP2-036] agreed with the LVIA conclusion that <u>some of the</u> long term landscape effects are significant in EIA terms.”
158	5.2.56	“Moreover, transboundary effects were scoped out of further assessment in accordance with the Scoping Opinion from the Planning Inspectorate, 2021. <u>And</u> the ExA has no reason to disagree with that conclusion or that contained within the Regulation 32 screening document [OD-005].”	“Moreover, transboundary effects were scoped out of further assessment in accordance with the Scoping Opinion from the Planning Inspectorate, 2021 <u>and</u> the ExA has no reason to disagree with that conclusion or that contained within the Regulation 32 screening document [OD-005].”
160	5.2.85	“For the CEA a range of 30km from NFOWF has been used. Such a buffer distance considers the potential for other projects cumulative effects far-field. <u>And</u> a buffer of two spring tidal ellipse excursions is considered for the CEA.”	“For the CEA a range of 30km from NFOWF has been used. Such a buffer distance considers the potential for other projects cumulative effects far-field <u>and</u> a buffer of two spring tidal ellipse excursions is considered for the CEA.”
161	5.2.93	“Tidal currents demonstrated similar directions and velocities on the flood tide and ebb <u>tide</u> <u>Moreover</u> , other than the Inner Gabbard and Galloper sandbanks, the seabed sediments at all sites were considered broadly similar.”	“Tidal currents demonstrated similar directions and velocities on the flood tide and ebb <u>tide</u> . <u>Moreover</u> , other than the Inner Gabbard and Galloper sandbanks, the seabed sediments at all sites were considered broadly similar.”
180	5.2.236	“Moreover, following Examination updates, it was not anticipated by the ES that cumulative effects are likely to be significant in EIA terms, with the exception of collision risk for kittiwake, and <u>gull</u>	The “gull” should be replaced with “lesser black backed gull (LBBG) and “greater black backed gull (GBBG)”.

PDF Page No.	Para	Error	Correction
		which were all assessed to be potentially significant in EIA terms.”	
224	5.3.82	“The <u>Exa</u> has also considered if the concern could be addressed under the existing controls in place under Condition 22, Schedule 9, in the dDCO [REP8-005] which relies on consultation with the HHA, but with approval by the MMO.”	“The <u>ExA</u> has also considered if the concern could be addressed under the existing controls in place under Condition 22, Schedule 9, in the dDCO [REP8-005] which relies on consultation with the HHA, but with approval by the MMO.”
255	5.4.103	“However, the ExA finds that the Applicant’s approach to character assessment meets the provisions set out in paragraph <u>2.0.207</u> of NPS EN-3, paragraph 5.10.17 of NPS EN-1.”	“However, the ExA finds that the Applicant’s approach to character assessment meets the provisions set out in paragraph <u>2.8.207</u> of NPS EN-3, paragraph 5.10.17 of NPS EN-1.”
256	5.4.109	“Notwithstanding the justification provided, the ExA notes that in the final SoCGs, local authorities’ (SCC and ESC) initial position altered [REP8-068] <u>[REP8-075]</u> .”	Incorrect SoCG referenced and linked, “REP8-075” should be replaced with “REP8-072” for East Suffolk Council. “Notwithstanding the justification provided, the ExA notes that in the final SoCGs, local authorities’ (SCC and ESC) initial position altered [REP8-068] <u>[REP8-072]</u> .”
259	5.4.128	“Through this process, the Applicant has taken steps to avoid, reduce and mitigate effects associated with the Proposed Development, including the significant reduction and then complete removal of the northern array. This increases the separation distance to the <u>SENCHL</u> , whilst the reduction in proposed WTG height following PEIR would also reduce the impact.”	“Through this process, the Applicant has taken steps to avoid, reduce and mitigate effects associated with the Proposed Development, including the significant reduction and then complete removal of the northern array. This increases the separation distance to the <u>SECHNL</u> , whilst the reduction in proposed WTG height following PEIR would also reduce the impact.”
270	6.1.13	These were assessed against what is considered worst-case scenarios, based on	There should be no space at the end of the sentence before the full stop.

PDF Page No.	Para	Error	Correction
		the project design envelope which includes potential options for the Proposed Development's electricity transmission national grid connection point_	"These were assessed against what is considered worst-case scenarios, based on the project design envelope which includes potential options for the Proposed Development's electricity transmission national grid connection point_."
292	6.3.47	"This matter therefore weighs neither for nor against the making of the Order"	Should include a full stop at the end of the paragraph. "This matter therefore weighs neither for nor against the making of the Order."
295	6.4.16	"Overall, the design principles <u>aim ensure</u> that the detailed design would deliver against the criteria set out and would ensure an appropriate response to the local context."	"Overall, the design principles <u>aim to ensure</u> that the detailed design would deliver against the criteria set out and would ensure an appropriate response to the local context."
331	6.6.31	Paragraph number in bold.	The paragraph number should not be in bold.
331	6.6.31	"Major beneficial effects for socio economics during the construction phase and moderate beneficial effects during the operational phase in terms of economic value and employment. <u>There</u> are identified as significant;"	"Major beneficial effects for socio economics during the construction phase and moderate beneficial effects during the operational phase in terms of economic value and employment. <u>These</u> are identified as significant;"
335	6.6.57	"The ExA is satisfied that the concerns raised by ECC would be addressed by the Applicant in the development of the SEP. The ExA agrees that there would be a minor beneficial impact on employment opportunities and benefits in the local area"	Should include a full stop at the end of the paragraph. "The ExA is satisfied that the concerns raised by ECC would be addressed by the Applicant in the development of the SEP. The ExA agrees that there would be a minor beneficial impact on employment opportunities and benefits in the local area_."

PDF Page No.	Para	Error	Correction
340	6.6.80	Incorrect hyperlink to [RR-318]	Correct link inserted to Suffolk County Council Relevant Representation: Relevant Representations Representation by Suffolk County Council
365	8.6.9	“However, as indicated above, the residual adverse effects identified <u>fall</u> to be weighed in the balance.”	“However, as indicated above, the residual adverse effects identified <u>fail</u> to be weighed in the balance.”

1. INTRODUCTION

1.1. BACKGROUND TO THE EXAMINATION

- 1.1.1. An application (The Application) for North Falls Offshore Wind Farm (the Proposed Development), Planning Inspectorate (the Inspectorate) reference EN010119, was submitted by North Falls Offshore Wind Farm Limited (the Applicant) to the Inspectorate on the 26 July 2024 under section (s) 37 of the Planning Act 2008 (PA2008) and accepted for Examination under s55 of the PA2008 on 22 August 2024 [\[PD-001\]](#). This Report sets out the Examining Authority's (ExA) findings, conclusions and recommendations to the Secretary of State for Energy Security and Net Zero (SoSESNZ).
- 1.1.2. The legislative tests for whether the proposed development is a Nationally Significant Infrastructure Project (NSIP) were considered by the SoS for Housing, Communities and Local Government in its decision to accept the Application for Examination in accordance with s55 of the PA2008 [\[PD-001\]](#).
- 1.1.3. As the Proposed Development is an offshore wind turbine generating station with a capacity of greater than 100 Mega Watts (MW), it is considered a Nationally Significant Infrastructure Project (NSIP) under s14(1)(a) and s15(3) of the PA2008. As such, the Proposed Development requires development consent in accordance with s31 of PA2008.
- 1.1.4. The [Examination Library](#) (EL) provides a record of all application documents and submissions to the Examination, each of which is given a unique reference number, for example [\[APP-001\]](#). The reference numbers are used throughout this Report and hyperlinks are included to allow the reader to access them directly.
- 1.1.5. This Report does not contain extensive summaries of the documents and representations received. Readers are referred to relevant material using linked EL references. Full regard has been had to all such material and to all important and relevant matters arising from it in all conclusions drawn by the ExA and the recommendation made in this Report.

1.2. APPOINTMENT OF THE EXAMINING AUTHORITY

- 1.2.1. On 13 September 2024, Wendy McKay, Helen Van Willegen, Anthony Johnson, Matthew Shrigley and Jonathan Medlin were appointed as the ExA for the Application under s61 and 65 of the PA2008 [\[PD-004\]](#). Wendy McKay was appointed as the Lead Member.

1.3. THE APPLICATION

- 1.3.1. The Proposed Development comprises an offshore wind farm with a proposed capacity of 1GW [\[REP2-020\]](#), which would be located in the southern North Sea, with a landfall on the Essex coastline and a connection to the new onshore East Anglian Connection Node (EACN) which is proposed by National Grid Electricity Transmission Plc (NGET) as part of its Norwich to Tilbury project. The draft Development Consent Order (dDCO) [\[REP8-005\]](#) for North Falls Offshore Wind Farm (NFOWF) includes an alternative Option 3 for an offshore electrical connection, supplied by a third party. The build options are discussed later in this Chapter.

- 1.3.2.

NFOWF Limited is a joint venture between SSE Renewables Offshore Windfarm Holdings Limited (SSER) and RWE Renewables UK Swindon Limited (RWE). The NFOWF shares the same proposed National Grid connection point and connection date October 2030 [\[REP2-020\]](#) with the Five Estuaries Offshore Wind Farm (VEOWF). NFOWF is a proposed extension to the existing Greater Gabbard Offshore Wind Farm (GGOWF). VEOWF is a proposed extension to the Galloper Offshore Wind Farm (GOWF); the sister project to GGOWF. Both NFOWF and VEOWF are being developed as two distinct projects but have worked together to align landfall locations for the export cables to come ashore, develop a shared onshore export cable corridor and select a single site for both onshore substations to co-locate. The Examination of the VEOWF began on 18 September 2024 and was completed on 17 March 2025. An application from NGET for the Norwich to Tilbury project, which includes the EACN, was accepted for Examination on 26 September 2025.
- 1.3.3.

The location of the proposed development is shown below in Figure 1 and Figure 2 and can also be found in the Location Plan Offshore [\[APP-197\]](#) and Location Plan Onshore [\[APP-196\]](#) and the final versions of the Land Plans [\[AS-018\]](#).

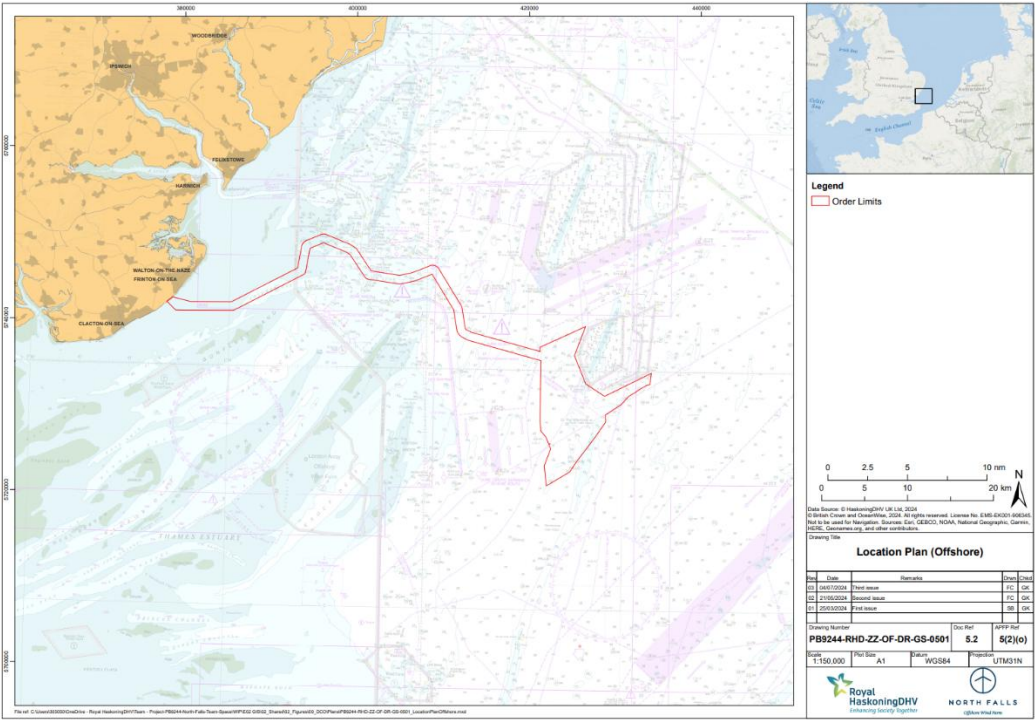


Figure 1: Location Plan of the Proposed Development (Offshore) (Source [\[APP-197\]](#))

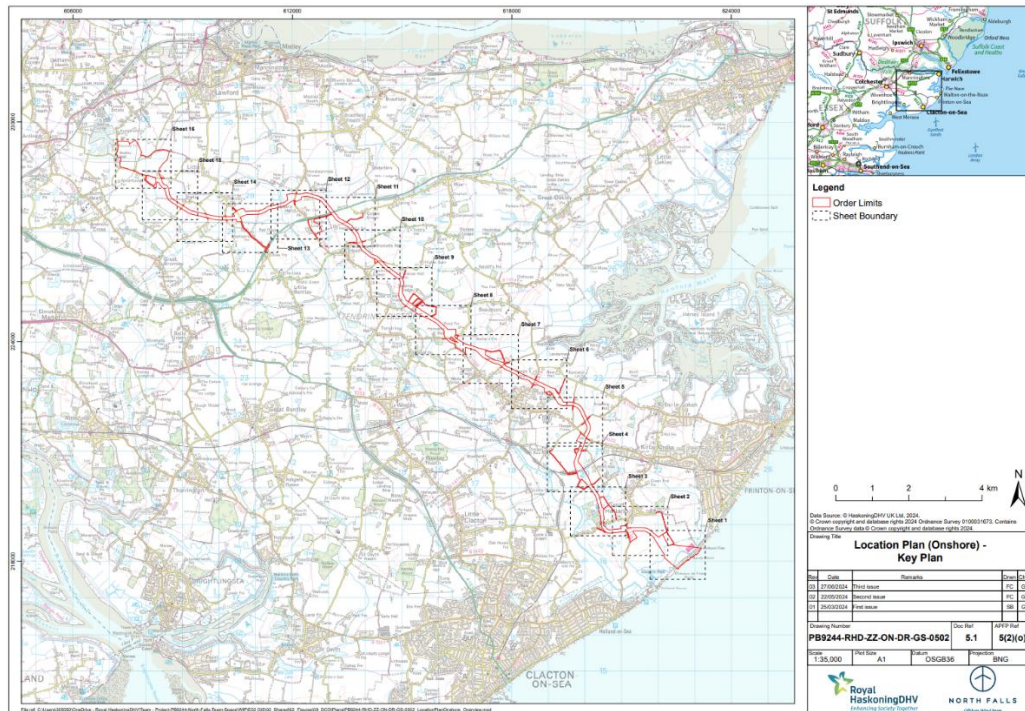


Figure 2: Location Plan of the Proposed Development (Onshore) (Source [APP-198])

- 1.3.4. The North Falls array area would be 95km² in area and located approximately 40km off the East Anglia coastline in the southern North Sea. The offshore export cables and related works would be located within and between the North Falls array area and the landfall and routed through the North Falls offshore cable corridor. Landfall would be made at Kirby Brook, which is between Frinton-on-Sea and Clacton-on-Sea, on the Essex coastline.
- 1.3.5. The proposed onshore development area, which includes export cables and the onshore substation, would be located within Tendring District Council (TDC) and Essex County Council (ECC) administrative areas. From landfall, the proposed onshore cable route (approximately 24km long) follows a generally north-east direction connecting to the proposed onshore substation, with a connection to the new EACN which is proposed by NGET as part of their Norwich to Tilbury project.
- 1.3.6. The proposed onshore substation works area would be located to the north-east of the existing National Grid Lawford substation on Ardleigh Road. The site is located approximately 2km to the south-west of Little Bromley in Tendring. Lawford substation is located immediately to the south of the site on the opposite side of Little Bromley Road. Two existing 132kv overhead electricity transmission lines run northwards from the existing Lawford substation, one of which crosses the western boundary of the proposed substation site.

DESCRIPTION OF THE PROPOSED DEVELOPMENT

- 1.3.7. Part 1 of Schedule 1 [REP8-005] of the dDCO describes the Proposed Development. The schedule is split into different Work Nos. with each representing a different part of the Proposed Development.
- 1.3.8. A more detailed description of the Proposed Development can be found in ES Chapter 5 Project Description [APP-019]. The key parameters of the components of

the Proposed Development can be found in ES Chapter 5, Table 5.3, or the Tables or Section as referenced below:

OFFSHORE

- Up to 57 offshore wind turbines;
- Up to two Offshore Substation Platforms (OSP);
- Up to one Offshore Converter Platform (OCP);
- Foundations for the wind turbines, OSPs and OCP (Tables 5.5 to 5.9 for wind turbines and Table 5.13 for OSPs and OCP);
- Inter-array cables linking the individual wind turbines to each other and the OSPs (Table 5.16);
- Platform interconnector cable linking OSPs or OSP and OCP (Table 5.16);
- Offshore export cables (Tables 5.3 and 5.18); and
- Scour protection for foundations, where required (Tables 5.14 and 5.15); and
- Surface laid cable protection, where required (Table 5.19).

ONSHORE

- Onshore export cables and associated joint bays (Tables 5.26 and 5.27);
- An onshore substation (Tables 5.26 and 5.28);
- A connection from the onshore substation to the new 400kV National Grid East Anglian Connection Node (proposed by NGET as part of their Norwich to Tilbury project) (Table 5.26); and
- Bentley Road improvement works ([\[APP-019\]](#), Section 5.7.5).

1.3.9. ES Chapter 5 also notes the three grid connection options below which are included in the Project design envelope:

- Option 1: Onshore electrical connection at a National Grid connection point within the Tendring peninsula of Essex, with a project alone onshore cable route and onshore substation infrastructure;
- Option 2: Onshore electrical connection at a National Grid connection point within the Tendring peninsula of Essex, sharing an onshore cable route and onshore cable duct installation (but with separate onshore export cables); and and co-locating separate project onshore substation infrastructure with VEOWF
- Option 3: Offshore electrical connection, supplied by a third party.

1.3.10. NFOWF and VEOWF have also developed three possible build scenarios to develop a coordinated design onshore and these are also described in ES Chapter 5.

RELEVANT PLANNING HISTORY

1.3.11. The existing GGOWF was approved under s36 of the Electricity Act (1989) in 2007 and became operational in 2012 (See Figure 3 below).

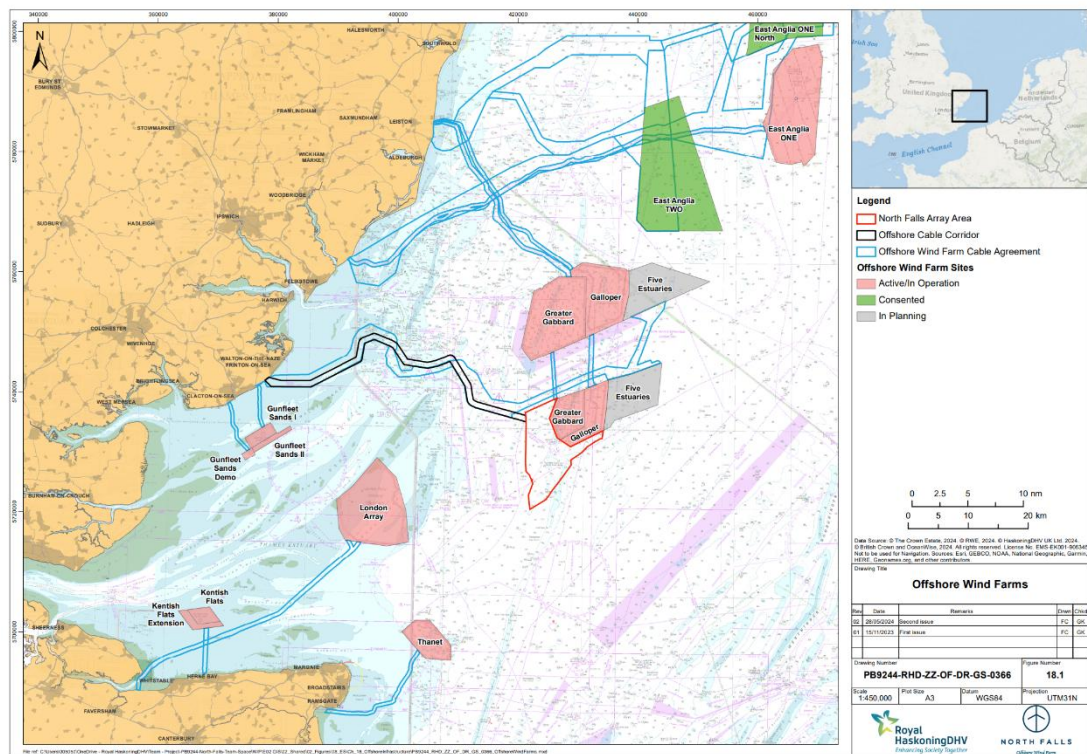


Figure 3: The Proposed Development and surrounding offshore wind farms (Source: Figure 18.1 [APP-063])

- 1.3.12. The background to the proposed development is described in ES Volume 3.1, Chapter 1, paragraph 7, [APP-015]. In February 2017, The Crown Estate launched an opportunity for existing wind farms to apply for project extensions. NFOWF Ltd applied for a lease to develop an extension to the western boundary of the existing GGOWF. In August 2019, The Crown Estate consulted on and then concluded a plan-level Habitats Regulations Assessment (HRA) for the proposed extension projects and confirmed that Greater Gabbard Extension, now named NFOWF would be among seven projects that would be awarded an Agreement for Lease (aFL).
- 1.3.13. ES Volume 3.1, Chapter 4 [APP-018] Section 4.4 sets out the identification of the North Falls array area. Following stakeholder feedback received through the Evidence Plan Process and Shipping stakeholder engagement, the array area was significantly reduced from 150km² to 95km². The former northern array area was removed to reduce impacts on shipping and seascape, particularly the Suffolk and Essex Coast and Heaths National Landscape; and the southern array area (now known as the 'array area') was also reduced in size as part of the mitigation of the effects for shipping and navigation, and ornithology.
- 1.3.14. ES Volume 3.1, Chapter 6 Environmental Impact Methodology [APP-020], paragraph 56 states that the Cumulative Effects Assessment (CEA) therefore considers other reasonably foreseeable development-related activities occurring within a similar timeframe to the construction and operation of North Falls, for which there is reasonable information upon which to base a meaningful assessment. The specific approach for each technical topic is described in the CEA section of each ES chapter.

1.4. THE EXAMINATION

START OF THE EXAMINATION

- 1.4.1. Prior to the Preliminary Meeting (PM) which took place on 28 January 2025 [\[EV3-001\]](#)[\[EV3-004\]](#)[\[EV3-005\]](#), the period for Relevant Representation (RR) had run from 11 September 2024 until 18 October 2024. The Examination closed on 28 July 2025.
- 1.4.2. The Examination Timetable identified dates for hearings and set deadlines for receipt of written material. Events, including all deadlines, which took place during the Examination can be found in the ExA's Rule 8 Letter [\[PD-008\]](#) and on the Planning Inspectorate website.
- 1.4.3. The ExA issued written questions in the following forms:
- First Written Questions (ExQ1) [\[PD-009\]](#).
 - Second Written Questions (ExQ2) [\[PD-012\]](#).
 - Rule 17 letter to the Applicant [\[PD-014\]](#).
 - Rule 17 letter to the Applicant [\[PD-015\]](#).
 - Third Written Questions (ExQ3) [\[PD-016\]](#).
 - Rule 17 letter to NatureScot [\[PD-018\]](#).
 - The ExA's Report on the Implications for European Sites (RIES) [\[PD-020\]](#).
- 1.4.4. The key Examination events were:
- Two Issue Specific Hearings (ISH): ISH1 [\[EV5-001\]](#) and ISH2 [\[EV6-001\]](#).
 - One Compulsory Acquisition Hearing (CAH): CAH1 [\[EV7-001\]](#).
 - One Open Floor Hearing (OFH): OFH1 [\[EV1-001\]](#).
 - Three Unaccompanied Site Inspections (USI): 4-5 December 2024 [\[EV2-001\]](#), 28 January 2025 [\[EV2-002\]](#) and 22 June 2025 [\[EV2-003\]](#).
 - One accompanied Site Inspection [ASI]: 1 April 2025 [\[PD-010\]](#).
- 1.4.5. The Procedural Decisions (PDs) taken by the ExA are recorded in the EL referenced [\[PD-001\]](#) to [\[PD-021\]](#). They detail the ExA's decisions relating to the procedure of the Examination and did not bear on the ExA's consideration of the planning merits of the Proposed Development.

STATEMENT OF COMMON GROUND

- 1.4.6. The ExA requested the submission of Statements of Common Ground (SoCG) between the Applicant and various IPs in its Procedural Decision letter dated 28 November 2024 [\[PD-005\]](#). The Applicant's Progress with Statement of Common Ground summarises the status of agreement on SoCG at the end of the Examination [\[REP8-039\]](#).
- 1.4.7. The signed SoCG have been fully taken into account by the ExA in all relevant sections of this Report. The weight (if any) to be afforded to unsigned SoCG is considered in the relevant sections of this Report.

1.5. CHANGES TO THE APPLICATION

- 1.5.1. Changes to the key application documents, including the wording of the dDCO were submitted and updated during the Examination. The changes sought to address points raised by IPs and the ExA and to update or provide additional information resulting from changes and discussions that had occurred during the Examination.

1.5.2. A list of the updated, revised and / or additional information is contained within the Application Document Tracker [\[REP8-001\]](#).

1.5.3. No formal change requests to the Application were made by the Applicant during the Examination.

1.6. OTHER CONSENTS, UNDERTAKINGS, OBLIGATIONS AND AGREEMENTS

CONSENTS AND LICENCES

1.6.1. As part of the Applicant's response to the s51 advice, the Applicant updated its Consents and Licences statement [\[AS-030\]](#) which sets out the consents that are, or may be, required for the Proposed Development that are not contained within the dDCO (Table 2.1 Offshore Consents and Table 2.2 Onshore Consents). It also provided details of the consents that the Applicant is seeking to disapply within the dDCO and which, as a result would not be applied for separately (Section 1.3.3).

AGREEMENTS

1.6.2. There are no agreements required.

1.7. THE STRUCTURE OF THIS REPORT

1.7.1. The structure of the remainder of the report is as follows:

- Chapter 2 identifies how the Application is to be determined and summarises the key legislation and policy context that applies to the decision.
- Chapter 3 sets out the findings and conclusions in relation to the overarching issues that arose from the Application and during the Examination.
- Chapter 4 sets out the findings and conclusions in relation to the onshore planning issues that arose from the Application and during the Examination.
- Chapter 5 sets out the findings and conclusions in relation to the offshore planning issues that arose from the Application and during the Examination.
- Chapter 6 sets out the findings and conclusions in relation to crosscutting onshore and offshore planning issues that arose from the Application and during the Examination.
- Chapter 7 provides a summary of the Habitats Regulations Assessment (HRA)
- Chapter 8 sets an assessment of the overall planning balance and conclusion on the case for development consent that flows from the findings of Chapters 3, 4, 5 and 6 in the light of important and relevant factual, legal and policy considerations.
- Chapter 9 sets out the ExA's examination of land rights and related matters.
- Chapter 10 considers the implications of the matters arising from the preceding chapters for the DCO.
- Chapter 11 summarises all relevant considerations and sets out the ExA's recommendation to the SoS.

1.7.2. The ExA's initial assessment of principal issues [\[PD-006\]](#), Annex C was informed by the ExA's reading of the Application documents, Relevant Representations (RR) and consideration of any other important and relevant matters. Building on this, the ExA has taken account of all Examination submissions, made both in writing and orally, in identifying the main planning issues relevant to our consideration of the Proposed Development. In addition to the issues arising from the IAPI, the ExA has also given consideration on an overarching basis to the principle of the development in terms of need and the consideration of alternatives (Chapter 3).

- 1.7.3. The ExA's findings and conclusions on the planning issues have been subdivided into onshore matters (Chapter 4), offshore matters (Chapter 5) and those matters which cut across both onshore and offshore (Chapter 6).
- 1.7.4. In each section, the ExA will introduce the topic, drawing attention to those matters it has had regard to, followed by a summary of the Application as made, then report on the main issues for each topic. Findings and conclusions will then be drawn for each topic.
- 1.7.5. To aid the reader and to achieve consistency we have set out the following regime for applying/ assessing the weight to be attached to the different aspects of the proposal in the following manner:
- Neutral weight: The ExA considers that there are no matters relating to that issue which would weigh for or against the making of the Development Consent Order (DCO).
 - First Level: The ExA ascribes a little weight to matters relating to the issue for/ against the making of the DCO.
 - Second Level: The ExA ascribes moderate weight to matters relating to the issue for/ against the making of the DCO.
 - Third Level: The ExA ascribes great weight to matters relating to the issue for/ against the making of the DCO.
 - Fourth Level: The ExA ascribes very great weight to matters relating to the issue for/ against the making of the DCO.
- 1.7.6. Matters are generally only reported upon if the ExA considers them to be important and relevant to the decision and they have not been agreed or adequately justified or are controversial.
- 1.7.7. This Report is supported by the following Appendices:
- Appendix A – Other legislation and policies.
 - Appendix B – List of Abbreviations.
 - Appendix C – Habitats Regulations Assessment.
 - Appendix D – The Recommended DCO.

2. HOW THE APPLICATION IS DETERMINED

2.1. INTRODUCTION

- 2.1.1. This Chapter identifies the key legislation, policy and Local Impact Reports (LIR) relevant to the consideration of the Application. In Annex C of its Rule 6 letter [\[PD-005\]](#), the Examining Authority (ExA) set out its Initial Assessment of Principal Issues as required under section 88(1) of the Planning Act 2008 (PA2008). In making its Recommendation the ExA has considered all written and oral submissions that have been received during the Examination.

2.2. LEGISLATION

PLANNING ACT 2008

- 2.2.1. PA2008 provides the basis for decision-making in respect of applications for Nationally Significant Infrastructure Projects (NSIPs). National Policy Statements (NPS) EN-1, EN-3 and EN-5 have effect in relation to the Proposed Development and consequently it is to be determined under the provisions of s104 of PA2008. S104(2) of PA2008 sets out the matters to which the Secretary of State (SoS) must have regard when making its decision:
- Any NPS which has effect in relation to development of the description to which the Application relates;
 - the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;
 - any LIR within the meaning given by section 60(3)) submitted to the SoS before the deadline specified in a notice under section 60(2) of PA2008;
 - any matters prescribed in relation to development of the description to which the Application relates; and
 - any other matters which the SoS thinks are both important and relevant to the SoS's decision.
- 2.2.2. S104(3) of PA2008 requires the SoS to decide the Application in accordance with any relevant NPS, subject to the SoS being satisfied that none of the provisions in subsections (4) to (8) apply, namely that:
- Deciding the Application in accordance with any relevant NPS would lead to the UK being in breach of any of its international obligations;
 - deciding the Application in accordance with any relevant NPS would lead to the SoS being in breach of any duty imposed on her or him by or under any enactment;
 - deciding the Application in accordance with any relevant NPS would be unlawful by virtue of any enactment;
 - the adverse impact of the Proposed Development would outweigh its benefits; or
 - any condition prescribed for deciding an application otherwise than in accordance with a NPS is met.
- 2.2.3. This Report sets out the ExA's findings taking these matters into account and applying the provisions set out in s104 of PA2008.

MARINE AND COASTAL ACCESS ACT 2009

- 2.2.4. The Marine and Coastal Access Act 2009 sets the framework for the marine planning system in the UK. It provides for the preparation of a UK Marine Policy

Statement, marine plans for UK marine areas and the system of marine licensing. In deciding an application for an order granting development consent, the SoS must have regard to (amongst other things) the appropriate marine policy documents, which in this case is the UK Marine Policy Statement. The policies of the East Inshore and East Offshore Marine Plans, and the South East Inshore Marine Plan are also capable of being an important and relevant consideration in relation to the Proposed Development.

OTHER LEGISLATION

- 2.2.5. A full list of relevant primary and secondary legislation, including but not limited to duties arising under the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (CA Regulations), the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR), the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations), Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations), Equality Act 2010, Human Rights Act 1998 and Climate Change Act 2008, can be found in Table A1 in Appendix A of this Report. All applicable legislation has been considered by the ExA as required and the findings and recommendations in this Report are framed to identify and enable the SoS to discharge all applicable statutory considerations or duties.

2.3. NATIONAL POLICY STATEMENTS

- 2.3.1. NPSs set out Government policy for national infrastructure development and form the primary policy context for this Examination. The NPSs of relevance to the Proposed Development are:
- Overarching NPS for Energy (EN-1);
 - NPS for Renewable Energy Infrastructure (EN-3); and
 - NPS for Electricity Networks Infrastructure (EN-5).
- 2.3.2. There were all published in November 2023 and came into force from 17 January 2024. Chapters 3 to 6 of this Report assess the extent to which the Proposed Development accords with them. The Department for Energy Security and Net Zero's consultation on revised energy NPSs, with draft updates made to EN-1, EN-3 and EN-5, ran from 24 April 2025 to 29 May 2025.

OVERARCHING NATIONAL POLICY STATEMENT FOR ENERGY (NPS EN-1)

- 2.3.3. NPS EN-1 sets out the Government's policy for the delivery of major energy infrastructure. It lays out the general principles and generic impacts to be considered in examining applications for energy NSIPs and provides the policy framework within which all other energy NPSs sit.
- 2.3.4. Section 4.2 of NPS EN-1 establishes the principle of a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. Low carbon infrastructure for the purposes of this policy includes, amongst other things, offshore renewable electricity generation such as offshore wind farms (OWF) and all electricity grid infrastructure in scope of NPS EN-5 such as power lines and associated substations. NPS EN-1 states that CNP infrastructure benefits from a presumption in favour of consent, subject to several exceptions.

NATIONAL POLICY STATEMENT FOR RENEWABLE ENERGY INFRASTRUCTURE (NPS EN-3)

- 2.3.5. NPS EN-3 provides policy specific to major renewable energy infrastructure, including OWFs. It sets out the assessment criteria for offshore wind applications, which include the consideration of biodiversity, ecology and habitats, marine physical and historic environment, commercial fisheries, navigation and shipping, other offshore activities, and seascape and visual effects. Expectations around Habitats Regulation Assessment, climate change resilience and good design are also articulated.

NATIONAL POLICY STATEMENT FOR ELECTRICITY NETWORKS (NPS EN-5)

- 2.3.6. NPS EN-5 sets out policy relevant to electricity transmission and distribution systems. It provides a framework of technology-specific impacts to be considered for electricity networks infrastructure including substations and overhead lines. Assessment criteria specific to electricity networks development include the consideration of effects relating to biodiversity and geological conservation, landscape and visual, noise and vibration and Electric and Magnetic Fields (EMFs). NPS EN-5 also supports the principle of achieving coordinated approaches to delivering offshore and onshore electricity transmission to minimise environmental, community and other impacts.

2.4. UK MARINE POLICY STATEMENT

- 2.4.1. The UK Marine Policy Statement (2011) provides a framework for preparing marine plans and taking decisions affecting the marine environment. It is jointly adopted by the SoS for the Department of Environment, Food and Rural Affairs, Welsh Ministers, Scottish Ministers and the Department of the Environment in Northern Ireland.

2.5. OTHER RELEVANT NATIONAL POLICIES

- 2.5.1. Table A2 in Appendix A provides a comprehensive list of other national policies of relevance to the Proposed Development. This includes:
- National Infrastructure Strategy (NIS) (2020);
 - National Planning Policy Framework (NPPF) (2023);
 - Net Zero Strategy: Build Back Greener (2021);
 - British Energy Security Strategy (2022);
 - Powering up Britain (2023); and,
 - Clean Power 2030 Action Plan (2024).
- 2.5.2. Relevant national policies and guidance are discussed in more detail as appropriate in subsequent Chapters of this Report.
- ## **2.6. LOCAL IMPACT REPORTS**
- 2.6.1. Local Impact Reports (LIRs) were received by the ExA from the following local authorities.

- Babergh District Council [[REP1-063](#)];
- East Suffolk Council [[REP1-064](#)];
- Essex County Council (in partnership with Tendring District Council) [[REP1-065](#)]; and

- Suffolk County Council [[REP1-074](#)].

2.6.2. The Applicant submitted its comments on the LIRs in [[REP2-023](#)]. The ExA will discuss individual areas of concerns, if required, within the topic Chapters of this Report. If not directly referenced, the ExA informs the Secretary of State that either the local authorities did not discuss those matters in their respective LIRs or were content with the matter at hand.

2.7. ENVIRONMENTAL IMPACT ASSESSMENT

2.7.1. The Proposed Development is development for which an Environmental Impact Assessment (EIA) is required (EIA development). On 16 July 2021, the Planning Inspectorate (the Inspectorate) received, on behalf of the SoS, a Scoping Request under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, as amended (the EIA Regulations). The Applicant also provided notification under Regulation 8(1)(b) of the EIA Regulations that it proposed to provide an ES in respect of the Proposed Development.

2.7.2. The Inspectorate, on behalf of the SoS, provided a Scoping Opinion in August 2021 [[APP-260](#)]. In accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development was determined to be EIA development, and the Application was accompanied by an Environmental Statement (ES). The Applicant provided the Planning Inspectorate with certificates confirming compliance with s56 [[OD-002](#)] and s59 [[OD-003](#)] of PA2008 and Regulation 16 of the EIA Regulations [[OD-004](#)] on 21 October 2024.

2.7.3. Overall, the ExA considers that the ES, as supplemented by additional information during the Examination, is sufficient to enable the SoS to take a decision in compliance with the EIA Regulations. Consideration is given to the findings of the ES in subsequent Chapters of this Report.

2.8. HABITATS REGULATIONS ASSESSMENT

2.8.1. The SoS is the Competent Authority for the purposes of the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations') and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) ('the Offshore Marine Regulations'). The Proposed Development is development for which Habitats Regulations Assessment (HRA) reports have been provided. Consideration is given to the adequacy of the HRA reports, associated information and evidence and the matters arising from them in Appendix C of this Report, a summary of which can be found in Chapter 7.

2.9. WATER FRAMEWORK DIRECTIVE ASSESSMENT

2.9.1. Directive 2000/60/EC (the Water Framework Directive or WFD) sets objectives to prevent and reduce pollution, improve aquatic ecosystems and mitigate the effects of floods. It provides for the production of River Basin Management Plans for the sustainable management of rivers. The Directive is transposed into law in England and Wales by The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017.

2.9.2. The Application included a WFD assessment within a Water Environment Regulations Compliance Assessment [[APP-120](#)], an Appendix to ES Chapter 21 Water Resources and Flood Risk [[APP-035](#)] which also addressed WFD issues. A Groundwater Risk Assessment and Monitoring Plan - Private Water Supplies and

Licensed Abstractions (Parts 1 to 4) was submitted at Deadline 5 [REP5-049], [REP5-050], [REP5-051], [REP5-052].

- 2.9.3. The Proposed Development was assessed to have no effects that would be likely to cause deterioration in WFD status or prevent waterbodies from achieving their WFD objectives, provided that best practice and established guidance are adhered to. Embedded mitigation measures are identified in ES Chapter 21 (Water Resources and Flood Risk) [APP-035] and [APP-120] and the outline Code of Construction Practice [REP7-025]. The WFD assessment is discussed in more detail in Chapter 3 (section 4.4) of this Report. For water resources and flood risk, no potential for transboundary effects were identified.

2.10. TRANSBOUNDARY EFFECTS

- 2.10.1. A transboundary screening under Regulation 32 of the EIA Regulations was undertaken by the Inspectorate on behalf of the SoS on 3 February 2022, following the Applicant's request for an EIA Scoping Opinion [OD-005]. On the basis of the information provided by the Applicant and taking a precautionary approach, the Inspectorate took the view that the Proposed Development was identified as likely to have a significant effect on the environment in a European Economic Area (EEA) member state. As a result, the Netherlands was identified to be notified for transboundary issues (in particular due to the potential effects on aviation and radar). The Netherlands was notified of the Proposed Development but no response was received from it.
- 2.10.2. A second screening was undertaken on 26 November 2024 which took account of how the Proposed Development had been refined following submission of the Scoping Report and consultation. Again, the Proposed Development was identified as likely to have a significant effect on the environment in an EEA member state. Four EEA states were identified as being likely to have significant effects on their environment. The states notified were Germany, France and Belgium (due to potential impacts on marine mammals). The Netherlands was renotified (due to potential impacts on marine mammals). The second screening also confirmed that the potential effects previously identified in the first screening for aviation and radar that may affect the Netherlands are unlikely and not considered further.
- 2.10.3. No responses were received from France or Belgium in relation to the second screening. A response was received from Germany stating that they did not consider the Proposed Development would result in transboundary effects on Germany. Netherlands responded that they would like to participate in the procedure under Regulation 32. All four EEA states were invited to participate in the Examination as "Other Persons".
- 2.10.4. The Netherlands Ministry of Infrastructure and Water Management responded [REP3-065] and was subsequently invited to the ISHs as an "Other Person", although they did not attend. The ExA referenced the Netherlands' comments when they asked the Applicant whether they had adequately addressed cumulative effects/transboundary implications for marine mammals [PD-012]. The Applicant responded to the comments at D4 [REP4-027] and in their responses to ExQ2 10.0.2 [REP5-054]. The matters raised have been considered with the overall range of offshore ecological examination issues dealt with in this Report. Other matters raised relating to Commercial Fisheries, and Navigation and Shipping have been considered in this Report in Chapters 5.1 and 5.3 respectively.

- 2.10.5. The Regulation 32 duty is an ongoing duty, and on that basis, the ExA has considered whether any facts have emerged to change the Inspectorate's screening conclusions, up to the point of closure of the Examination. The ExA is satisfied that the duties under Regulation 32 have been satisfied.

2.11. MADE DEVELOPMENT CONSENT ORDERS

- 2.11.1. Section 4 of the Applicant's final Explanatory Memorandum [\[REP8-007\]](#) provides details of the made DCOs upon which articles of the draft DCO are based. Where applicable, precedent in made Orders is dealt with in Chapter 10 of this Report.

3. OVERARCHING ISSUES

3.1. NEED

INTRODUCTION

3.1.1. This section considers the overarching need for the Proposed Development.

3.1.2. In its consideration of need the ExA has had regard to:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1);
- the National Policy Statement for Renewable Energy Infrastructure (NPS EN-3);
- the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5);
- the Local Impact Reports (LIRs);
- any matters prescribed in relation to the development; and
- any other important and relevant matters.

THE APPLICATION

THE OVERVIEW

3.1.3. The Environmental Statement (ES) Chapter 2 Need for the Project [[APP-016](#)] presents an overview of the importance of the Proposed Development in contributing to policy commitments. This includes international and national UK policy commitments for renewable energy, as well as wider policy objectives for UK energy security, decarbonisation and socio-economic benefits which highlight the need to develop the North Falls Offshore Windfarm (NFOWF).

3.1.4. The Applicant's position is that the need for the Proposed Development is well established within the existing national policy framework through the relevant NPS's and within extensive policy documents and other literature. It would help to deliver on the UK Government's climate change targets, on reducing emissions and increasing the proportion of renewables within the energy mix and generating more electricity from low-carbon sources.

3.1.5. The extant NPS EN-1 and EN-3 reiterate increased support for the growth in offshore wind generation, recognising low carbon infrastructure as a critical national priority with the generation of utility-scale quantities of electricity from renewable energy sources having a direct and measurable effect on climate change and in meeting the UK's climate change and emissions reduction targets.

3.1.6. The key national targets are as follows:

- Meeting the Sixth Carbon Budget (and subsequent Carbon Budgets) and the overall 2050 net zero target, set out in the Climate Change Act 2008;
- full decarbonisation of the power sector by 2035, set by the UK's Net Zero Strategy and reiterated in Powering up Britain; and
- 50GW of offshore wind by 2030, as stated in the British Energy Security Strategy (BESS).

3.1.7. In summary, the Applicant asserts that the Proposed Development would provide a measurable contribution to Government targets in relation to offshore wind and wider decarbonisation, while contributing to energy security and affordability, and providing socio-economic benefits.

THE SUPPORTING EVIDENCE FOR THE APPLICANT'S NEEDS CASE

- 3.1.8. The Applicant's Needs Case and Project Benefits Statement [\[REP2-004\]](#) sets out the evidence supporting the need for the delivery of the Proposed Development and the benefits of its planned pre-2030 delivery date as well as the potential impact of delaying delivery beyond the realisation of the provision of an economic, efficient, operable, sustainable and coordinated Electricity Transmission System to support large scale offshore wind (Holistic Network Design).
- 3.1.9. The case underpinning the need for the Proposed Development is built upon its expected contribution to meeting three key national policy aims of:
- Decarbonisation to achieve net zero and the importance of developing at-scale zero-carbon electricity generation assets;
 - security of energy supply through realising geographically and technologically diverse supplies; and
 - affordability of electricity generated.
- 3.1.10. The benefits of the Proposed Development are set out in Section 5 of the Needs Case and Project Benefits Statement [\[REP2-004\]](#). By generating renewable electricity in the UK, NFOWF would help to reduce the UK's reliance on imported energy and improve UK energy security. The key benefits of offshore wind energy as a contributor to the renewable energy mix are assessed as follows:
- Diversification and security of home-grown energy generation capacity which make use of an abundant source of energy;
 - a technology with potential to make significant and rapid contributions to the national renewable energy targets;
 - economic development and job creation, both within the UK and further afield within the supply chain; and
 - very low lifetime Carbon Dioxide (CO₂) emissions per unit of electricity generated.
- 3.1.11. The Needs Case and Project Benefits Statement [\[REP2-004\]](#) concludes that new offshore wind farms such as NFOWF provide a source of renewable energy with a wide range of benefits, including economic growth, energy security and decarbonisation of a key sector in order to meet the 2050 net zero target. It states that the Proposed Development would make a contribution both to the achievement of UK decarbonisation targets and would contribute to the economy by providing jobs during all phases of its lifetime.
- 3.1.12. The Applicant indicates that only 14GW of consented offshore wind farms have a grid connection offer on or before 2030, including the Proposed Development (National Grid, 2024). This shows there is a deficit of 17.7GW to meet the 50GW target by 2030 and highlights the need to deliver the Proposed Development. Based on the current rate of deployment, the UK is set to fall short of the 50GW target by 2030 and not meet 50GW until 2048. If the offshore wind farms proposed for connection before 2030 were delayed, this would increase the climate change risk associated with energy security and potentially increase social inequality associated with increasing energy costs.
- 3.1.13. The Needs Case and Project Benefits Statement [\[REP2-004\]](#) therefore finds that a delay beyond 2030 would jeopardise the UK's ability to meet the Sixth Carbon Budget as required by the 2050 target set out in the Climate Change Act 2008 (as amended). It would also increase pressure on the supply chain and skills required to meet the UK's legally binding decarbonisation targets. The Proposed Development

is stated to be well-suited to delivery ahead of 2030 and before the realisation of the Holistic Network Design due to its size, its efficient delivery as an extension from the existing Greater Gabbard Offshore Wind Farm (GGOWF), and its ability to coordinate routing of cables onshore with a second project, VEOWF.

- 3.1.14. The Applicant's case is that NFOWF has sought opportunities for co-ordination with VEOWF as outlined in the Co-ordination Report [\[REP1-004\]](#) and include a coordinated landfall location, a shared onshore cable route corridor, and a co-located onshore substation zone. It is stated that further opportunities for co-ordination will continue to be explored throughout the development phase of the Proposed Development.

THE OVERALL PLANNING ASSESSMENT OF NEED

- 3.1.15. The Planning Statement [\[REP8-003\]](#) summarises the Applicant's position in relation to the need for the Proposed Development. It emphasises that there are urgent and compelling global and domestic imperatives behind the need to reduce reliance on fossil fuels and support drastic increases in renewable energy output, including legislative requirements and current significant social, economic and environmental challenges.

- 3.1.16. It sets out the key drivers underpinning the need for renewable energy within the UK, and why the Government believes there is an urgent need for new electricity NSIPs. These are as follows:

- NPS EN-1 paragraph 3.2.6, establishes that when determining applications for offshore wind this should be done on the basis that the Government has demonstrated that there is a need for this type of infrastructure which is urgent.
- NPS EN-1 paragraph 3.2.7, provides that substantial weight should be given to the contribution these types of projects would make towards satisfying this need.
- NPS EN-1 paragraphs 3.3.62 and 4.2.4, confirm that the Government "has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure." Paragraph 4.2.5 of NPS EN-1 confirms that offshore wind constitutes low carbon CNP infrastructure.
- NPS EN-3 Part 3 also confirms that the Government has concluded that there is a CNP for the provision of nationally significant new offshore wind development and supporting onshore and offshore network infrastructure.
- The numerous UK Government strategies which outline that low carbon energy is needed to support wider decarbonisation and met UK net zero targets are set out in the Planning Statement [\[REP8-003\]](#) paragraph 6.3.1. The Proposed Development would assist in the achievement of those listed strategies.
- In addition to the National policy, goals and targets for renewable energy, local policy support is also a driver for renewable energy development. In 2019, the Tendring District Council (TDC) declared a climate emergency. The Proposed Development would help support Essex County Council (ECC) and TDC's climate change and economic growth objectives.

CONCLUSION

- 3.1.17. In conclusion, the Applicant's position is that the need for the Proposed Development is clearly supported by NPS EN-1, in addition to the wider governmental and international obligations and objectives relating to low carbon electricity generation, climate change and the economy.

ISSUES CONSIDERED DURING THE EXAMINATION

- 3.1.18. The main issue that was considered during the Examination in relation to the need for Proposed Development was:
- The need for the Proposed Development in the light of the international and national UK legislative and policy commitments for renewable energy, as well as wider policy objectives for UK energy security, decarbonisation and socio-economic benefits including the contribution that it would make to the achievement of UK decarbonisation targets.

THE NEED FOR THE PROPOSED DEVELOPMENT IN THE LIGHT OF THE INTERNATIONAL AND NATIONAL UK LEGISLATIVE AND POLICY BACKGROUND

- 3.1.19. The 'in principle' overall need case for the Proposed Development was not a matter disputed by parties during the Examination. However, the details of how this might be best achieved were questioned by IPs and various concerns are explored under other topic headings in this Report.
- 3.1.20. The ECC LIR in partnership with TDC [\[REP1-065\]](#) has assessed the Proposed Development against its Net Zero: Making Essex Carbon Neutral – Essex Climate Action Commission policy document. ECC conclude that they are in favour of the Proposed Development as a significant investment in renewable energy. However, they remain interested in any proposals that the Applicant might put forward during Examination which would secure low carbon initiatives which can be introduced to offset carbon impacts within, for example, a Community Benefits commitment.
- 3.1.21. The East Suffolk Council (ESC) LIR [\[REP1-064\]](#) acknowledges that renewable energy will play a central role in tackling climate change and in meeting Government targets in the lead up to net-zero by 2050. They accept that a significant amount of new offshore wind generation and associated infrastructure is required to meet the present Government's ambitious target to connect 50GW of offshore wind by 2030. Nonetheless, they highlight that the shift towards the delivery of low carbon and renewable sources of energy must consider the potential impacts it may have on the landscape, natural environment and local communities set to host or neighbour such development.
- 3.1.22. The Suffolk County Council (SCC) LIR [\[REP1-074\]](#) updated Energy and Climate Adaptive Infrastructure Policy indicates the predisposition of SCC to supporting projects that are necessary to deliver Net-Zero Carbon for the UK. However, in order to be able to support a project, SCC expects that any impacts are appropriately dealt with.
- 3.1.23. The Babergh District Council (BDC) LIR [\[REP1-063\]](#) is principally concerned with the potential visual and landscape impacts and cumulative effects of the onshore elements of the Proposed Development on the landscape of Babergh District. The LIR submission focused on those matters which are considered further in the relevant Section 4.6 of Chapter 4 of this Report.
- 3.1.24. In response to ExQ1.3.2 (ii) [\[REP2-020\]](#), the Applicant confirms its position as set out in paragraph 6.1.10 of the Needs Case and Project Benefits Statement [\[APP-232\]](#) that the delay of those offshore wind farms with pre-2030 connection dates would significantly increase the required rate of delivery of offshore wind farms, placing increased pressure on supply chains and skills demand.

- 3.1.25. The Sixth Carbon Budget Balanced Pathway includes offshore wind generation contribution of 40 GW in 2030, on a path to 65-125 GW by 2050. The Sixth Carbon Budget Electricity Generation Sector Summary lists supply chains as a key challenge to deploying offshore wind. On 5 November 2024, NESO published its independent analysis on how DESNZ can achieve its Clean Power 2030 (CP2030) goal.
- 3.1.26. The Applicant submits that these published documents support the need for urgency and evidence supply chains as a key challenge to deploying offshore wind. Should the construction of the pre-2030 offshore wind farms be delayed beyond 2030, the increased in roll out rate and resultant pressure on supply chains could risk the CP2030 goal. The Sixth Carbon Budget Balanced Pathway is reliant on the CP2030 goal of achieving 40 GW of offshore wind by 2030.
- 3.1.27. In response to ExQ1.3.3 [\[REP2-020\]](#), the Applicant states that in addition to the key national legislation and policy driving the need for renewable energy, an update to the UK Government's strategy was published through the Clean Power 2030 Action Plan in December 2024. This strategy discusses the rapid and mass deployment of new clean energy, including offshore wind, to deliver a clean power system by 2030. The Applicant contends that the Proposed Development would support the urgent need for rapid deployment of offshore wind energy as outlined in UK Government strategy update of the Clean Power 2030 Action Plan.
- 3.1.28. In addition, the Applicant's response to ExQ1.3.5 [\[REP2-020\]](#) confirms that the new generating capacity of the Proposed Development is expected to be approximately 1GW, but the exact figure would depend on the final selection of wind turbine types. This would contribute approximately 2% towards the Government's target of delivering 50 GW by 2030. With a generating capacity of approximately 1GW, the Proposed Development would be expected to generate approximately 5.5GWh of renewable energy per year. When offsetting the consumption of mains gas for power (using Table 2a of the DESNZ Greenhouse Gas Conversion Factor Repository) this equates to a saving of 2.05 million kg of CO₂ per year. This means that a delay of 5 years would add to the current carbon budget deficit by a total 10.2 million kg of CO₂.
- 3.1.29. The Applicant's table in response to EXQ2 1.0.4 [\[REP5-054\]](#) provides a summary of residual beneficial and adverse effects for the Proposed Development as identified at the conclusion of each ES Chapter and includes a separate column detailing the residual cumulative effects. The Applicant submits that substantial positive weight should be given to the Proposed Development's contribution to the reduction of the UK's reliance on imported energy to improve UK energy security and to its contribution to the achievement of UK decarbonisation targets by 2030 and 2050 through approximately 1GW of new generating capacity, and a contribution towards the UK's global commitments to reduce the effects of climate change.
- 3.1.30. The Applicant's table also attributes moderate positive weight to the cost-of-living impacts by contributing to decreasing reliance on fossil fuels, decreasing the wholesale electricity price and thereby household energy bills in the UK and minor positive weight to social benefits to local communities through upskilling, income generation and thereby supporting a better quality of life. Minor positive weight is given to the extension to operational GGOWF as being an efficient way of developing more offshore capacity.

EXA'S CONSIDERATIONS

- 3.1.31. The ExA agrees with the Applicant's position that the need for the Proposed Development is well-established within the existing national policy framework through the relevant NPS's and other Government strategies, as well as international obligations and objectives relating to low carbon electricity generation, climate change and the economy. There is also support at local policy level for the provision of renewable infrastructure development necessary to deliver Net-Zero Carbon for the UK.
- 3.1.32. The ExA believes that the Proposed Development would assist in the achievement of the relevant national and local policies and strategies relating to the provision of low carbon energy and the benefits associated with that. It would contribute to meeting three key national policy aims of decarbonisation to:
- achieve net zero by developing at-scale zero-carbon electricity generation assets;
 - provide security of energy supply through realising geographically and technologically diverse supplies; and
 - provide an affordable and reliable electricity generation system.
- 3.1.33. The ExA considers that the Proposed Development would make a material contribution towards achieving Government's target of up to 50GW of offshore wind by 2030. It would provide new generating capacity of approximately 1GW which would contribute approximately 2% towards that target. The anticipated generation of approximately 5.5GWh of renewable energy per year equates to a saving of 2.05 million kg of CO₂ per year when offsetting the consumption of mains gas for power.
- 3.1.34. The ExA takes the view that the relevant documentation referred to by the Applicant also supports the need for urgency in the deployment of offshore wind with supply chains being a key challenge to deploying offshore wind. We agree that if the offshore wind farms proposed for connection before 2030 were delayed beyond that date, the increase in roll-out rate and resultant pressure on supply chains could have implications for the CP2030 goal of achieving 40 GW of offshore wind by 2030. In addition, we accept the reasons why the Proposed Development would be well-suited to delivery by 2030.
- 3.1.35. Although the Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in NPS-1, we are content that the Proposed Development would provide a measurable contribution to Government targets in relation to offshore wind and wider decarbonisation that would assist in the decarbonisation of a key sector in order to meet the UK's 2050 net zero target. It would also contribute to energy security and affordability and provide socio-economic benefits.
- 3.1.36. The Applicant has also referred to EN-1, paragraphs 3.3.62 and 4.2.4, which state that the Government: "has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure." Paragraph 4.2.5 of NPS EN-1 confirms that offshore wind constitutes low carbon CNP infrastructure. Nevertheless, EN-1 paragraph 4.2.7 makes it clear that CNP policy does not create an additional or cumulative need case or weighting to that which is already outlined for each type of energy infrastructure. The policy applies following the normal consideration of the need case, the impacts of the project, and the application of the mitigation hierarchy. If required, the application of CNP policy will be considered later in this Report when all matters are weighed in the planning balance.

CONCLUSIONS

- 3.1.37. The NPSs establish the urgent need for offshore wind for both energy security and net zero. The Proposed Development would provide approximately 1GW of new renewable generating capacity. This would assist in the achievement of Government targets in relation to offshore wind and wider decarbonisation targets and hence the UK's global commitments to reduce the effects of climate change. It would also contribute to the reduction of the UK's reliance on imported energy to improve UK energy security and provide socio-economic benefits. The Proposed Development would be in accordance with the designated NPSs in that respect.
- 3.1.38. In the light of NPS-EN1, paragraph 3.2.6, all applications for development consent for the types of infrastructure covered by the NPS should be assessed on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent. In addition, paragraph 3.2.7 states that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008 (PA2008).
- 3.1.39. Pursuant to NPS EN-1, paragraph 4.1.3, the starting point is a presumption in favour of granting development consent for the Proposed Development. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused, and it is also subject to the provisions of the PA2008 set out at paragraph 1.1.4 of NPS EN-1.
- 3.1.40. The consideration of specific and relevant issues raised by IPs including the local authorities are considered elsewhere in this Report. However, as a matter of principle, the ExA are content that there is a strong need case in favour of the grant of development consent, so as to meet the urgent need for low carbon energy within a reasonable timeframe. The overall need case carries very great positive weight in favour of the grant of development consent. As explained in Chapter 1 paragraph 1.7.5, this is the fourth and highest level of weighting that we have ascribed to topics, and we equate this to the 'substantial weight' referred to in NPS EN-1 paragraph 3.2.7.

3.2. ALTERNATIVES

INTRODUCTION

- 3.2.1. This section considers the alternatives appraised by the Applicant in defining and designing the Proposed Development.
- 3.2.2. In its consideration of alternatives, the ExA has had regard to:
- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1) Section 4.3;
 - the National Policy Statement for Renewable Energy Infrastructure (NPS EN-3), in particular Sections 2.3 and 2.8;
 - the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5), in particular Section 2.2;
 - the Local Impact Reports (LIRs);
 - the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations);
 - any matters prescribed in relation to the development; and
 - any other important and relevant matters including the Horlock Rules.

- 3.2.3. For those matters where there are specific requirements in respect of the consideration of site-specific alternatives, such as in relation to compulsory acquisition or habitats sites or where the NPS imposes a policy requirement to consider alternatives, these are not dealt with in this section of the Report. They have instead been considered in the relevant individual topic and other sections of the Report.

THE APPLICATION

OVERVIEW OF THE SITE SELECTION PROCESS

- 3.2.4. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regs), Regulation 14 (2) (d), requires the application to be accompanied by an Environmental Statement (ES), which includes a description of reasonable alternatives studied by the applicant, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment
- 3.2.5. The Applicant's consideration of alternatives is set out within ES Chapter 4: Site Selection and Assessment of Alternatives [APP-018]. This explains that the siting, design and refinement of the Proposed Development's offshore and onshore areas has followed a site selection process, taking account of environmental, physical, economic and social effects and opportunities, as well as engineering, technical and commercial feasibility. The details of the approach taken to select the array area; offshore cable corridor; landfall; onshore cable route and onshore substation works area are provided in Sections 4.4 to 4.9 of ES Chapter 4.
- 3.2.6. The site selection process began with the identification of an extension to the existing Great Gabbard Offshore Wind Farm (GGOWF) in 2019. The project areas described in ES Chapter 4, Section 4.1.2, have been significantly refined throughout the pre-application process, in response to consultation (Section 4.2 and ES Appendix 4.2 Site Selection and Assessment of Alternatives Consultation Responses [APP-091a]), as well as environmental and engineering studies.
- 3.2.7. For the offshore project area, the Scoping Report and Preliminary Environmental Information Report (PEIR) included two array areas and an interconnector corridor. Following stakeholder feedback on the PEIR, the offshore project area has been revised, with the previously defined northern array area and interconnector corridor removed and the southern array area reduced in size. The offshore cable corridor has been extended to meet the revised boundary of the array area and also reduced in width to align with the selected landfall.
- 3.2.8. The Proposed Development's site selection process was underpinned by a set of 'golden rules' as described in ES Appendix 4.1 [APP-091]. These are a set of assumptions and principles which set the framework for the site selection exercise, and they have been adhered to throughout the process. The Applicant asserts that the golden rules have been derived using best practice guide for site selection, including the Crown Estate's Cable Route Protocol, the National Grid's Horlock Rules (for the siting of substations) and Holford Rules (for the siting of transmission infrastructure), as well as NPS EN-1, EN-3 and EN-5 and other relevant planning considerations.

COLLABORATION WITH OTHER PROJECTS

- 3.2.9. The site selection process takes into account that all three grid connection options are included in the Proposed Development's design envelope (ES Chapter 5 Project Description [[APP-019](#)]).
- 3.2.10. The site selection process for the transmission infrastructure required under both Options 1 and 2 has involved co-ordination with the Five Estuaries Offshore Windfarm (VEOWF) project, located to the east of North Falls Offshore Windfarm (NFOWF) and the transmission infrastructure for both options has been designed as a single site selection process.
- 3.2.11. The details of how co-ordination between NFOWF and VEOWF has been undertaken during the site selection process is set out in ES Chapter 4, Sections 4.8 and 4.9 [[APP-018](#)], and full details are provided in the Co-ordination Report [[APP-236](#)].

CONSULTATION

- 3.2.12. The Applicant has undertaken pre-application engagement with stakeholders, communities and landowners throughout the site selection process, in order to seek input to the process, as well as to communicate key project updates. The key consultation to date relating to site selection and assessment of alternatives is summarised in ES Appendix 4.2 [[APP-019a](#)] which also provides a summary of how the consultation responses received to date have influenced the approach that has been taken.

SITE SELECTION AND ASSESSMENT OF ALTERNATIVES

- 3.2.13. A number of strategic-level project location and design alternatives have been considered as part of the site selection and assessment of alternatives process, as shown in ES Chapter 4, Table 4.2 [[APP-018](#)].

IDENTIFICATION OF THE NFOWF ARRAY AREA

- 3.2.14. Following stakeholder feedback (ES Chapter 4 Section 4.2 and ES Appendix 4.2 [[APP-091a](#)]), the array area has been significantly reduced:

- The former northern array area has been removed to reduce impacts on shipping and seascape, particularly the Suffolk and Essex Coast and Heaths National Landscape.
- The southern array area (now the 'array area') has been reduced in size to facilitate various shipping and ecological factors from 150km² to 95km². The maximum number of turbines has therefore also reduced since the PEIR to 57 of the smallest turbines (down from 72); or 34 of the largest turbines in the design envelope (down from 40).

ONSHORE GRID CONNECTION

- 3.2.15. In March 2019, the Connection and Infrastructure Options Note (CION) process for NFOWF commenced. In January 2021, National Grid Electricity Transmission (NGET) indicated to the Applicant that the location of the connection would be at a new 'East Anglia Coastal' substation and the location of that new substation would be within the Tendring Peninsula. Subsequently, NGET provided increased certainty to the Applicant that the new substation would be located on land to the east of the village of Ardleigh in Tendring district, Essex (ES Figure 4.12 [[APP-050](#)]). The

Applicant has used this information as the basis for the site selection process for the Proposed Development.

- 3.2.16. Since 2021, NGET has developed proposals for the East Anglian Connection Node (EACN) substation as part of its Norwich to Tilbury (N2T) grid reinforcement project for upgrading the grid infrastructure within East Anglia. In April 2024, NGET published its PEIR documentation for the N2T project, which presented a footprint for the proposed new EACN substation located within the area adjacent to the NFOWF onshore substation works area to facilitate connection works into the new EACN substation. This is the location at which the Proposed Development would connect to the grid under grid connection Options 1 and 2.

SELECTION OF THE LANDFALL

- 3.2.17. Following NGET's indication in January 2021 that the Proposed Development would connect into a new substation located within the Tendring peninsula, the Applicant commissioned a study to identify suitable locations for making cable landfall on the Tendring peninsula between the Stour and Colne Estuaries.
- 3.2.18. Since the confirmation of a grid connection location by NGET and publication of the PEIR, a further site exercise was undertaken to identify potential landfall compound locations (and associated HDD profiles) within the landfall search area, and compare the constraints and opportunities associated with each. Three options were identified as locations where landfall works would be viable along the coastline between Clacton-on-Sea and Frinton-on-Sea.
- 3.2.19. The outcome of the site selection work undertaken to date was reviewed to identify the most suitable option for bringing ashore cables for both the NFOWF and VEOWF at a single onshore location. Kirby Brook was the most suitable option due to the greater availability of space for incoming offshore cable routes for two projects (and four circuits) to make landfall at this location, and this option has been taken forward within the development consent order (DCO) application.

OFFSHORE CABLE CORRIDOR SITE SELECTION

- 3.2.20. The process adopted for the offshore cable corridor site selection is set out in ES Chapter 4, Section 4.7 [\[APP-018\]](#). The Applicant sought to identify a number of offshore cable corridor options based on the key principles which are set out at paragraph 63 of that section.
- 3.2.21. Northern, central and southern offshore cable corridor options between the array areas and landfall search area were identified by the Applicant, following constraints mapping.
- 3.2.22. Following PEIR and the refinement to the array area (Section 4.4.4) and landfall (Section 4.6.2), the offshore cable corridor was refined slightly to align with the array area and landfall (shown in ES Figure 4.11 [\[APP-050\]](#)). Furthermore, the number of export cable circuits has been reduced from four to two, but the 1km wide offshore cable corridor is required to facilitate a future dedicated cable route exercise for each export cable circuit.

ONSHORE SUBSTATION

- 3.2.23. The site selection process for the onshore substation is set out in ES Chapter 4, Section 4.8 [\[APP-018\]](#). Following the provision of a grid connection location by

NGET, the Applicant has undertaken a site selection exercise to identify the optimum location for an onshore substation.

- 3.2.24. The Applicant has sought to identify suitable options for the Proposed Development's onshore infrastructure that could accommodate either the NFOWF project alone or co-located infrastructure for NFOWF and the VEOWF project. The onshore substation site selection exercise has therefore, from the outset, sought to identify options which would fulfil the objectives of both projects. The principles that were applied in order to delineate an area of search are set out in ES Chapter 4, Section 4.8.1, paragraph 78. Following identification of an area of search, a constraints mapping exercise was undertaken to identify an initial 'long list' of potential options for the location of the onshore substation as set out in Section 4.8.2.
- 3.2.25. Using these constraints, parcels of less 'constrained' land were identified within the area of search, which had the space to potentially accommodate onshore substation infrastructure for the NFOWF and the VEOWF projects. This includes space for two project onshore substation platforms, and associated landscaping and environmental mitigation, access and drainage requirements. These options are shown in ES Figure 4.13 [\[APP-050\]](#).
- 3.2.26. The onshore substation zone identified through this process is an approximately 60ha area located either side of Ardleigh Road to the east of the village of Ardleigh in Tendring district. The zone is entirely comprised of flat-lying arable land in current use and has no internal boundary features. The nearest property is approximately 250m to the east, and the nearest settlement is the village of Little Bromley, approximately 1km to the east. The onshore substation zone is the area which was assessed within the PEIR.
- 3.2.27. Once a refined onshore substation works area was identified, potential locations for an onshore substation, co-located with a VEOWF onshore substation, within the area were identified. The conclusion of this process was the identification of co-located platforms for the NFOWF and VEOWF onshore substations, as shown in ES Figure 4.15 [\[APP-050\]](#). The onshore substation layout has been designed to allow space for the additional ancillary infrastructure during construction and operation identified in ES Chapter 4, Section 4.8.5, paragraph 98.

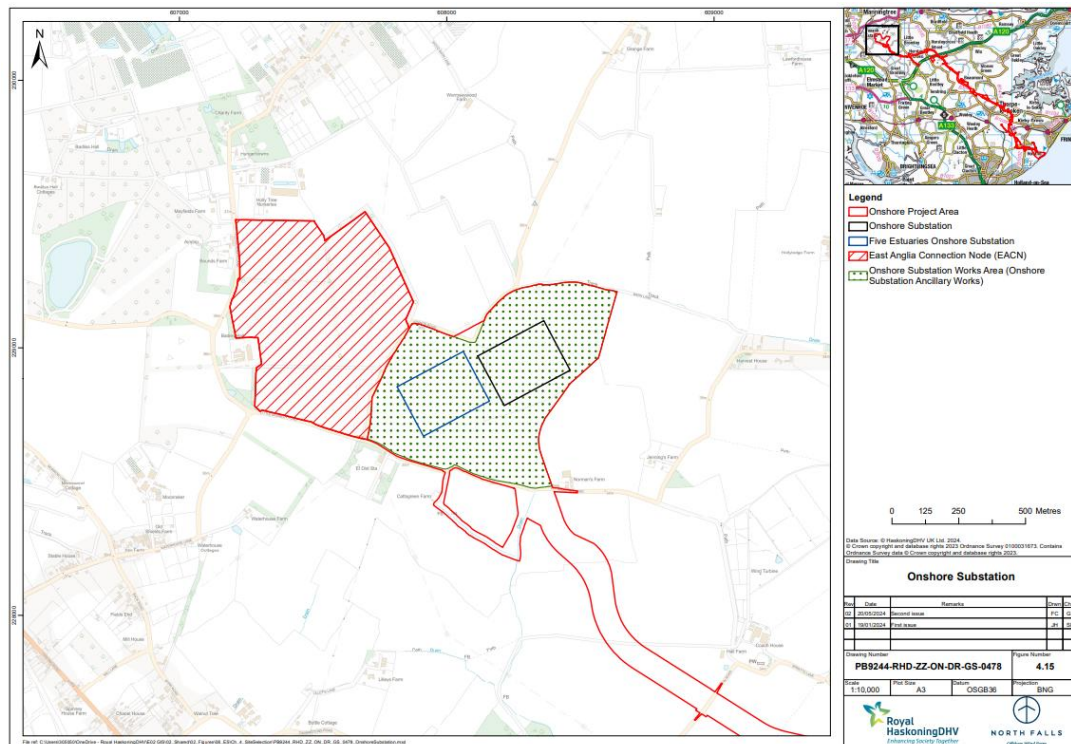


Figure 4 : Onshore Substation (Source: ES Figure 4.15 [APP-050].)

ONSHORE CABLE CORRIDOR ROUTE

- 3.2.28. The ES Chapter 4, Section 4.9 sets out the selection process for the onshore cable corridor route. The four phases of site selection have all been undertaken using the Proposed Development's 'golden rules', as described in ES Appendix 4.1 [APP-091]. As with other elements of the transmission infrastructure site selection process described above, this process has adhered to the recommendations regarding site selection described within the NPSs (especially EN-1 and EN5) and the Electricity Act 1989.

SUMMARY

- 3.2.29. The Applicant indicates that the site selection process for the Proposed Development has been continuous since its inception. A summary of the key decisions made during the site selection process is provided in ES Chapter 4 Table 4.4 [APP-018] which sets out the alternatives assessed and preferred options selected for the different infrastructure elements of the Proposed Development.

ISSUES CONSIDERED DURING THE EXAMINATION

- 3.2.30. The main issues considered in relation to alternatives to the Proposed Development, including the various routes, strategies, and design development options, were as follows:

- The proposed location of the onshore substation;
- the proposed route for the onshore cable corridor; and
- the scope for connecting to an offshore transmission network as an alternative to connecting to an onshore cable corridor with an onshore substation.

THE PROPOSED LOCATION OF THE ONSHORE SUBSTATION

THE PRINCIPLES APPLIED IN THE SELECTION PROCESS

3.2.31. The ES Appendix 4.1 Site Selection Golden Rules [\[APP-091\]](#) defines the assumptions and principles which set the framework for the site selection. The Applicant's response to ExQ1 3.1.3 [\[REP2-020\]](#) includes a table which sets out the derivation of the relevant principles followed including for the siting of the onshore substation. The Applicant explains that the golden rules are not intended to be an exhaustive list of criteria but instead set the first principles which will be used when identifying sites, which are then subject to further scrutiny through the site selection process as described in ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#).

3.2.32. The Applicant explains that BMV land was not able to be included within the list of golden rules. This is because to enable a connection to the national grid at NGET's proposed EACN, all land which met other technical criteria within the required proximity to the EACN was located entirely within BMV land.

THE USE OF BEST AND MOST VERSATILE (BMV) AGRICULTURAL LAND FOR THE SITING OF THE PROPOSED SUBSTATION

3.2.33. The substation requirements are listed in the Applicant's response to ExQ1 6.1.6 [\[REP2-020\]](#). This includes ancillary items to mitigate the impact of the substation as well as the substation itself. The total area required for each substation is 280m x 210m (just under 6ha). The co-ordinated substations require just under 50ha together.

3.2.34. The ES Chapter 4, Section 4.8.1, paragraph 78, footnote 3 [\[APP-018\]](#) explains that the maximum distance of 3km from the grid connection point is set in order to minimise the length of cable between the Proposed Development's onshore substation and that point. This is necessary to reduce the general impacts from cabling; to minimise electrical losses which improves overall system efficiency; to reduce/eliminate the need for additional equipment to compensate for losses and to minimise the overall cost of the connection. The Applicant provides further details in relation to the need for the 3km parameter in response to ExQ1 3.1.8 [\[REP2-020\]](#).

3.2.35. Therefore, the Applicant's position is that to meet the Proposed Development's technical requirements an onshore substation must be located within 3km of the NG connection point offered to it at the proposed EACN. All suitable land which meets the other technical criteria in terms of space requirements, separation distances from residential properties, access, drainage requirements as set out in the golden rules [\[APP-091\]](#) within the area of search is classified as Grade 1 agricultural land, and as such no areas of poorer quality land are available.

3.2.36. The Deadline (D) 4 submission of T & R Fairley Farming Partnership and T Fairley and Sons Limited [\[REP4-099\]](#) questions this and encloses a plan indicating the Agricultural Land Classification (ALC) grades in the location of the proposed EACN substation. They do not consider the proposed EACN to be appropriately located, given its position in the centre of a productive area of Grade 1/BMV land. They submit that alternative sites for substations/convertor stations associated with the EACN, including an initial NFOWF/VEOWF design, were considered on areas of Grade 3 land outside/bordering the 3km radius.

3.2.37. The ES Figure 4.13 shows the initial 'long list' of options for an onshore substation site. The sites considered within the 3km zone during the site selection process are

- 3.2.40. In response to ExQ2 2.0.7 [\[REP5-054\]](#), the Applicant contends that it has sought to minimise impacts on BMV land by minimising the footprint of permanent infrastructure required, and the land take for drainage, landscaping and biodiversity net gain as far as possible whilst still ensuring that these components would fulfil their purpose in reducing environmental impacts.

THE IMPACT OF THE PROPOSED SUBSTATION SITING ON THE LANDSCAPE, PREMATURITY AND THE CONSIDERATION OF ALTERNATIVES TO THE NORWICH TO TILBURY OPTION

- 3.2.41. The submissions of Sir Bernard Jenkin [\[REP4-090\]](#) and [\[REP6-094\]](#) raise concerns that the siting of a major new substation at Ardleigh, directly adjacent to the Dedham Vale AONB would cause unavoidable and irreparable harm to the landscape. He submits that the substation must be relocated to a site that does not directly compromise the Dedham Vale AONB or its setting.
- 3.2.42. He also asserts that the Proposed Development and VEOWF are dependent upon the outcome of the DCO application for National Grids (NG's) proposals for N2T. He submits that until alternatives to N2T, such as Electricity System Operator's (ESO's) Option 8 from their East Anglian Network Study (EANS) (and the other possible alternatives being promoted by the Essex Suffolk and Norfolk Pylons campaign (ESNP)) are fully considered, DCOs for NFOWF and VEOWF must not be granted.
- 3.2.43. The Applicant's response to ExQ2 9.1.13 [\[REP5-054\]](#) explains further its reliance upon the connection agreement with the National Energy System Operator (NESO) which requires NESO to provide a connection which has been identified as the EACN. In response to ExQ2 3.0.3 [\[REP5-054\]](#), the Applicant sets out why it does not agree that the consideration of the Proposed Development should be delayed. The ESO East Anglia Network Study (March 2024) sets out a feasibility assessment for Option 8 (onshore HVDC route) and includes an anticipated delivery date and projected capital cost for this option. The feasibility assessment identifies significant deliverability and operability concerns with this option. Furthermore, the anticipated timeline was not considered to be acceptable because it threatened the implementation of the UK Government's Clean Power 2030 Action Plan.
- 3.2.44. The Applicant points out that NGET will need to justify its site selection and consideration of alternatives as part of its separate DCO application. However, it is not clear what actions or processes would constitute 'fully considering' the alternatives being canvassed by the ESNP including Option 8. The Applicant's position is that it would be unreasonable to delay the consideration of the NFOWF application solely on the basis that there are objections to the N2T project.

EXA'S CONSIDERATIONS

- 3.2.45. The site selection process for the onshore substation is set out in ES Chapter 4, Section 4.8 [\[APP-018\]](#). The proposed EACN substation would be located within the area adjacent to the proposed NFOWF onshore substation works area. This is the location at which the Applicant has been offered a connection to the grid under grid connection Options 1 and 2.
- 3.2.46. Given that background, the ExA considers that this location provides the most appropriate starting point for the site selection process. Following the provision of a grid connection location by NGET, the Applicant has undertaken a site selection exercise to identify the optimum location for an onshore substation. The conclusion

of this process was the identification of co-located platforms for NFOWF and VEOWF onshore substations, as shown in ES Figure 4.15 [\[APP-050\]](#).

- 3.2.47. The ExA notes the concerns raised by IPs that the application for the Proposed Development is premature, particularly in the light of the objections raised to the N2T proposal. However, the Applicant's response to ExQ1 3.1.6 [\[REP2-020\]](#) confirms that it has signed a connection agreement with NESO. The Applicant has therefore complied with paragraph 4.11.5 of NPS EN1 which requires it to liaise with NG (now NESO) to secure a grid connection. Given that there is a contractual obligation for the connection to be provided and the level and urgency of need for this type of new energy infrastructure, the ExA does not regard the consideration of the DCO application for the Proposed Development to be premature.
- 3.2.48. As the Applicant points out, NGET will need to justify its site selection and consideration of alternatives in its DCO application for the N2T project as part of the normal DCO process (ExQ2 3.0.3) [\[REP5-054\]](#). The ExA does not find the consideration of alternatives for that separate scheme to which the EIA Regs will also apply to be a matter that justifies any delay in the consideration of the NFOWF application. We consider the Grampian requirement suggested by Essex County Council (ECC) and Tendring District Council (TDC) that would link the commencement of any development consent to the progress of the N2T DCO application elsewhere in Section 4.6 of Chapter 4 of this Report.
- 3.2.49. The site selection process for the transmission infrastructure required under both Options 1 and 2 has involved co-ordination with the VEOWF project, and the transmission infrastructure for both options has been designed as a single site selection process. The ExA is content that this reflects the coordinated approach advised by NPSs EN-3 and EN-5 in order to reduce the cumulative environmental impacts and impacts on communities.
- 3.2.50. The ExA believes that the Applicant's golden rules described in ES Appendix 4.1 Site Selection Golden Rules [\[APP-091\]](#) provide a sound basis for establishing the first principles that were used to identify sites before further scrutiny through the site selection process. For the reasons set out above, the golden rules do not include the avoidance of BMV land as a factor within the list of parameters.
- 3.2.51. The ExA is satisfied that in order to meet the Proposed Development's technical requirements, an onshore substation is required to be located within 3km of the NG connection point offered to the Applicant at NGET's EACN. Whilst we have had regard to the concerns expressed by IPs as regards the siting of the proposed substation on BMV land, given the technical requirements for a connection to the NG at NGET's proposed EACN, we are content that BMV land was appropriately excluded from those selection principles.
- 3.2.52. We also accept that all suitable land which meets the other technical criteria of the golden rules in terms of space requirements, separation distances from residential properties, access, and drainage requirements within the area of search is classified as BMV agricultural land. This is confirmed by the Applicant's updated version of Figure 4.13 at Deadline 5 showing the Onshore Substation Site Selection constraints including BMV land (Appendix to Applicant's Response to ExA's Second Written Questions (ExQ2) [\[REP5-070\]](#)).
- 3.2.53. The Applicant has provided further explanation and justification for the selection of the proposed substation site in terms of the area required to accommodate the substations in comparison to all other locations considered. We accept that the

substation size is based on the size of the component equipment needed to meet the limits set out by NG standards and this equipment is minimised by locating the substations as close as physically possible to the EACN substation. This also enables the ancillary items to be minimised as they are based on the substation size.

- 3.2.54. In the light of all the substation requirements, including ancillary items to mitigate the impact of the substation as well as the substation itself, we accept that the Applicant has sought to minimise the use of BMV land. The ExA gives detailed consideration to the impacts arising from the loss of and use of BMV land in Section 4.1 of Chapter 4 of this Report and consequently in the overall planning balance elsewhere in Chapter 8 of this Report. In addition, the extent of the land sought to be acquired is considered in the context of compulsory acquisition in Chapter 9 of this Report.
- 3.2.55. As regards the impact on the landscape and the submissions made that the substation must be relocated to a site that does not directly compromise the Dedham Vale AONB or its setting, the ExA gives detailed consideration to those landscape impacts in Section 4.6 of Chapter 4 and consequently in the overall planning balance in Chapter 8 of this Report.
- 3.2.56. However, for the purposes of the consideration of alternatives, no specific proposal or evidence of suitability of an alternative substation site that could meet the objectives of the Proposed Development has been put forward either by Sir Bernard Jenkin or other IPs for consideration.
- 3.2.57. The ExA is satisfied that the site selection process for the onshore substation including the ES consideration of alternatives has been appropriately and proportionately carried out. We find no reason to question the outcome of that process which reflects the relevant NPS and other policies and guidance.

THE PROPOSED LOCATION OF THE CABLE CORRIDOR ROUTE

- 3.2.58. The post hearing submissions of Strutt & Parker (Farms) Ltd and Liana Enterprises Ltd [\[REP4-091\]](#) provide further information about their own development plans which they submit will be impacted by the cable corridor route. The submissions include the Scott Properties 'Vision Document' dated April 2025 which sets out a proposed development framework for their land at Thorpe-le-Soken.
- 3.2.59. Their preference is for the cable corridor route to go further north (outside the current cable corridor land). This has been rejected by the Applicant as it would require a slightly longer cable and hence additional cost. However, this land is within the ownership of Strutt & Parker (Farms) Ltd, and they would be happy to accommodate the NFOWF works through it, as this would not impact on their development proposals either now or in the future.
- 3.2.60. They submit that there is also an option for the Applicant to go under the water bodies on their land. They have been told by the Applicant that it is not possible to put the cable under a pond by directional drilling. However, they assert that other offshore wind farm cables have directional drilled under water courses and water bodies and hence it seems perfectly possible to do so.
- 3.2.61. The Applicant's response to this matter is set out in various documents [\[AS-050-a-3\]](#), [\[AS-050-a-4\]](#), [\[AS-050-a-5\]](#), [\[AS-050-a-7\]](#) and [\[AS-050-a-8\]](#) within the Applicant's Response to D3 Submissions and Deferred Responses from D2 [\[REP4-027\]](#). The

Applicant has also provided a response to ExQ2 2.0.8 [\[REP5-050\]](#), as regards the progress made with the landowner's agent in identifying a route for the cables which would minimise the potential impact on the future development of the land.

- 3.2.62. In relation to the Vision Document, based on the indicative site layout, the Applicant highlights the limited interaction between the two projects. Consequently, the Applicant sees no reason why the two projects could not co-exist and will continue to engage with the landowner on this point. Additionally, the Vision Document states that parts of the land within which the NFOWF is predominantly located "could be made available for biodiversity net gain or other nature-based initiatives if required". Whilst further engagement would be required on this point, such a use could co-exist with the Applicant's proposals.
- 3.2.63. The Applicant contends that in the absence of any planning consent or evidence to demonstrate the viability or deliverability of the scheme (including for example formal pre-application advice from the Local Planning Authority regarding the likely conformity or divergence of the proposals when assessed against the Development Plan and other material considerations), there is no basis at this time to conclude that the landowner's development would materialise or that it should be afforded significant weight in the assessment of the Applicant's proposals.
- 3.2.64. At the CAH, [\[REP6-064\]](#), the Applicant referred to the plan submitted on behalf of the landowners at D4 [\[REP4-091\]](#), which shows a slight overlap between their proposed development site boundary and the NFOWF and VEOWF cable corridor. The Applicant reiterated its position that the proposed residential development and the cable corridor can coexist at the relevant location. Furthermore, the proposed housing development is at an early stage and has not yet been submitted for planning permission. Any housing development would be required to include open space, biodiversity net gain, and landscaping, which could be located and designed to accommodate the cable route.
- 3.2.65. Regarding the proposed Phase 2 of the residential development, the Applicant noted that no details have been provided, making it difficult to assess potential interactions with the NFOWF project. However, any future development would need to be designed to coexist with the cable infrastructure installed for the NFOWF project.
- 3.2.66. The Applicant also addressed suggestions made by the landowner to re-route the cable further north or beneath existing reservoirs in that drilling under the reservoirs would be technically challenging due to depth, rock strata, and maintenance concerns. Routing further north would require crossing an Affinity Water main at a shallow angle, increasing the risk of interference with that apparatus, such as galvanic corrosion to the water pipe, causing much larger impacts on other stakeholders. The current route crosses the pipe perpendicularly to minimise these risks.
- 3.2.67. The Applicant indicates that it will continue to engage constructively with the land interest on their proposals and remains committed to minimising impacts on their future land use where this is feasible and supported by evidence. However, the Applicant must also ensure that their Proposed Development remains deliverable within the parameters of the proposed Order Land (as shown on the Land Plans [\[AS-018\]](#)) and the dDCO [\[REP8-005\]](#).

EXA'S CONSIDERATIONS

- 3.2.68. The ES Chapter 4, Section 4.9 sets out the selection process for the onshore cable corridor route. The four phases of site selection have all been undertaken using the Proposed Development's 'golden rules', as described in ES Appendix 4.1 [APP-091]. This process has adhered to the recommendations regarding site selection described within the NPSs (especially EN-1 and EN5) and the Electricity Act 1989. The ExA is content that the general assessment of the cable corridor route has been carried out in an appropriate and proportionate manner.
- 3.2.69. As regards the specific alternative routes for the cable corridor proposed on behalf of Strutt & Parker (Farms) Ltd and Liana Enterprises Limited, the landowner has only provided details of the Phase 1 development proposals as set out in the Vision Document [REP4-091]. No evidence has been provided of any planning consent having been granted or evidence to demonstrate the viability or deliverability of the scheme for the proposed housing development (Phase 1) depicted within the Vision Document [REP4-091], nor plans provided for the proposed Phase 2 of the development.
- 3.2.70. We therefore find no reason to question the Applicant's submission that Phase 1 and the Proposed Development could reasonably co-exist together, and that any small degree of interaction would not be insurmountable. Given that this residential development has not yet been consented, we agree that there remains the opportunity for the landowner to amend the proposals in order to remove the minor existing interactions with NFOWF. Since there are no specific details of Phase two of the development before us, we agree with the Applicant that this makes it difficult to assess potential interactions with the NFOWF project. However, there is no substantial evidence to suggest that any future Phase 2 development could not also be designed to coexist with the cable infrastructure installed for the Proposed Development.
- 3.2.71. We also consider that the Applicant has provided sound and reasonable reasons for rejecting the landowner's suggested alternatives to re-route the cable further north or beneath existing reservoirs. The ExA is satisfied that the proposed route represents the most satisfactory option for the cable corridor having regard to all relevant factors. We consider the question of alternatives in relation to the Strutt & Parker (Farms) Ltd land in the context of compulsory acquisition in Chapter 9 of this Report.

THE SCOPE FOR CONNECTING TO AN OFFSHORE TRANSMISSION NETWORK

- 3.2.72. The ECC [RR-093], SCC [RR-318] and TDC [RR-327] amongst others have raised concerns about the Proposed Development's reliance on an onshore connection and the EACN as a component part of the N2T project.
- 3.2.73. ECC in consultation on the NFOWF [APP-215] has stated its clear preference for a coordinated approach between the different proposed offshore windfarm extension projects and multi-purpose interconnector. ECC submits that the developers of these separate projects have not presented a comprehensive and conclusive set of evidence to show that the transmission objectives of the Proposed Development could not be met using alternative link(s) to reduce the impact of onshore infrastructure on the terrestrial environment in Essex or Suffolk.
- 3.2.74. Many other IPs including Zena Marlow [RR-352], Emma Stimpson [RR-090], and John Glasse [RR-166] have also expressed the view that the provision of an

alternative offshore connection should be examined. The D1 submission of Glynis Robertson [\[REP1-084\]](#) raises concerns in relation to the lack of a satisfactory appraisal of an alternative offshore grid connection.

- 3.2.75. At Open Floor Hearing 1 (OFH1) Ardleigh Parish Council [\[REP1-077\]](#) submitted that the requirement for a more coordinated approach to offshore-onshore transmission is strongly incorporated in the latest energy NPSs from the Department for Energy Security & Net Zero (DESNZ). The Parish Council and its residents are frustrated that integrated offshore options have never been given full consideration. They draw attention to the Offshore Coordination Support Scheme (OCSS) review report produced as a collaboration between Ardleigh Parish Council and the ESNP campaign group following the termination of the OCSS.
- 3.2.76. The Applicant's Co-ordination Report from page 13 [\[REP1-004\]](#) comprehensively sets out its long-term engagement in the Offshore Transmission Network Review, (OTNR) commencing from 2020 and then subsequently, the DESNZ project, the OCSS. On 3 September 2024 (approximately two months after the submission of the DCO application), the Secretary of State for DESNZ decided not to grant further funding to the consortia to explore the potential for offshore cable and offshore grid connection coordination. Whilst the workstream and its technical report identified that an offshore cable and grid connection point was technically feasible, it also identified the potential for significant additional costs and delay. Further background to the decision by DESNZ in relation to that is explained in Section 3 of the Co-ordination Report [\[REP1-004\]](#).
- 3.2.77. The Applicant's response [\[AS-042\]](#) to the ExA's Procedural Decisions (PD) [\[PD-005\]](#) indicates that currently no third party is promoting a co-ordinated offshore cable option in collaboration with the NFOWF proposed grid connection point. The Applicant's Common Response – 001 within the Applicant's Response to Relevant Representations Received from Members of the Public [\[REP1-048\]](#), responds to the points raised in relation to connecting to other offshore electricity interconnectors including LionLink and Nautilus. Further details in relation to the progress of specific offshore interconnector projects are set out in response to ExQ2 3.1.3 (iii) [\[REP2-020\]](#). This confirms that currently, the only grid connection agreement secured and in place is between the Applicant and NESO for a radial connection located at the EACN.
- 3.2.78. At ISH1, the Applicant stated that although the Sea Link DCO application has been submitted, it does not allow for connection of the NFOWF project. The Applicant also clarified that other current interconnector projects do not include connections to UK offshore wind projects. In addition, the costs of the connection solution had been considered by the government as part of the OCSS and the point of connection was determined by NG [\[REP4-026\]](#). The Applicant has provided additional information in relation to this topic in response to ExQ2 3.0.2 [\[REP5-054\]](#).

EXA'S CONSIDERATIONS

- 3.2.79. The Applicant has had long-term engagement in the OTNR and then subsequently, the OCSS. The Secretary of State for DESNZ has decided not to grant further funding to the consortia to explore the potential for offshore cable and offshore grid connection coordination as part of the OTNR "Early Opportunities" workstream and advised key stakeholders accordingly.
- 3.2.80. Although the Sea Link DCO application has been submitted, the Applicant has clarified that it does not allow for connection of the NFOWF project. The Applicant

also confirmed that other current interconnector projects do not include connections to UK offshore wind projects.

- 3.2.81. The ExA considers that the Applicant has fully explored the options for an integrated offshore connection but a viable option that could deliver a connection for the Proposed Development by 2030 has not been identified to date. Whilst the option to connect offshore remains part of the DCO application, we accept that at present in order to achieve the operational date of 2030 an onshore radial connection is required.
- 3.2.82. The ExA considers that the Applicant has demonstrated a reasonable and appropriate approach to the consideration of alternatives to the connection to transmission network including by means of an offshore connection.

CONCLUSIONS

- 3.2.83. The ExA is satisfied that the Applicant has included in the ES information about the reasonable alternatives that have been studied in accordance with NPS EN-1, paragraph 4.3.15. Furthermore, the ES gives an indication of the main reasons for the options chosen, taking into account the environmental, social and economic effects and, where relevant, technical and commercial feasibility. We consider that Regulation 14 of the EIA Regs has been complied with by the Applicant and the ES approach is reasonable in that respect.
- 3.2.84. The ExA considers that ES Chapter 4: Site Selection and Assessment of Alternatives, Sections 4.4 to 4.9 [\[APP-018\]](#) provides the necessary information as regards the site selection process. This includes the siting, design and refinement of the Proposed Development's offshore and onshore project areas and details of the approach taken to select the array area; offshore cable corridor; landfall; onshore cable route and onshore substation works area.
- 3.2.85. In the ExA's view, the Applicant's 'golden rules' presented in ES Appendix 4.1 [\[APP-091\]](#) provide a sound basis for the assumptions and principles which underpinned the site selection exercise. They include the Crown Estate's Cable Route Protocol, the Horlock Rules and the Holford Rules. We are satisfied that they reflect best practice for site selection and have been adhered to during the site selection process.
- 3.2.86. The co-ordination undertaken during the site selection process between NFOWF and VEOWF as set out in ES Chapter 4, Sections 4.8 and 4.9 [\[APP-018\]](#), and in the Co-ordination Report [\[APP-236\]](#), reflects the EN-1, EN-3 and EN-5 policy requirements for a more co-ordinated approach to offshore-onshore transmission.
- 3.2.87. As regards the specific issues relating to the location of the proposed substation site and the cable corridor route, we consider that the Applicant has thoroughly assessed the alternative sites during the site selection process. We are content that the selected locations for these aspects of the Proposed Development represent the most satisfactory options taking all relevant factors into account. The assessment of any residual harm to the AONB and the extent to which that could be moderated will be considered in the Landscape and Visual Effects Section 4.6 and the use of BMV land in Section 4.1 Agriculture of Chapter 4 against the background of the NPSs and other policy tests and weighed in the balance of considerations in Chapter 8 of this Report. We shall have regard to the consideration of alternatives in the context of compulsory acquisition in Chapter 9 of this Report.

- 3.2.88. The ExA concludes that the Applicant has made an appropriate and proportionate assessment of alternatives in accordance with NPSs EN-1, EN-3 and EN-5 and other relevant and important planning considerations. There are no other common law or policy requirements which demand further consideration of alternatives to the Proposed Development or that would lead us to recommend that development consent be refused for it in favour of another alternative. Consequently, there are no matters relating to alternatives that would weigh for or against the making of the Order.

4. ONSHORE ISSUES

4.1. AGRICULTURE, LAND USE AND GROUND CONDITIONS

INTRODUCTION

4.1.1. This section considers the effects of the Proposed Development on land use, agriculture and ground conditions. Matters relating to the consideration of alternative sites and compulsory acquisition are not dealt with in this section of the Report. They have been considered in the relevant individual topic and other sections of the Report.

4.1.2. In its consideration of agriculture, land use and ground conditions, the Examining Authority (ExA) has had regard to:

- The Overarching National Policy Statement for Energy (NPS EN-1), in particular Section 5.11;
- the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8;
- The National Policy Statement for Electricity Networks Infrastructure (NPS EN-5), in particular Section 2.9;
- the Local Impact Reports (LIR);
- any matters prescribed in relation to the Proposed Development; and
- any other important and relevant matters.

THE APPLICATION

4.1.3. The Applicant's assessment of Land Use and Agriculture is set out in the Environmental Statement (ES) Chapter 22 Land Use and Agriculture [[APP-036](#)] and the Chapter 22 Land Use and Agriculture Figures [[APP-067](#)].

4.1.4. Other documents relevant to this include:

- ES Chapter 19 Ground Conditions and Contamination [[APP-033](#)];
- ES Chapter 19 Figures [[APP-064](#)]; and
- Outline Code of Construction Practice (OCoCP) as updated at deadline 7 [[REP5-025](#)].

BASELINE

4.1.5. For the assessment of effects on agriculture and land use, the worst case scenario was considered to be Option 2. This is considered as the worst case scenario for land use and agriculture as it requires the installation of four sets of cable ducts and associated joint bays, with the largest footprint of the 3 grid connection options set out in the application.

4.1.6. The ES Chapter 22 [[APP-036](#)] describes the existing environment as a rural county with 68% of Essex County being graded agricultural land. Farming is a major part of the Essex economy, generating over 8000 jobs. The production of cereal crops is important to the area and the use of land for arable farming is reflected in the Agricultural Land Classifications (ALC) for the area. The onshore project area is predominantly within ALC Grades 1-3 and in particular, the onshore substation works would be located within ALC Grade 1 land, being classed as best and most versatile (BMV) land.

- 4.1.7. The Applicant undertook a desk based review of available information to understand baseline conditions and to inform the land use and agricultural impact assessment [APP-036]. During site selection, the Applicant considered designations including local nature reserves, Sites of Special Scientific Interest, country parks and areas subject to agri-environment schemes. The Applicant also considered the potential to align with existing field boundaries, avoid high quality agricultural land and land within agri-environment schemes, the location of utilities and to avoid areas subject to local plan allocations.

MITIGATION

- 4.1.8. The Applicant's proposed mitigation measures to reduce the potential impacts on land use and agriculture would be secured by the Outline Code of Construction Practice (OCoCP) [REP7-025] which would be secured by Requirement (R) 8 of the draft Development Consent Order dDCO [REP8-005].
- 4.1.9. The mitigation measures in the OCoCP [REP7-025] for agriculture and land use includes:
- Minimising land take where practicable, reducing severance of land parcels and aligning the cable route with existing field boundaries;
 - use of stock proof fencing for construction compounds, onsite substation site and where onshore cable route works are being undertaken in accordance with a Construction Fencing Plan that would be included in the CoCP;
 - pollution and contamination controls and prevention;
 - preparation of a Soil Management Plan (SMP) as part of the CoCP which would define the site-specific mitigation measures and good industry practice techniques;
 - stockpiling of excavated materials to be temporary in nature and only to be permitted in designated areas;
 - a Site Waste Management Plan (SWMP) would be prepared prior to the construction works commencing; and
 - pre-construction land surveys would be undertaken by an agricultural liaison officer (ALO) appointed by the Applicant and the ALO would be the main point of contact with the landowners.
- 4.1.10. Embedded mitigation is set out in ES Chapter 22 [APP-036] and key measures include:
- Site selection process-seeking to minimise land take, reduce severance of land parcels, align with field boundaries and avoid BMV land where practicable. The Applicant has sought to minimise impact on utilities and to avoid land that is allocated in local plans or subject to planning permission;
 - drainage-an agricultural land drainage consultant would be appointed to deal with pre and post construction land drainage plans. This is further detailed in the OCoCP [REP7-025];
 - temporary loss of agricultural land-the ALO would be appointed and they would liaise with the landowners to agree means of access to their land. The details of the ALO are contained in the OCoCP [REP7-025] and they would also look to agree ways to minimise the impact of construction on landowners. A schedule of condition of the land would be prepared prior to the commencement of works together with soil sampling surveys. The information gathered would be used in the reinstatement of the soils to their former condition and to allow landowners to continue with the previous uses. Habitat reinstatement method statements would also be prepared and implemented post construction;

- loss of soil to erosion- the SMP including a Construction Method Statement would be used for the soil handling including storage and drainage of soils. A soil specialist would be engaged to work with the contractor and landowners;
- soil degradation-this would be dealt with in the SMP and would set out the procedures for soil handling including soil storage, seeding, handling and separation of soils; and
- agri-environment schemes- the Applicant has sought to avoid areas affected by such schemes where possible. Where schemes are affected the reinstatement of soils post-construction as set out in the SMP with the embedded mitigation contained within ES Chapter 23 Onshore Ecology [\[APP-037\]](#) would be measures to mitigate the effect on such schemes

4.1.11. The majority of the proposed onshore cable route works would be buried with agricultural activities being able to recommence following construction and reinstatement of the land.

ASSESSMENT OF IMPACTS

4.1.12. A summary of the potential likely significant effects and the proposed mitigation measures and residual effects is set out in Table 22.26 of ES Chapter 20 [\[APP-036\]](#).

4.1.13. The potential impacts assessed in the ES Chapter 20 [\[APP-036\]](#) include:

- For construction:
 - a. Temporary loss of agricultural land;
 - b. soil degradation;
 - c. loss of soil to erosion;
 - d. impact on agri-environment schemes; and
 - e. disruption to existing utilities.
- For operation:
 - f. Agricultural drainage;
 - g. permanent loss of agricultural land;
 - h. soil heating;
 - i. agri-environment schemes; and
 - j. utilities.
- The impacts of decommissioning are anticipated to be similar to those of the construction phase though the details of decommissioning have not been determined.

4.1.14. In ES Chapter 20 [\[APP-036\]](#) the Applicant concludes that taking account of the mitigation measures outlined above, land use and agricultural receptions could be affected as a result of direct and indirect impacts during the construction, operation and decommissioning phases of the Proposed Development. For the majority of the receptors, the effect would be no impact or minor adverse which would not be significant in EIA terms.

4.1.15. During the construction period the temporary loss of BMV land would result in moderate adverse significant effect. The effects assessed during construction would be temporary and reversible once construction is completed, with land being reinstated to pre-construction condition. During the operation phase the Applicant concluded that the permanent loss of BMV land would be a major adverse significant effect, which could not be mitigated.

CUMULATIVE EFFECTS

- 4.1.16. The summary of the potential cumulative effects on land use and agriculture is set out in Table 22.25. The potential cumulative effects of the Proposed Development along with other plans, projects and activities are identified as:
- Impact on agricultural drainage;
 - temporary and permanent loss of agricultural land;
 - soil heating;
 - agri-environment schemes; and
 - utilities
- 4.1.17. Overall, the Applicant concludes that there is a potential for cumulative effects to occur with Five Estuaries Offshore Wind Farm (VEOWF). For the majority of effects, they are not anticipated to be significant in EIA terms. However, the cumulative effects of the temporary and permanent loss of agricultural land are considered to be significant during the construction and operation for both the Proposed Development and VEOWF. The Applicant concludes that the effects would be no greater than those assessed for the Proposed Development alone. The Applicant states that the ongoing coordination and collaboration with VEOWF would aim to minimise the temporary and permanent loss of agricultural land across the onshore project area.

ISSUES CONSIDERED DURING THE EXAMINATION

- 4.1.18. The main issues for land use and agriculture in the Examination were:
- The extent of the BMV land to be used for the Proposed Development;
 - effect on soils as a result of handling, storage and use of machinery;
 - reinstatement of soils and the maintenance of original ALC grades;
 - cable burial depths;
 - drainage; and
 - Effects of electromagnetic fields (EMF) on soils.

THE EXTENT OF THE BMV LAND TO BE USED FOR THE PROPOSED DEVELOPMENT

- 4.1.19. Several IPs made reference to the loss of BMV land in their RRs. This included but is not limited to T & R Fairley Farming Partnership [\[RR-324\]](#), expressing concern about the loss of prime agricultural land. Mary Ann Cooper [\[RR-223\]](#) expressed concerns about the loss of good quality productive arable farmland and Ardleigh Parish Council (PC) [\[RR-027\]](#) and [\[REP1-077\]](#) referred to the loss of BMV land and harm to farming and related businesses, together with the impact on the rural economy and the predominantly agricultural communities of Ardleigh and surrounding parishes. Elspeth Elinor Knott [\[RR-088\]](#) raised concerns about the use of Grade 1 agricultural land that is used for food production.
- 4.1.20. In ExQ1 Q2.1.2 [\[PD-009\]](#), the Applicant was asked how the test set out in paragraph 5.11.12 of EN1 had been satisfied in terms of minimising the impact on BMV land. The Applicant's response to ExQ1 Q2.1.2 [\[REP2-020\]](#) states that the permanent loss of agricultural land is only in respect of the onshore substation, permanent access road and the link boxes, with a total of 6.36 ha of land, being 0.002% of the available BMV regional land resource as set out in Chapter 22 [\[APP-036\]](#). The Applicant explained the position relating to the technical requirements for the onshore substation to be within a 3km radius of the East Anglia Connection Node (EACN) and that all potential sites that were identified were on BMV land.

- 4.1.21. The impact on BMV land was discussed at issue specific hearing (ISH) 1 [\[REP4-026\]](#) and [\[EV5-010\]](#). In response to the points raised, T & R Fairley Farming Partnership provided a plan of ALC grades within the 3km radius of the EACN onshore substation site [\[REP4-099\]](#). In response to ExQ2 Q2.0.7 [\[REP5-054\]](#), the Applicant provided an updated figure 4.13 as an appendix [\[REP5-070\]](#). This showed the ALC grades as an additional layer on the plan to show the extent of BMV land within the 3km radius of the EACN substation site. The Applicant states that the 'long list' of potential sites for the onshore substation were all on BMV land and the use of BMV land could not be avoided. The issues relating to alternative sites is considered further in Section 3.2 Alternatives of Chapter 3 of this Report.

EXA'S CONSIDERATIONS

- 4.1.22. The ExA has considered the effects of the Proposed Development on BMV land in the context of the policy framework set by NPS EN-1 and NPS EN-3. The requirement in EN-1, paragraph 5.11.12, is for applicants to seek to minimise impacts on BMV land and preferably use land in areas of poorer quality. In addition, paragraph 5.11.34 provides that the Secretary of State (SoS) should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Where schemes are to be sited on best and most versatile agricultural land the SoS should take into account the economic and other benefits of that land.
- 4.1.23. The ExA notes the extent of the ALC grades in the locality and is satisfied that the use of BMV land is unavoidable in order to provide the Proposed Development in the vicinity of the proposed EACN onshore substation. The ExA has had regard to the concerns raised by the interested parties (IPs) relating to the loss of the BMV land for the onshore substation, permanent access road and the link boxes. Whilst this would be a permanent loss, the ExA accepts that the BMV land being lost is a total of 6.36 ha and represents 0.002% of the regional BMV land.
- 4.1.24. The ExA also notes that the use of BMV land for the proposed onshore cable route would result in temporary loss of BMV land which would be reinstated following construction and the land returned to its former agricultural use. The ExA considers that the reinstatement of the land is adequately secured in the OCoCP [\[REP7-025\]](#). The Applicant would be required to provide the CoCP and the SMP secured by R8 and R13 respectively of the dDCO [\[REP8-005\]](#).
- 4.1.25. The ExA is in agreement with the Applicant that the impact of the temporary loss of BMV land during construction and the permanent loss of BMV land during operation is of moderate adverse significance as it would impact agricultural productivity by taking land out of agricultural use. The ExA also agrees that the cumulative effects of the permanent loss of BMV land arising from the onshore substation for the Proposed Development and onshore substation for VEOWF would also be of major adverse significance.
- 4.1.26. EN-1 paragraph 5.11.34 does not preclude development on BMV land and the ExA is satisfied that the Applicant has fully justified the use of BMV land in this case. The Applicant has also sought to minimise the BMV land that would be permanently lost though the coordination of the Proposed Development with VEOWF and the reinstatement of the BMV land that would be used during construction.

EFFECT ON SOILS AS A RESULT OF HANDLING, STORAGE AND USE OF MACHINERY

- 4.1.27. In ExQ2 Q2.0.3 [\[PD-012\]](#), the Applicant was asked to confirm the position as regards the compaction of soils and damage to soil structure, in particular for the haul routes. The Applicant's response to ExQ2 Q2.0.3 [\[REP5-054\]](#) sets out the range of soil protection measures that would be used, as set out in the OCoCP [\[REP7-025\]](#). This includes the SMP and the construction surface water drainage plan (CSWDP). The soil protection measures would be implemented for the stripping, handling and storage of soils, reinstatement and the provision of the haulage routes together with appropriate drainage

EXA'S CONSIDERATION

- 4.1.28. The ExA notes the mitigation measures proposed by the Applicant and that the final CoCP and SMP would be agreed in accordance with R8 and R13 of the dDCO [\[REP8-005\]](#) and that these would be implemented with the ALO, who would work with landowners. The ALO would implement the pre-construction surveys and the ExA is satisfied that the measures would provide sufficient means to control the handling, storage and reinstatement of soils and the impact of machinery on soils.

REINSTATEMENT OF SOILS AND THE MAINTENANCE OF ORIGINAL ALC GRADES

- 4.1.29. In ExQ1 Q2.1.8 [\[PD-009\]](#), the Applicant was asked to provide further information on the reinstatement of soils following construction and how the original ALC land grades would be achieved on reinstatement. The Applicant's response to ExQ1 Q2.1.8 [\[REP2-020\]](#) sets out its proposals for pre-construction surveys and the mitigation measures contained in the OCoCP [\[REP7-025\]](#), including the SMP both of which would be secured by R8 and R13 in the dDCO [\[REP8-005\]](#). The Applicant also refers to the appointment of the ALO, who would be appointed to liaise with landowners and their agents and the appointment would continue for 12 months post construction. The Applicant states that the contractors undertaking the works would be required to comply with DEFRA's 2009 Construction Code of Practice for the Sustainable Use of Soils on Construction Sites PB13298 (or updated relevant guidance).
- 4.1.30. The Applicant was asked to further expand on this issue at ISH1 [\[REP4-026\]](#) and to explain why an outline SMP had not been provided as part of the application. In the Applicant's written summary of the oral submissions at ISH1 [\[REP4-026\]](#), the Applicant explains that the SMP would be agreed post consent and would be in accordance with the OCoCP [\[REP7-025\]](#). It was not necessary to provide a draft SMP as the mitigation measures to be included in the SMP are set out in the OCoCP [\[REP7-025\]](#). The Applicant also addressed the concerns raised by Mr Fairley and Mr Fell at ISH1 as regards the reinstatement of soils and the timing of reinstatement. The Applicant, refers to the appointment of the ALO, the need to comply with the CoCP and SMP and the coordination between the Applicant and VEOWF as set out in the Coordination Report [\[REP1-004\]](#).
- 4.1.31. Strutt & Parker Farms Ltd and Liana Enterprises Ltd in post hearing submissions [\[REP4-091\]](#), raised their issues relating to drainage systems and the depth of cable burial. They also referred to concerns relating to management and reinstatement of soils. In response to issues raised, the Applicant [\[REP5-056\]](#) again referred to the mitigation measures set out in the OCoCP [\[REP7-025\]](#), SMP and the appointment of an ALO. Where the requisite condition could not be achieved following reinstatement, the Applicant states that there would be the opportunity for the

landowners to be compensated financially by making a claim for their losses. The Applicant also refers to a Construction Practice Addendum whereby it would agree key principles with landowners to be embedded in the CoCP as part of the voluntary negotiations.

EXA'S CONSIDERATIONS

- 4.1.32. The ExA agrees with the Applicant that the commitment to provide the SMP is clearly set out in the OCoCP [\[REP7-025\]](#), along with the measures that are required in the SMP. The provision of the CoCP and SMP would be secured by R8 and R13 of the dDCO [\[REP8-005\]](#) and the Applicant would be required to comply with the approved plans. The Applicant has also committed to the appointment of an ALO, giving landowners and agents a point of contact and liaison through the pre-construction, construction and post-construction periods. This appointment is set out in the OCoCP [\[REP7-025\]](#) and secured by R8 of the dDCO [\[REP8-005\]](#). The compensation available for landowners and occupiers affected by the Proposed Development is outside of the remit of the Examination and it would be a matter for landowners and occupiers to make a compensation claim, if appropriate.

CABLE BURIAL DEPTHS

- 4.1.33. Strutt & Parker Farms Ltd and Liana Enterprises Ltd in [\[AS-050\]](#) and at ISH1 [\[REP4-026\]](#), detailed in the post hearing submissions [\[REP4-091\]](#), raised issues relating to the cable burial depths and their impact on field drainage systems. Their concerns related to the potential impact on farming activities where cables would not be buried to 1.2m and they asked why the cable depth cannot be guaranteed. The Applicant in its responses to D3 submissions [\[REP4-027\]](#) and D4 submissions [\[REP5-056\]](#) refers to the cable depths and submits that the minimum depth of 0.9m would be satisfactory to allow standard agricultural activities such as drainage, cultivation and deep ploughing to continue. The Applicant confirms that the minimum cable depth would be 0.9m though, where possible, the cable would be buried at a greater depth with the aim of being up to 1.2m depth. It adds that this would be in line with the UK Power Networks requirements as set out in the Engineering and Construction Standard 02-0019. The Applicant states that no infrastructure would be shallower than 0.9m and that it proposes to bury the cables as deep as reasonably practicable. The Applicant states that it would carry out detailed ground investigations post consent and the proposed cable depths would be determined when the investigations are completed. The Applicant would also provide for consultation with the landowners on the depths of the cables as set out in the OCoCP [\[REP7-025\]](#).

EXA'S CONSIDERATION

- 4.1.34. The ExA notes the responses provided by the Applicant and the mitigation measures in the OCoCP [\[REP7-025\]](#), which include the pre-construction soil survey and the appointment of the ALO to provide the principal point of contact for landowners during construction. The ExA is satisfied that the depth of the cables would be sufficient to allow agricultural activities to recommence and that the landowners would be consulted on the proposed cable depths during the detailed design stage of the Proposed Development. This is set out in the OCoCP [\[REP7-025\]](#) and secured by R8 of the dDCO [\[REP8-005\]](#).
- 4.1.35. The ExA notes that the cable burial depth would be dependent on local geology, soil conditions, agricultural practices and existing field drainage. The ExA is satisfied that the cable depths would not be shallower than 0.9m which is an industry standard depth and that the Applicant would aim for up to 1.2m depth where

possible to allow for agricultural practices to continue following reinstatement as set out in the OCoCP [\[REP7-025\]](#) which would be secured by R8 of the dDCO [\[REP8-005\]](#).

DRAINAGE

- 4.1.36. Strutt & Parker Farms Ltd and Liana Enterprises Ltd in [\[AS-050\]](#) raised issues relating to land drainage, asking that the drainage system on reinstatement be agreed with them and also stating that the field drains need to be above the ducting. They suggested that the cable depths might need to be lower in certain areas to ensure that the field drainage would be above the cables. The Applicant's D3 response [\[REP4-027\]](#) states that there would be a specialist drainage contractor appointed, as specified in the OCoCP [\[REP7-025\]](#) and that this would be secured by R8 of the dDCO [\[REP8-005\]](#). The Applicant indicates that existing land drains along the onshore cable route would be reinstated where practicable and in agreement with the landowner following construction. The drainage consultant would prepare drawings of pre and post construction drainage and a Construction Surface Water Drainage Plan would be required to be provided in accordance with the OCoCP [\[REP7-025\]](#). Any further remediation required following reinstatement would be dealt with via the ALO. The Applicant reports in its responses to D4 submissions [\[REP5-056\]](#) that a meeting with the farm manager for Strutt & Parker Farms Ltd had resulted in a further understanding of specific drainage issues for the land and further drainage designs could be prepared for consultation with the landowner.

EXA'S CONSIDERATIONS

- 4.1.37. The ExA is satisfied that the Applicant would deal with the detailed design of the drainage post consent when the ground investigations are undertaken. The ExA notes the mitigation measures set out in the OCoCP [\[REP7-025\]](#) as secured by R8 of the dDCO [\[REP8-005\]](#) which would include the appointment of a specialist drainage contractor, the Construction Surface Water Drainage Plan and the ALO to deal with post-construction matters. The ExA considers that these would be sufficient to provide a satisfactory means for the Applicant and landowners to agree drainage designs post consent and to ensure that the drainage systems are adequately reinstated. The ExA is satisfied that the obligations within the OCoCP [\[REP7-025\]](#) relating to drainage would be sufficiently robust to avoid a significant impact on agricultural land and would be secured by R8 of the dDCO [\[REP8-005\]](#).

EMF EFFECTS ON SOILS

- 4.1.38. In the ISH1 [\[REP4-026\]](#), Mr Blythe asked if consideration had been given to the impact of EMF on plant life. The Applicant responded [\[REP4-036\]](#) that the implications of EMF on plant life is an emerging topic in relation to the evidence for effects. It states that studies have shown both positive and negative effects. The Applicant adds that it is not aware of studies being undertaken in respect of buried high voltage alternative current (HVAC) electrical cables and their effect on plant health. The studies that the Applicant refers to involved much higher levels of electric and magnetic fields than predicted for the Proposed Development, and it does not consider there to be evidence in respect of effects on plants at the levels of EMF expected for the Proposed Development.
- 4.1.39. The OCoCP [\[REP7-25\]](#) sets out that the Applicant would adopt the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines and that the embedded mitigation including the burying of cables and shielding of cables would eliminate potential EMF risks.

EXA'S CONSIDERATION

- 4.1.40. The impact of EMF on health has been considered in the Section 4.5 Human Health of Chapter 4 of this Report. The information regarding the impact of EMF on soils and plants in the Applicant's response [REP4-036] and in the EMF Non-Technical Summary [REP4-025], together with the Applicant's commitment to comply with the ICNIRP guidelines for EMF as set out in Chapter 28 Human Health [APP-042] and in the OCoCP which would be secured by R8 of the dDCO [REP8-005] is satisfactory and the ExA does not consider any further mitigation is required.

CONCLUSIONS

- 4.1.41. The ExA is satisfied that the Applicant's assessment has fully addressed the potential effects of the Proposed Development on land use, agriculture and ground conditions. This is in accordance with NPS EN-1, in particular Section 5.11.
- 4.1.42. The ExA considers that the measures set out in the OCoCP [REP7-025] and the further management plans that would form part of that final document which would be secured by R8 and R13 of the dDCO [REP8-005], would be sufficient to deal with the handling, storage and reinstatement of soils and the agricultural land generally.
- 4.1.43. The ExA recognises that there would be a permanent loss of 6.36ha of BMV land as a result of the Proposed Development for which the Applicant is unable to provide mitigation. The agricultural land required for the construction of the Proposed Development would be a temporary loss of BMV land for the construction period and would be reinstated and brought back into agricultural use. Whilst there would be an adverse impact on BMV land, the ExA is nevertheless content that the Applicant has sought to minimise those impacts and has fully justified its use in accordance with EN-1 paragraphs 5.11.12 and 5.11.34.
- 4.1.44. The ExA considers that the Applicant has presented a range of measures that would deal with the impacts of the Proposed Development on agriculture, land use and ground conditions in a satisfactory way, which would be secured by the submission and approval of the final CoCP, the SMP and other relevant management plans, secured by R8 and R13 of the dDCO [REP8-005].
- 4.1.45. However, the ExA finds that there would be significant adverse effects and significant cumulative effects arising from the temporary and permanent loss of BMV land for the Proposed Development and in respect of the other proposed substations for VEOWF and the EACN. For those reasons, the ExA concludes that overall, the effects on agriculture, land use and ground conditions should carry a moderate negative weight against the making of the Order.

4.2. AIR QUALITY

INTRODUCTION

- 4.2.1. This section considers the onshore effects of the Proposed Development on air quality.
- 4.2.2. In its consideration of air quality below, the Examining Authority (ExA) has had regard to:
- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Sections 5.2 and 5.7;

- the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8;
- the Local Impact Reports (LIRs), to the extent that they are relevant to this topic;
- any matters prescribed in relation to the development, and
- any other important and relevant matters.

THE APPLICATION

4.2.3. Environmental Statement (ES) Chapter 20 Onshore Air Quality [APP-034] presents the assessment of the likely significant effects of the Proposed Development on onshore air quality. The Chapter is supported by Figures [APP-065] and Appendices 20.1 to 20.4 [APP-115] [APP-116] [APP-117] [APP-118]. The Chapter:

- Presents the existing environmental baseline and identifies any assumptions and limitations encountered in compiling the environmental baseline information;
- presents the potential environmental effects of the Proposed Development on air quality during the construction, operation and decommissioning phases; and
- highlights any necessary monitoring and/or mitigation measures which could avoid, reduce, or mitigate the possible environmental effects of the Proposed Development on air quality.

BASELINE

4.2.4. The study area for the air quality assessment is defined in paragraph 12 of ES Chapter 20 [APP-034] on the basis of the Planning Inspectorate's scoping opinion and through consultation with Tendring District Council (TDC). A desk-based review was undertaken to determine the air quality baseline within the study area. Monitoring data was obtained from TDC's website as well as supplied by the environmental protection officer for use in the assessment. Data sources used to inform the air quality assessment are listed in Table 20.7 of ES Chapter 20 [APP-034]. The onshore impacts during the operational phase have been scoped out as documented in Table 20.1 of ES Chapter 20 [APP-034]. The Applicant considers that Option 2 is the realistic worst-case scenario for air quality assessment as it has the largest footprint of the three grid connection options.

4.2.5. The Applicant's assessment of potential onshore air quality impacts associated with construction phase dust and fine particulate matter emissions was undertaken in accordance with the latest Institute of Air Quality Management (IAQM) guidance, 2024. This assesses:

- Human receptors within 250 metres (m) of the onshore project area and within 50m of routes used by construction vehicles (for routes used by construction-generated traffic up to 500m from the onshore project area); and
- ecological receptors within 200m of the onshore project area and used the same distances as human receptors for routes used by construction vehicles.

4.2.6. A qualitative assessment of project generated Non-Road Mobile Machinery (NRMM) used during construction of the onshore cable corridor and/or onshore substation was undertaken by the Applicant with agreement on the approach from TDC. The assessment included:

- The number and type of plant to be used;
- working hours to be employed and the duration of works;
- distances from NRMM to the nearest receptors;
- existing air quality conditions in the area; and
- prevailing meteorological conditions.

- 4.2.7. Human and ecological receptors within 200m of the onshore project area boundary were assessed.
- 4.2.8. The construction phase road traffic emissions were assessed for human and ecological receptors within 200m of routes which would experience traffic flows in exceedance of the relevant air quality screening criteria. Further information on construction traffic routes and traffic data is provided in ES Chapter 27 Traffic and Transport [[APP-041](#)].
- 4.2.9. The Applicant's view is that the baseline review of air quality provides a clear indication that air quality in the air quality study area is good, which it views is to be expected in an area which is largely rural in nature, with areas of air quality concern and monitoring confined to urban areas, ES Chapter 20 [[APP-034](#)].

MITIGATION

- 4.2.10. Embedded mitigation relevant to air quality has been incorporated into the design of the Proposed Development on air quality and is outlined in Table 20.3 of ES Chapter 20 [[APP-034](#)]. Embedded mitigation specific to the onshore construction effects would be secured through the Outline Code of Construction Practice (OCoCP) [[REP7-025](#)], under Requirement (R) 8 of the Applicant's draft Development Consent Order (dDCO) [[REP8-005](#)]. The OCoCP includes mitigation measures specific to NRMM and sets out the minimum recommended measures for a Dust Management Plan (DMP).

ASSESSMENT OF EFFECTS

CONSTRUCTION, OPERATION AND DECOMMISSIONING

- 4.2.11. For the construction phase of the Proposed Development, the onshore impacts assessed included:
- construction dust and fine particulate matter;
 - NRMM emissions; and
 - construction road vehicle exhaust emissions.
- 4.2.12. The onshore impacts during the operational phase were scoped out as documented in Table 20.1 of ES Chapter 20 [[APP-034](#)]. An exception to this is the reinstatement of the haul road connecting Bentley Road to Ardleigh Road to service abnormal indivisible load movements to the onshore substation in the unlikely event of transformer failure during the Proposed Development's lifetime. ES Chapter 20, paragraph 224 [[APP-034](#)], determines that this construction activity would be within the impact envelope assessed during construction; therefore, no new receptors would be impacted during operation and the magnitude and significance of effects would be less than assessed during the construction phase. Furthermore, it states that the significance of effect from construction works associated with Bentley Road was determined to be not significant in Environmental Impact Assessment (EIA) terms for all likely significant effects.
- 4.2.13. For the decommissioning phase the Applicant considers that the onshore impacts would be expected to be the same as the construction phase.
- 4.2.14. A summary of the potential likely significant effects and residual effects for onshore air quality can be found in Table 20.53 of ES Chapter 20 [[APP-034](#)]. A summary of the potential cumulative effects on air quality can be found in Table 20.54 of ES Chapter 20 [[APP-034](#)].

- 4.2.15. Overall, the Applicant concluded that with the implementation of embedded mitigation measures, it is predicted that there would be no significant effects arising from the Proposed Development alone or alongside other offshore wind farms and/or projects during the construction, operation or decommissioning phases. As a result, no further additional mitigation was proposed.

ISSUES CONSIDERED DURING THE EXAMINATION

- 4.2.16. Issues emerging during the Examination that the ExA has examined, considered and concluded on are:

- Effects from construction dust and fine particulate matter; and
- NRMM emissions.

EFFECTS FROM CONSTRUCTION DUST AND FINE PARTICULATE MATTER

- 4.2.17. In response to concerns from Little Bromley Parish Council (LBPC) [\[RR-203\]](#) regarding significant dust, dirt and mud on roads, the Applicant concluded [\[REP1-046\]](#) that with the implementation of mitigation measures, the effects of dust and fine particulate matter on sensitive receptors including residential properties, gardens, and roads would be not significant, in accordance with IAQM guidance (2024). The Applicant referred to the mitigation measures included in the OCoCP [\[REP7-025\]](#) and that this would be secured within the final Code of Construction Practice (CoCP) which would be submitted post-consent (secured by dDCO R8). The ExA notes that the OCoCP includes mitigation measures specific to NRMM and sets out the minimum recommended measures for a DMP.
- 4.2.18. In response to ExQ1 13.1.1 regarding dust management, the Applicant referred [\[REP2-020\]](#) to the dust control measures as identified within the OCoCP [\[REP1-033\]](#) as being designed in accordance with good practice (IAQM 2024) and to avoid annoyance or exposure to particulate matter over a time period relevant to the air quality objectives, as defined in the Government's technical guidance for Local Air Quality Management (Defra, 2022). The Applicant explained that a DMP would be used to ensure the mitigation is effective and would be produced post-consent at the detailed design stage and would be submitted to the Local Planning Authority for approval as part of the CoCP before construction works commence.

EXA'S CONSIDERATIONS

- 4.2.19. The ExA notes that ECC/TDC agreed with the Applicant's position regarding the EIA approach / methodology for onshore air quality in their final signed Statement of Common Ground (SoCG) [\[REP8-060\]](#). Furthermore, the ExA notes that in a joint response from TDC and ECC [\[REP2-036\]](#), TDC confirmed that the air quality measures were sufficiently precise and enforceable.
- 4.2.20. The ExA notes that ES Chapter 20, Table 20.33, identifies that the highest risk of dust impacts is for the Bentley Road Improvement works area which has a high risk of dust soiling for trackout (Number of Heavy Goods Vehicles (HGVs) outward movements per day). However, the ExA notes this is derived from the combination of the large dust emission magnitude and high sensitivity of the area, to determine the risk of impacts before mitigation is applied. The residual effects with mitigation are considered by the Applicant as not significant in EIA terms. However, the ExA is mindful of the high dust soiling risk for the Bentley Road Improvement works area and that, even with mitigation, it would be expected there would be some residual effects albeit not significant.

- 4.2.21. The ExA concludes that the effects from construction dust and fine particulate matter have been adequately assessed by the Applicant. Having considered the minimum recommended measures for a DMP, which are set out in the OCoCP [REP7-025], the ExA is content that effects from construction dust and fine particulate matter, would be satisfactorily mitigated through the implementation of a DMP. The DMP would be produced post-consent at the detailed design stage and submitted to the Local Planning Authority for approval as part of the CoCP before construction works commence. The ExA is content that the CoCP, which must accord with the OCoCP, would be secured under R8 in the Applicant's dDCO [REP8-005]. Furthermore, the ExA concurs with the Applicant that with the implementation of these mitigation measures, it is predicted that there would be no significant effects from construction dust and fine particulate matter resulting from the Proposed Development.

NRMM EMISSIONS

- 4.2.22. In ExQ1 13.1.3 [PD-009], the ExA examined what consideration had been given to making the use of low emission mobile plant, during construction, mandatory. The Applicant's response [REP2-020] included that measures specific to NRMM were developed in accordance with the Government's technical guidance for Local Air Quality Management (Defra, 2022) and that, as detailed in the OCoCP [REP1-033], the use of low emission mobile plant would be used where practicable. Furthermore, the Applicant's view was that it is not possible to commit to low emission mobile plant being mandatory at this stage as the final construction methodology would not be known until a Principal Contractor was on board which would happen at detailed design stage post-consent.

EXA'S CONSIDERATIONS

- 4.2.23. The ExA notes that ECC/TDC agreed with the Applicant's position regarding the EIA approach / methodology for onshore air quality in their final signed Statement of Common Ground (SoCG) [REP8-060]. Furthermore, the ExA notes that in a joint response from TDC and ECC [REP2-036], TDC confirmed that the air quality measures were sufficiently precise and enforceable.
- 4.2.24. The ExA concludes that the effects from NRMM emissions have been adequately assessed by the Applicant. The ExA is satisfied with the mitigation measures specific to NRMM which are set out in Section 1.9.1.6 of the OCoCP [REP7-025]. The ExA is content that the CoCP, which must accord with the OCoCP, would be secured under R8 in the Applicant's dDCO [REP8-005]. Furthermore, the ExA concurs with the Applicant that with the implementation of mitigation measures, it is predicted that there would be no significant effects on air quality from NRMM emissions arising from the Proposed Development.

CONCLUSIONS

- 4.2.25. The ExA finds that with respect to NPS EN-1, the Applicant has demonstrated that:
- Its assessment [APP-034] considered the impact from construction, operation and decommissioning phases of the Proposed Development on air quality as well as outlining the key pollutants of concern (paragraph 5.2.1);
 - it has prepared an ES in accordance with paragraphs 5.2.9 to 5.2.11 and 5.7.6; and
 - there would be no breach of statutory air quality limits or objectives with mitigation set out in the OCoCP [REP7-025] (paragraphs 5.2.12 and 5.2.13).

- 4.2.26. The ExA is satisfied that the Proposed Development is in accordance with NPS EN-1, NPS EN-3 and where relevant NPS EN-5 as well as local policies and strategies and all other relevant legislation and there are no other important or relevant considerations.
- 4.2.27. The ExA is satisfied that the Applicant has demonstrated that such risks associated with air quality arising from the Proposed Development can be satisfactorily mitigated and managed (in line with the mitigation hierarchy), and that appropriate mitigation would be secured via the CoCP under R8 of the Applicant's dDCO [\[REP8-005\]](#).
- 4.2.28. The ExA concurs with ES Chapter 20 [\[APP-034\]](#) that the significance of effect, including embedded mitigation, from the Proposed Development on air quality would be not significant, and that no significant cumulative effects would be anticipated.
- 4.2.29. The ExA concurs that with the implementation of mitigation, the residual effects for construction dust and fine particulate matter would be not significant. However, the ExA is mindful that for the Bentley Road Improvement works area, it would be expected there would be some residual effects for dust soiling albeit not significant.
- 4.2.30. The ExA therefore attaches a little weight to these residual effects on onshore air quality matters in the planning balance, against the making of the Order.

4.3. ONSHORE ECOLOGY

INTRODUCTION

- 4.3.1. This Report chapter deals with all relevant onshore ecology implications raised by the Proposed Development. However, onshore ornithology is discussed separately below by the ExA owing to the amount of ES technical coverage involved for all relevant species related to the terrestrial environment. The ExA's detailed analysis of all HRA issues is contained in Appendix C and a summary is provided in Chapter 7. However, some marginal reference is mentioned here toward the schemes planned Lesser Black Backed Gull (LBBG) compensation relative to EIA provision because of potential terrestrial plant and other wildlife impacts.
- 4.3.2. In addition to NPS EN-1 (Energy); EN-3 (Renewable Energy Infrastructure) and EN5 (Electricity Networks Infrastructure) the following other statutory provision, policy and guidance has been taken into account by the ExA in relation to all applicable ecological matters: The Conservation of Habitats and Species Regulations 2017 (as amended) (or 'the Habitats Regulations 2017'); Wildlife and Countryside Act 1981 (as amended); The Protection of Badgers Act 1992; Natural Environment and Rural Communities (NERC) Act 2006; The Hedgerows Regulations 1997; The Environment Act 2021 (as amended); Marine and Coastal Access Act 2009; The Commons Act 2006; Countryside and Rights of Way Act 2000 (CRoW); NPPF; Natural Environment White Paper 2011; Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services; Tending's Infrastructure Delivery Plan (2017); Tending's Open Spaces Strategy (2009); Tending District Local Plan 2013-2033 and Beyond (2021; 2022); Essex Green Infrastructure Strategy (2020); Natural England and Forestry Commission's Standing Advice on Ancient woodland, ancient trees and veteran trees: advice for making planning decisions (2022).

THE APPLICATION

4.3.3. ES Chapter 23 Onshore Ecology [\[APP-037\]](#) and associated Figures (Parts 1, 2 and 3) [\[APP-068\]](#), [\[APP-069\]](#) and [\[APP-070\]](#) should be read in conjunction with:

- Chapter 19 Ground Conditions and Contamination [\[APP-033\]](#)
- Chapter 20 Air Quality [\[APP-034\]](#)
- Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#)
- Chapter 22 Land Use and Agriculture [\[APP-036\]](#)
- Chapter 24 Onshore Ornithology [\[APP-038\]](#)
- Chapter 26 Noise and Vibration [\[APP-040\]](#)

4.3.4. Additional information to support the Applicant's onshore ecology assessment included:

- ES Appendix 23.1 Extended Phase 1 Habitat Survey Report [\[APP-122\]](#)
- ES Appendix 23.2 Great Crested Newt eDNA Survey Report [\[APP-125\]](#)
- ES Appendix 23.3 Riparian Mammals (Water Vole and Otters) Survey Report [\[APP-126\]](#)
- ES Appendix 23.4 Reptile Survey Report (Parts 1-3) [\[APP-122\]](#), [\[APP-123\]](#), [\[APP-124\]](#)
- ES Appendix 23.5 Hazel Dormouse Survey Report [\[APP-128\]](#)
- ES Appendix 23.6 Terrestrial and Aquatic Invertebrate Survey Report [\[APP-129\]](#)
- ES Appendix 23.7 National Vegetation Classification (NVC) Survey Report [\[APP-130\]](#)
- ES Appendix 23.8 Bat Emergence/ Re-entry Survey Report [\[APP-131\]](#)
- ES Appendix 23.9 Bat Activity Survey Report (Parts 1 and 2) [\[APP-132\]](#) and [\[APP-133\]](#)
- ES Appendix 23.10 Green Infrastructure Plan [\[APP-134\]](#)
- ES Chapter 23 Onshore Ecology Supplemental Information - Technical Note (Rev 0) [\[REP3-048\]](#); subsequently updated to Technical Note (Rev 1) [\[REP5-040\]](#)

BASELINE – HABITATS AND SPECIES

4.3.5. All North Falls Offshore Wind Farm (NFOWF) onshore infrastructure is proposed to be located entirely within the Tendring peninsula of Essex.

4.3.6. Different study areas have then been used for different receptors depending on their importance and their habitat preferences. The study areas were agreed with stakeholders during the Evidence Plan Process and set out in ES Chapter 23 Table 23.2 [\[APP-037\]](#). The study areas are also shown in ES Figures 23.1 – 23.11 within ES Chapter 23 Figures Parts 1 to 3 [\[APP-068\]](#), [\[APP-069\]](#) and [\[APP-070\]](#). Table 23.3 identifies the survey area of each ecological receptor [\[APP-037\]](#). The realistic worst-case scenarios for the likely significant effects scoped into the EIA for the onshore ecology assessment are summarised in Table 23.4 [\[APP-037\]](#).

4.3.7. Having regard to the Applicant's Grid Connection Options 1 to 3, Grid connection Option 2 is considered by them as the realistic worst-case scenario for the onshore ecology assessment because the build out requires four sets of cable ducts and associated joint bays to be installed. It has the largest impact footprint.

4.3.8. Ecological surveys were conducted in the period from September 2021 and August 2023. As detailed in ES Appendices 23.1-23.9 ([\[APP-121\]](#) consecutively to [\[APP-133\]](#)). They included surveys for:

- Habitats of various kind. (Onshore land is mostly arable fields interspersed with field margin drains, rivers and areas of scattered and dense scrub. Field boundaries are typically hedgerows (species-poor intact and/or defunct) and dominated by hawthorn and/or blackthorn).
- Terrestrial and aquatic invertebrates [\[APP-129\]](#).
- Great crested newts. The full great crested newt survey report is detailed in ES Appendix 23.2 [\[APP-125\]](#). Table 23.28 [\[APP-037\]](#) sets out a summary of great crested newt survey results within the relevant study area.
- Hazel dormouse. From the 14 hedgerows and woodlands surveyed; dormouse presence was recorded within 12 (see ES Figures 23.11 (a-i) [\[APP-070\]](#)). Further details of the hazel dormouse surveys are outlined in ES Appendix 23.5 [\[APP-128\]](#) and ES Figures 23.11 (a-i) [\[APP-070\]](#) combined.
- Reptiles such as Adder; Grass Snake; Common Lizard and Slow Worm are also gauged. Table 23.31 [\[APP-037\]](#) summaries the reptile species recorded during field survey and population size estimation within the habitat and species study area alongside ES Appendix 23.4 [\[APP-127\]](#) and ES Figures 23.10 a-j [\[APP-070\]](#).
- Bats of various species (details on the bat emergence / re-entry surveys are available in ES Appendix 23.8 [\[APP-131\]](#) and ES Figure 23.5 [\[APP-070\]](#) and ES Figure 23.6 [\[APP-070\]](#), Table 23.23 [\[APP-037\]](#) notes the combined total counts for bat species for transect and static detector surveys. A summary of Nathusius' pipistrelles recorded during the activity surveys by both transect surveys and static recorders is presented in Table 23.24 [\[APP-037\]](#)). For worst case scenario, it was assumed the Nathusius' pipistrelle present are potentially migratory, due to a lack of data to evidence otherwise and the presence of the potential migratory route of the species to the Essex area;
- Water vole and otter. (Table 23.26 [\[APP-037\]](#) gives a summary of water vole and otter field survey findings within the habitat and species study area. Further details of the water vole and otter field survey are detailed in ES Appendix 23.3 [\[APP-126\]](#) and ES Figures 23.8 a-j [\[APP-070\]](#)). The water vole field signs found in watercourse TN017 were all located outside of the habitat and species study area. Water vole being highly mobile species and therefore it is assumed that water vole is also present within the areas of TN017. No evidence of water voles was found on the remaining three watercourses surveyed within the habitat and species study area. No watercourses had signs of otter within the habitat and species study area.
- Badgers – although no badger setts were recorded.
- Fish –no field survey data was collected to identify the presence/ likely absence of fish species in watercourses within the onshore project area.

4.3.9. Data from the JNCC and MAGIC website; Essex Wildlife Trust Biological Records Centre and Essex Field Club was also utilised.

4.3.10. European sites were assessed separately by the Applicant as part of the HRA Screening Report and Report to Inform Appropriate Assessment, published alongside the ES. Where qualifying features may be affected by the Proposed Development, they have been assessed individually within ES Chapter 23. SPAs have not been included. They are instead described and assessed in ES Chapter 24: Onshore Ornithology.

4.3.11. Notably, Holland Haven Marshes Local Nature Reserve (LNR)/ Site of Special Scientific Interest (SSSI) is located within the onshore project area. All statutory and non-statutory designated sites that are located within the study area are presented in Table 23.12 [\[APP-037\]](#) and shown in ES Figure 23.1 (Parts 1-3) [\[APP-122\]](#),

[APP-123] and [APP-124]. Table 23.12 [APP-034] also provides a summary of the qualifying features/reasons for notification of these designated sites.

- 4.3.12. Detailed baseline surveys of the interest features of the Holland Haven Marshes SSSI and LNR were undertaken to inform the Ecological Impact Assessment (EcIA). The results of these surveys can be found in ES Appendix 23.6 [APP-129] and ES Appendix 23.7 [APP-130]. The information presented excludes ornithological interest features of the site, which are considered in ES Chapter 24 Onshore Ornithology.
- 4.3.13. Holland Haven Marshes SSSI is designated for the following (excluding ornithological interest features):
- Its ditch network which, represents an outstanding example of a freshwater to brackish water transition intimated by the aquatic plant communities, and nationally and locally scarce species;
 - Adjoining grasslands, which are of botanical importance in their own right as well as acting as a buffer zone to the ditch system; and
 - Aquatic and terrestrial invertebrates associated with these habitats.
- 4.3.14. Table 23.8 [APP-037] gives further information regarding its features to the SSSI. In summary, Holland Haven Marshes SSSI was found to be of low importance for its aquatic invertebrate species, high importance for its terrestrial invertebrate species (especially the Fisher's estuarine moth), medium importance for the botanic interest of the ditch network, and high importance for the botanic interest of the adjoining grassland habitats.
- 4.3.15. Aside to that, Table 23.14 [APP-037] sets out UK Habitats of Principle Importance (UKHPI) footprints within the habitat and species area and onshore project area (based on the Natural England 'Priority Habitat Inventory' dataset). Of those UKHPis are: 'coastal saltmarsh' (some 0.79ha); 'arable land' (approximately 602.6ha within the habitat and species study area, plus an additional 1.52ha of arable field margins); 'boundary features' (with total length of hedgerows at some 23,034.22metres in the study area; 'woodland' (of a total area of approximately 10.25ha in the study area); plus 3.9ha of improved grassland, some 5.45ha of improved grassland, approximately 23.49ha of amenity grassland (subject to frequent mowing and around 3.38ha of scrub within the study area.
- 4.3.16. Watercourses in the study around included 89 standing water bodies (equating to some 3.74ha). Plus, around 0.79ha of running water such as rivers. Six areas of ancient woodland were found within 500m of the Order limits. These are: Simon's Wood; Manning Grove; Tendring Grove; Hollandhall Wood; Gravel Wood; and Stonehall Wood. Table 23.17 [APP-037] lists all JNCC Phase 1 habitats recorded within the habitats and species study area during the Extended Phase 1 Habitat Survey.
- 4.3.17. Most species of conservation concern identified in the Applicant's assessments are associated with expected future declines from a range of factors including climate change, alterations to land-use (particularly intensification of farming and increased built development), increased human disturbance and environmental pollution.

MITIGATION AND MONITORING

- 4.3.18. Table 23.5 identifies all embedded mitigation measures [APP-037]. As well as [REP7-004]. These include:

- Prior to works commencing, North Falls would prepare an Ecological Management Plan (EMP) (the outline EMP is [\[REP3-011\]](#)). The final EMP is secured by DCO Requirement 12 setting out full details of the ecological mitigation measures during construction. This would include: A programme of works; A list of roles and responsibilities for ecological mitigation, including the role of an ecological clerk of works (ECoW); A plan showing ecological constraints; Full details of good industry practice mitigation required in relation to all species and habitats affected; licensing; habitat reinstatement method statements for all habitats proposed to be reinstated following the completion of construction (including grassland, hedgerows, watercourses and arable field margins); standalone mitigation plans, (for example, reptile precautionary method of works, invasive species management plans);
- An Outline Landscape and Ecological Management Strategy OLEMS (Rev 4) has been developed [\[REP5-024\]](#) updated to OLEMS Revision 6 [\[REP7-027\]](#). The OLEMS sets out the ecological mitigation requirements identified within the ES that must be incorporated into the EMP for delivery during construction. The OLEMS acts as the single source for all ecological mitigation measures proposed within the ES as well as for all monitoring triggered.
- Good industry practice such as: avoiding sensitive times of the year having regard to bird and reptile nesting and active periods; undertaking preconstruction checks; ecologically friendly lighting proposals; use of protective fencing; limitation of dust and debris; pollution prevention measures considering watercourses and air quality; 20 metre stand-off areas in the proximity of SSSI/LNR sites; and 15 metre buffer zones adjacent to ancient woodland.
- Mitigation through site selection. This (accordingly to the Applicant) has enabled the avoidance of statutory and non-statutory designated sites for conservation and associated buffer zones for indirect effects; ancient woodland and allowing associated buffer zones for indirect effects; UKHPs; and habitats suitable for supporting protected species and other notable species, as far as practicable.
- Construction method selection. Commitments to trenchless techniques (e.g., HDD) where practicable. At all key sensitive linear features including: all 'important' hedgerows, and those hedgerows potentially suitable for supporting dormice and/or commuting / foraging bats.
- Main Rivers and watercourses potentially suitable for supporting water voles / otters; Veteran trees; Woodland UK Habitats of Principle Importance ; Ponds UKHPI. It is also noted by the Applicant trenchless techniques cannot be committed to at all locations, where the engineering feasibility of using such techniques needs further assessment before it can be confirmed. The list of crossings where trenchless techniques are committed to is described in ES Chapter 5 Project Description [\[APP-019\]](#) and ES Appendix 5.1 Crossing Schedule [\[APP-092\]](#).
- At trenched watercourse crossings where temporary dams are used: a minimum of 3 metre cable burial below the channel bed where possible; dam usage kept to a minimum; use of pumps to ensure downstream flows are maintained; scour protection; using geotextiles or similar to avoid sediment build up; retention of vegetation unless removal is necessary; reinstatement of channel beds and banks with natural profiles; fish rescue would be undertaken prior to any dewatering.
- An Outline Horizontal Directional Drill Method Statement and Contingency Plan (HDDMS) has been submitted [\[APP-250\]](#) updated to Revision 2 [\[REP5-026\]](#). DCO Requirement 23 secures the HDDMS as a commitment. The outline plan sets out the steps which would be taken to minimise the risk of effects upon interest features of the Holland Haven Marshes SSSI as a result of a bentonite, an inert clay, 'breakout' during the landfall HDD beneath the SSSI, including the provision of an ECoW during landfall HDD. It details both the measures

proposed to reduce the risk of a breakout occurring, and the contingency plans steps to reduce the extent of the breakout and to clean up the spill should it occur.

- Mitigation by design with embedded design commitments to reduce the onshore cable route working width to 30m at hedgerow crossings where open cut trenching is proposed, to minimise the amount of hedgerow removal required. This can be secured by the EMP.
- Where practicable all habitats subject to temporary disturbance during construction, would be reinstated in full following the completion of construction. The specific details of the reinstatement would be set out within the final EMP. The EMP would also facilitate BNG secured by DCO Requirement 21.
- Habitat creation/BNG. In the Environment Act 2021, a minimum of 10% BNG would be mandatory for NSIPs from November 2025, which is subsequent to the current timeline of North Falls DCO submission. Thus, for each of the habitats recorded during the Extended Phase 1 Habitat Survey, 'habitat condition' was also recorded for use in BNG calculations following the Biodiversity Metric 3.0 guidelines. Habitat creation would be delivered as part of landscaping via the EMP and BNG commitments. The OLEMS (Revision 4) [[REP5-024](#)] details such proposed habitat creation.
- The OLEMS specifies details towards tree achieving protection. An Arboricultural Impact Assessment (AIA) would be undertaken to assess the quality of the existing trees along the length of proposed onshore cable route to 'British Standard 5837:2012 Trees in relation to design demolition and construction – Recommendations. An Arboricultural Method Statement (AMS) and associated tree protection plans would ensure retained vegetation is adequately protected throughout the construction period. Plus, pre-construction tree survey would be undertaken by an appropriately qualified arboriculturist. The survey would define specific mitigation measures that would be implemented to protect trees that are located adjacent to the construction working areas. Including the identification of root protection areas. The arboricultural report would be submitted to and agreed with the local authority prior to the commencement of any works.

ASSESSMENT OF EFFECTS (DURING CONSTRUCTION AND OPERATION)

4.3.19. The ES has assessed potential construction and decommissioning impacts to include:

- Impacts on Holland Haven Marshes SSSI and LNR;
- Impacts on statutory and non-statutory designated sites (excluding Holland Haven Marshes SSSI / LNR);
- Permanent and temporary habitat loss. Relevant habitats include saltmarsh; coastal floodplain; grazing marshes; woodland habitats; good quality semi-improved grassland; hedgerows; and rivers, ponds and reed beds;
- Loss or damage to arable field margins;
- Permanent or temporary impacts on badgers/bats/water voles and otters/great crested newts/reptiles/hazel dormice/fish; and
- Spread of invasive non-native species.

4.3.20. For the operation and maintenance phase, potential assessed impacts assessed were:

- Temporary disturbance to habitats and species during maintenance activities;
- Disturbance of species from onshore substation operational light and noise;
- Habitat improvements arising from biodiversity enhancements; and
- Impacts on migratory bats (*Nathusius' pipistrelle*).

4.3.21. Table 23.44 [APP-037] provides a summary of potential likely significant effects on onshore ecology during construction and operation:

- During construction: Impact 1: Impacts on Holland Haven Marshes SSSI and LNR would be minor adverse.
- Impact 2: Impacts on statutory and non-statutory designated sites (excluding Holland Haven Marshes SSSI and LNR) would be minor adverse. Impact 3: Permanent and temporary loss of saltmarsh/ Impact 4: Permanent and temporary loss of coastal floodplain and grazing marshes/ Impact 5: Permanent and temporary loss of woodland habitats including veteran trees – all minor adverse.
- Impact 6: Permanent and temporary loss of hedgerows –moderate adverse (short term) moderate beneficial (long term). Impact 7: Permanent and temporary losses of rivers, ponds and reedbeds/ Impact 8: Loss or damage to arable field margins/ Impact 9: Permanent or temporary impacts on badgers – all would be minor adverse. Impact 10: Permanent or temporary impacts on bats would range between negligible to moderate adverse (short term) and negligible to moderate beneficial (long term). Impact 11: Permanent or temporary impacts on water voles and otters would range between no effect to minor adverse. Impact 12: Permanent or temporary impacts on great crested newts/ Impact 13: Permanent or temporary impacts on reptiles– would both be minor adverse.
- Impact 14: Permanent or temporary impacts on hazel dormice would be minor adverse (short term) and moderate beneficial (long term). As to Impact 15: Permanent and temporary impacts on fish and Impact 16: Spread of invasive non-native species – both would be minor adverse.
- During operation Impact 1: Maintenance activities post development completion would be minor adverse. Impact 2: Onshore substation operational light and noise would be negligible. Impact 3: Biodiversity enhancements would be moderate beneficial. Impact 4: On migratory Nathusius' pipistrelles would be minor adverse.

Cumulative and transboundary effects

4.3.22. The Cumulative Effects Assessment (CEA) [APP-104]; [REP3-040] and Rev 1 summary [REP6-047]; considers other plans, projects and activities that may result in cumulation with North Falls. ES Chapter 6 EIA Methodology [APP-20] provides further details of the general framework and approach to the CEA. For onshore ecology, these activities included regard to: 1. Other offshore wind farms (general operation and construction of onshore elements); 2. Roadworks (corridor improvements and traffic management schemes); and 3. Residential projects (construction of dwellings).

4.3.23. Table 23.45 [APP-037] gives a summary of cumulative effects on onshore ecology during construction and operation. For construction these are defined as: Cumulative effect 1: Impacts on designated statutory and non-statutory site which would be minor adverse. Cumulative effect 2: Impacts on habitats which would be Moderate adverse for hedgerows in the short term. Moderate beneficial for woodlands, hedgerows and grasslands in the long term. Minor adverse for all other habitats. Cumulative effect 3: impacts on protected and notable species Moderate adverse in the short term for commuting/ foraging barbastelle and brown-long eared bats. Minor adverse in the short term for hazel dormice. Moderate beneficial in the long term for commuting/ foraging barbastelle and brown-long eared bats, and hazel dormice. Minor adverse in the short term for great crested newts. Minor beneficial in the long term for great crested newts. Minor adverse for badgers, roosting bats, water voles, otters and fish.

- 4.3.24. During operation Cumulative effect 1: Onshore substation operation is assessed as negligible even when considering Five Estuaries and the proximity of Norwich to Tilbury projects. Therefore, not significant in EIA terms.
- 4.3.25. Although decommissioning strategies have not yet been finalised for North Falls, Five Estuaries Farm or Norwich to Tilbury; the cumulative effects are expected to be the same as those of the initial construction phase. Plus, no potential for transboundary effects were identified for onshore ecology by the Applicant.

ISSUES CONSIDERED DURING THE EXAMINATION

- 4.3.26. The main onshore ecological issues during Examination were:
- Whether any negative onshore environmental impacts could be further reduced, having regard to all relevant species surveys and mitigation as well as any reductions to the Maximum Design Scenario (MDS) including (but not exclusively) reducing the working corridor and cable crossings; and
 - The adequacy of the level of ecological enhancement proposed.
 - Consideration of impacts to bats.

WHETHER ANY NEGATIVE ONSHORE ENVIRONMENTAL IMPACTS COULD BE FURTHER REDUCED, HAVING REGARD TO ALL RELEVANT SPECIES SURVEYS AND MITIGATION AS WELL AS ANY REDUCTIONS TO THE MAXIMUM DESIGN SCENARIO (MDS) INCLUDING (BUT NOT EXCLUSIVELY) REDUCING THE WORKING CORRIDOR AND CABLE CROSSINGS

- 4.3.27. In dealing with the above, Babergh District Council [[REP1-065](#)]; East Suffolk Council [[REP1-064](#)]; Essex County Council [[REP1-065](#)]; and Suffolk County Council's LIRs [[REP1-074](#)] combined raised some of the following onshore ecology related issues:
- Essex County Council welcomed the embedded mitigation and compensation measures and commitments made to be secured by Requirements of any DCO made e.g. outline Management Plans such as Code of Construction Practice (CoCP) [[APP-248](#)] & Outline Landscape and Environmental Master Plan (OLEMP) [[APP-249](#)] to be finalised in consultation with the LPAs.
 - The presence of migratory bat species established in Essex should be noted alongside legal requirements and mitigation measures applicable.
 - Babergh District Council referred to concerns to overall cumulative effects in tandem with other Projects (noting these in the main are directed towards landscape and visual impact matters).
 - East Suffolk Council emphasised the importance of coordination relative to other windfarms as well as the ramification of on and offshore connection options and cumulative impacts.
 - Suffolk County Council (SCC) provided commentary on impacts within their administrative area only but these are largely related to offshore ecological impacts.

EXA'S CONSIDERATIONS

- 4.3.28. The Applicant's terrestrial assessment area is made up of hedgerow lined arable fields also intersected with drains, rivers and scattered areas of scrub land. Pockets of habitat considered to be of a higher ecological value include semi-improved grassland, marshy grassland, and woodland also feature in the vicinity.
- 4.3.29. The ExA in making its assessment is conscious Holland Haven Marshes SSSI is located within the onshore project area and Simon's Wood Local Wildlife Site (LWS)

lies directly adjacent to it, as two key environmental features. Further afield there are a number of designated sites close to the Applicant's ES study area, including LWSs, SACs, Ramsar sites, LNRs and SSSIs.

- 4.3.30. Moreover, the ExA acknowledges species such as common pipistrelle bats, hazel dormice and common nesting birds are associated to the local hedgerows within the onshore project area. Existing trees and woodland are identified as valuable habitats to badgers, bats and hazel dormice for nesting and foraging resources.
- 4.3.31. Other terrestrial habitats are present such as grassland support notable species including reptiles and, in particular, within Holland Haven Marshes SSSI, terrestrial invertebrates. Moreover, water vole, otter, great crested newts are also associated to the SSSI, and aquatic invertebrates in nearby waterbodies to NFOWF.
- 4.3.32. In addressing a range of environmental impacts in document [\[REP1-044\]](#) the Applicant specified the cable corridor is joint with Five Estuaries providing Maximum Design Scenario (MDS) for cable corridor at crossing points and along the remainder of the corridor. The Applicant also referred to [\[REP1-050\]](#), [\[REP3-028\]](#), [\[REP3-031\]](#) that they are minimising impacts on watercourses as much as possible.
- 4.3.33. However, a valid criticism would be even as a joint cable corridor NE noted that this is still much greater than that proposed for East Anglia 1N and 2. Nonetheless the Applicant made a robust case for its route and corridor selections and overall, the Applicant has met the requirements of para 5.4.35 of EN-1 including appropriate avoidance measures which are embedded into the corridor selection process. The MDS does seek to avoid potential effects, thus resulting in fewer effects to mitigate.
- 4.3.34. Separate to those issues, the ExA is aware the process of backfilling as described in the Examination documentation could potentially limit land returning to its previous use and ecological value. During the Examination the ExA concurred with IPs that further detail should be included within the cable statement toward ensuring that land can continue to maintain ecological function post installation and any back fill.
- 4.3.35. In response, the Applicant has committed in OLEMS Revision 6 [\[REP7-027\]](#) to habitat reinstatement following the completion of construction, with a minimum of 10 years after-care period, to monitor the success of such reinstatement. The exact methods of aftercare would need to be agreed in the 'final' Written Landscaping Scheme and subject to the results of monitoring. Consequently, with such included commitments the ExA finds that this issue has been adequately resolved and secured by the requirements in the DCO.
- 4.3.36. The ExA also notes Holland Haven Marshes SSSI is designated for its nationally important lowland ditch systems and its importance should be properly factored in relation to all construction processes. The SSSI site is currently considered to be in 'favourable' condition. But even where there has been some degradation of habitats, flora and fauna a duty remains to restore it in line with relevant local policies and strategies covering the Essex conurbation. Therefore, the Applicant was encouraged by NE throughout the Examination process to make every effort to avoid impacts which are likely to cause damage.
- 4.3.37. The Applicant's updated Outline HDD Method Statement and Contingency Plan [\[REP5-027\]](#) and subsequently Revision 3 [\[REP7-029\]](#) was in direct response to some aspects of this concern. Whilst the ExA disagrees with the Applicant's characterisation of the SSSI features as being of low or medium importance as they

should be high in accordance with NE advice seeking to protect national ecological assets, we find that the Applicant's updated HDD plans appropriately seek to reduce/avoid impacts to the SSSI as much as possible.

- 4.3.38. This is partly because the Applicant have stated in the updated Outline HDD Method Statement and Contingency Plan [\[REP7-029\]](#) that the number of HDD walkovers would be included in the final HDD Method Statement, along with details of the number of operatives and proposed routes taken. And because it includes a bentonite breakout decision tree for managing potential contamination breakouts, which is consistent with NE advice.
- 4.3.39. The Applicant has confirmed that no works vehicles would track through or access the nearby SSSI site. The Schedule of Mitigation Revision 3 [\[REP7-004\]](#) and Outline HDD Method Statement [\[REP7-029\]](#) combined reflect this commitment alongside the scope available within DCO Requirement 8. Additionally, and importantly, following clarification in [\[REP1-038\]](#) all water required for HDD works would be supplied over land using a water tanker and storage. Both actions in the context of DCO Requirement 8 would greatly reduce environmental impact risks to an acceptable level in accordance with the main ES findings.
- 4.3.40. Distinct to that issue, bearing in mind the nature of all engineering works proposed the need for a badger licence is unclear in the examination material. If a licence is required, then NE recommend following the guidance regarding protected species licensing.
- 4.3.41. Nevertheless, the ExA acknowledges that NE have not objected on these grounds and there is no reason why the licensing regime requirements could not be properly followed if warranted. Consequently, issues related to badger protection should not weigh negatively against the development applied for based on the evidence available.
- 4.3.42. In relation to protected bats commentary an early updated OLEMS was provided at Deadline 1 [\[REP1-036\]](#). Bat hibernation surveys were subsequently proposed to take place at pre-construction in line with best practice guidelines. This resolved the initial concerns of NE. Moreover, it was confirmed via [\[REP1-044\]](#) that details that licensing for bats is not anticipated to be required. In any event, licensing requirements for European Protected Species would be revisited pre-construction to account for any changes in the ecological baseline, should there be any.
- 4.3.43. With respect to dormice habitat impacts the OLEMS Revision 6 [\[REP7-027\]](#) states that the final proposed method for temporary hedgerows, including their materials, would be detailed post-consent within the EMP. Any dormouse habitat destruction and replacement features would need to be covered under a licence, and NE were content to resolve this issue at the licensing stage. With respect to terrestrial bats and mice the ExA is content with the approaches taken by the Applicant.
- 4.3.44. As context, implication to the Alde-Ore Estuary area (which features a Ramsar) is also relevant to mention from an EIA perspective, as NE was unable to agree with the Applicant's conclusions with respect to impacts on invertebrate assemblage and plant assemblages. Owing to evidence gaps in the baseline characterisation.
- 4.3.45. That said, the Applicant committed at Deadline 6 in the Outline LBBG Compensation Implementation and Monitoring Plan (Rev 2) [\[REP6-013\]](#) onwards to undertake pre-construction habitat and species surveys which would address the current evidence gaps, inform the impact assessment, mitigation measures, and

address any impacts on designated site(s), if relevant. Such matters are rigorously assessed in Appendix C of this Report.

- 4.3.46. The ExA agrees pre-construction surveys use, and finalisation of any mitigation required – both of which are secured by the DCO would be feasible mechanisms.
- 4.3.47. The ExA is content that the Applicant has taken a reasonable approach to avoiding ecological impacts at cable crossing and significant harm to onshore biodiversity has been avoided or adequately mitigated (as per paras 5.4.42-43 of EN-1). Potential harm to SSSIs, regional and local sites, ancient woodlands, ancient trees, veteran trees other important habitats and species has been adequately mitigated largely through embedded site selection choices (as per EN-1 paras 5.4.50 - 5.4.55). All mitigations are properly secured by the DCO and associated management plans.
- 4.3.48. Overall, given all of the above, the ExA finds that negative onshore ecological impacts have been reasonably identified and minimised as far as practicable by the Applicant. Further safeguards are also present within the DCO overall for procurement of final iterations of relevant documents to be produced should there be a material gap or shortfall following further survey work.
- 4.3.49. The ExA does not find a DCO amendment would be necessary to further reduce impacts having regard to EN-1 when applying the mitigation hierarchy.

THE ADEQUACY OF THE LEVEL OF ECOLOGICAL ENHANCEMENT PROPOSED

- 4.3.50. Babergh District Council [[REP1-065](#)]; East Suffolk Council [[REP1-064](#)]; Essex County Council [[REP1-065](#)]; and Suffolk County Council's [[REP1-074](#)] combined LIR responses are relevant. But the comments of Essex County Council are more detailed and pertinent to this Examination issue in that:
- Essex County Council largely welcomed the embedded mitigation and compensation measures and commitments made to be secured. (This would extend to dDCO Requirements 12 (for securing the final Ecological Management Plan) and Requirements 21 (for securing BNG) inclusive of regard to the Outline Landscape and Environmental Master Plan (OLEMP) [[APP-249](#)] to be finalised in consultation with the LPAs) as a further affiliated management document.
 - Nevertheless, Essex County Council sought reassurance in the Examination that BNG habitats created or enhanced would have at least 30 years secured for management not just their establishment phase to avoid being considered as losses from the development; and encouraged that watercourse biodiversity units should be supported with local off-site measures; as well as acknowledging the benefits of environmental net gain in accordance with NPS provision.

EXA'S CONSIDERATIONS

- 4.3.51. In accordance with the application material as a whole, all habitats subject to temporary disturbance during construction would be reinstated following completion of construction, with habitat creation also being carried out as compensation. This is secured by dDCO Requirements 7,8, 12 and 16 collectively.
- 4.3.52. Aside to that overarching mitigation the Applicant has made a commitment to exploring opportunities to deliver a minimum 10% BNG secured by dDCO

Requirement 21 states that: Firstly, Work No.11 and Work No.12 must not be commenced until a biodiversity net gain assessment (which must accord with the outline biodiversity net gain strategy) in relation to that stage has been submitted to and approved by the discharging authority in consultation with the relevant SNCB. And secondly, the biodiversity net gain assessment must be implemented as approved.

- 4.3.53. While North Falls is not subject to mandatory BNG, the Applicant stated it was exploring opportunities to deliver BNG for the onshore elements of the Proposed Development this is set out in accompanying document BNG Strategy Revision 2 [\[REP8-025\]](#).
- 4.3.54. The ExA welcomes this approach relative to national and local policy. The Applicant's technical details have been subject to various questions and responses stemming from ExQ1 [\[PD-009\]](#) and ExQ2 [\[PD-013\]](#). The majority of the questions related to scope available to improve such provision bearing in mind any local policy and existing initiatives.
- 4.3.55. Measures to achieve BNG refer to reinstatement, restoration and enhancement of habitats that are lost during construction, as well as proposals for habitat creation at the proposed onshore substation. The accompanying Green Infrastructure Plan [\[APP-134\]](#) outlines how North Falls adheres to local and national policy requirements for Green Infrastructure including adherence to the Essex Green Infrastructure Strategy.
- 4.3.56. In [\[REP5-025\]](#) the Applicant explains they are exploring relevant opportunities to deliver a minimum of 10% BNG. In response, NE advised that they should meet 10% on area and hedgerow modules. Importantly, the ExA is aware there may be local project opportunities that could help with the watercourse improvement shortfall which the Applicant is investigating.
- 4.3.57. The Applicant has stated in [\[REP7-052\]](#) that the final BNG assessment would be developed in consultation with relevant stakeholders. Such consultation would include establishing any further enhancements associated with the Essex Local Nature Recovery Strategy.
- 4.3.58. A net loss is expected in watercourse module biodiversity units of some 29%, which was not being addressed via BNG initially. This element has been scrutinised by the ExA and NE following the Applicant's responses to ExA's WQ's 1-3 combined.
- 4.3.59. In response the Applicant subsequently committed to further explore potential options with relevant stakeholders for watercourse enhancement [\[REP5-056\]](#). NFOWF final BNG post-consent assessment as secured in the DCO would consider any changes in policy between application submission and detailed design, including the finalised Essex Local Nature Reserve Strategy (LNRS) (published 10 July 2025).
- 4.3.60. Further consideration of enhancement opportunities would be carried out post-consent in consultation with relevant stakeholders and landowners [\[REP7-052\]](#).
- 4.3.61. It is the case that any deviation from BNG best practice and principles should continue to be justified and clearly reported. The outline BNG strategy updated within the Examination period is a certified document under Article 41 of the dDCO giving some security. Nevertheless, updates to metric calculations over time are required to reflect design iterations and developments are encouraged to continue

to maximise their potential biodiversity outcomes throughout the detailed design process. For consistency, the ExA highlights everything within the Order Limits should be included in the BNG baseline calculations, including any retained habitats to ensure the final version is accurate. There is no strong reason this could not be done thoroughly, in any circumstances if or when, Requirement 21 would be sought for discharge if any discrepancies come to light when formally assessed at a local level.

- 4.3.62. The approach to hedgerow removal would be acceptable to the ExA prior to mandatory BNG, but it did not reflect best practice, or the approach used for TCPA development. Best practice would be to maintain all replaced hedgerows for a minimum of 30 years in line with BNG regulations in line with NE advice.
- 4.3.63. NE advice was that where the long-term management of hedgerows for this period cannot be secured, they should be treated as “habitat loss” within the BNG metric. Once BNG is mandatory, then a legal agreement would be required to secure the management for thirty years where habitats would be lost. Examination documentation should be updated to reflect such a commitment.
- 4.3.64. The Applicant in [\[REP7-052\]](#) stated that they are following the current Defra consultation regarding Biodiversity Net Gain for Nationally Significant Infrastructure Projects (Defra, 2025) and is aware that this specific point is under consideration for mandatory BNG for NSIPs, once it comes into force. Plus, NE sought the incorporation of an appropriate risk multiplier applied to BNG calculations in line with the Statutory Biodiversity Metric User Guide.
- 4.3.65. The Applicant did produce a BNG Technical Note [\[REP1-050\]](#). And through [\[REP5-055\]](#) they stated they would, if required to, adjust risk multipliers to all habitats in the final BNG calculation carried out post consent. But NE maintained the issue was not fully resolved by the close of the examination period.
- 4.3.66. The ExA finds based on all submissions including [\[REP8-025\]](#) of its updated BNG Strategy that the Applicant could better draw distinction between what is reinstatement or restoration of land (directly or indirectly impacted by development) back to its original state (ideally a superior state should be the aim); other restoration enhancements possible; compensatory new habitat creation; and separate to that the actual BNG; plus any other environmental net gain/ ecological enhancement anticipated.
- 4.3.67. A further criticism would also be that Nature Recovery Strategy local to Essex could be more rigorously and ambitiously responded to with all associated outcomes better maximised. This includes water related habitat consideration and the greater involvement of the host Council and Environment Agency consultation to improve wider ecological benefit delivery.
- 4.3.68. However, in our overall conclusions, we do not find that further DCO revision would be necessary as final BNG documentation iterations would still need to be approved locally by the discharging authority through mechanisms already present in the dDCO. The discharging authority for the purposes of Part 3 (requirements) and Part 4 (procedure for discharge of requirements) of Schedule 1 means Essex County Council. In the wording of Requirement 21, the undertaker is obligated to undertake a BNG assessment which must be approved by Essex County Council in consultation with NE prior to commencement of work nos. 11 and 12. The dDCO mechanism would also be able to secure adequate levels of long-term management of hedgerows within the finalised arrangements for BNG delivery (in the context of

the 30 year request made by Essex County Council which would not be necessary based on all submissions at this point). The ExA is content with this approach of the Applicant in securing the final details in the manner presently proposed.

IMPACTS TO MIGRATORY BATS

- 4.3.69. Consideration of bat migration and collision ramification out at sea was referred to by Suffolk County Council's (SCC) LIR in particular potential harm to species such as Nathusius' pipistrelle, caused by wind turbine rotor blades. The Applicant's responses ExQ2 (Question 10.0.27) [PD-012]/[REP5-054] are highlighted by the ExA as well. Noting the comments of the Netherlands Ministry of Infrastructure and Water Management at [REP3 -065] also raising due consideration of potential bat species harms.
- 4.3.70. As described in Chapter 23 Onshore Ecology [APP-037], the primary Zone of Influence (Zol) used when defining impacts on bat species is the Core Sustenance Zones (CSZ) calculated by the Bat Conservation Trust (BCT). These are the mean-maximum foraging radius for UK bat species.

EXA'S CONSIDERATIONS

- 4.3.71. According to the Applicant's assessments, only one UK bat species, Nathusius' pipistrelle, has been recorded reliably migrating between the UK and mainland Europe. Therefore, the Examination responses they provided is with respect to that species only. The CSZ for Nathusius' pipistrelle is 3km. As all elements of the offshore infrastructure lie beyond this 3km Zol, effects upon the viability of this species are considered by them unlikely to occur.
- 4.3.72. In response to Interested Party points regarding the Zol for European sites (rather than bat individuals), the Applicant notes that there are no UK Special Areas of Conservation (SAC) designated under the Conservation of Habitats and Species Regulations 2017 or the Offshore Marine Habitats and Species Regulations 2017 (each as amended) for which the Nathusius' pipistrelle is a designated feature, and therefore no sites have been considered within the ES assessment (as per Table 23.12 of ES Chapter 23 Onshore Ecology [APP-037]).
- 4.3.73. It is the conclusion of the Applicant's impact assessment within Section 23.6.2.4 of ES Chapter 23 [APP-037] that likely significant effects would not result upon migratory bats, and mitigation is not required.
- 4.3.74. This is because any migration across the Southern North Sea, if it is taking place, would represent only a small component of the resident Nathusius pipistrelle's ecology, with activity predominantly being focussed in foraging locally within their CSZ, and migrating along the coastline rather than across open water.
- 4.3.75. As stated in Section 23.6.2.4 of ES Chapter 23 Onshore Ecology [APP-037], the majority of bat species recorded offshore have been observed flying at altitudes lower than the rotor swept zone, reducing the risk of physical collision occurring. Additionally, it is evidenced most bat mortalities at offshore wind farms are due to barotrauma, not direct collisions. And there is sparse evidence to suggest bat trauma would lead to significant bat fatalities in this case.
- 4.3.76. Considering the scarcity of Examination evidence on this issue, the ExA accepts that the design of potential mitigation and monitoring to successfully protect migratory bats is unlikely to be possible in a proportional manner to the potential impacts predicted on offshore bats.

- 4.3.77. The number of migratory Nathusius' pipistrelles recorded crossing the Southern North Sea is considered to be very low by the ES and supplementary material. Because of this the ExA accepts it can be assumed impacts (both adverse and beneficial) would not have wider connotation on the overall Nathusius' pipistrelle population.
- 4.3.78. NE Appendix L7 [\[REP7-091\]](#) provides its comments on the Applicant's Offshore In-Principle Monitoring Plan (OIPMP) (Rev 1) [\[REP6-032\]](#) with regards to impacts to migratory bats.
- 4.3.79. The OIPMP [\[REP6-032\]](#) stated that 'There is potential that existing conservation and monitoring projects in the area would have the capabilities to conduct migratory bat monitoring on behalf of North Falls. For example, this could include providing funding to the BCT National Nathusius' Pipistrelle Project (NNPP) or collaborating with the Motus Wildlife Tracking System'. NE does not agree a third-party arrangement would provide suitable a monitoring control. Yet, revision 3 [\[REP8-009\]](#) of the OIPMP retains potential for this.
- 4.3.80. Instead, NE recommended that a mechanism needs to be established to design and deliver a future collaborative strategy for monitoring and, if needed, mitigation. They recommended that the Applicant should together with Five Estuaries convene and promote a Migratory Bat and Offshore Wind Working Group with the operators of the operational wind farms in the vicinity, (currently the two 'parent' sites Greater Gabbard and Galloper offshore wind facilities), NE, and other relevant stakeholders. Mitigation measures, if needed, would need to be enacted for the duration of the operation of the scheme.
- 4.3.81. Within the Deemed Marine Licence (DML) there are various Conditions dealing with post-construction monitoring. For example, under Schedule 8 (generation assets), Part 2, Condition's 21, 25, 26 and 27 collectively require further details in accordance with the OIPMP for written approval. This entails consultation with NE including details of proposed post-construction surveys, including methodologies (including appropriate buffers, where relevant) and timings, and a proposed format, content and timings for providing reports on the results.
- 4.3.82. The survey proposals would need to be in accordance with the principles set out in the OIPMP and would need to specify the objectives for each survey and explain how the survey would assist in either informing a useful and valid comparison with the preconstruction position and/or would enable the validation or otherwise of key predictions in the environmental statement. Moreover, Table 5.5 of the OIPMP sets out the commitments and a monitoring duration of 6 years. Plus, NE must be consulted on the final offshore monitoring plan under DML condition 21(1)(j).
- 4.3.83. The ExA is cognisant there is sufficient general provision flexibility within the overall DCO to make further amendments. With respect to any condition which requires the licenced activities be carried out in accordance with the plans, protocols or statements approved under licence, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved in writing.
- 4.3.84. SCC did mention potential requirements to further protect bats via management of rotator cut in speeds. However, such mitigation would not be warranted in the ExA's view. This is because the ExA has no strong reason to disagree with the impact assessment presented in Section 23.6.2.4 of ES Chapter 23 [\[APP-037\]](#) that likely significant effects would not result upon migratory bats.

- 4.3.85. Additionally, as stated by the Applicant's representative in ISH2, to increase the cut in speed would mean losing a significant amount of potential power generation [EV6- 007]. Considering the very low number of migratory bats predicted, the assessment conclusions (no significant effects) and also the data limitations highlighted by the Applicant, set against the implication of significant loss of power generation from a Proposed Development which delivers significant amounts of clean energy of which there is an urgent need, the Applicant does not consider it would be feasible, reasonable or proportionate to impose any such requirement. The ExA concurs.
- 4.3.86. Overall, the ExA does not find that a Requirement or DML Condition regulating eventual rotator cut in speeds (should the development proceed) would be necessary in this case, as there is no strong evidence to support the need for its inclusion. The ExA finds that sufficient bat monitoring would be possible through the OIPMP. The OIPMP is also a certified document under Article 41 of the rDCO.

CONCLUSIONS

- 4.3.87. From a national policy perspective Section 4.6 of NPS EN-1 states that, as a general principle, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives.
- 4.3.88. Biodiversity net gain is an essential component of environmental net gain. Paragraph 4.6.2 of NPS EN-1 sets out that projects in England should consider and seek to incorporate improvements in natural capital, ecosystem services and the benefits they deliver when planning how to deliver biodiversity net gain which currently only applies to terrestrial and intertidal components of projects (paragraph 4.6.3).
- 4.3.89. Paragraph 4.6.6 goes on to say that Energy NSIP proposals, whether onshore or offshore should seek opportunities to contribute and enhance the natural environment by providing net gains for biodiversity and the wider environment where possible.
- 4.3.90. In accordance with NPS EN-1 the ExA accepts green infrastructure can enable developments to provide positive environmental, social, health and economic benefits. Green infrastructure environmental includes features such as trees, hedgerows. It can contribute to biodiversity recovery, sequester carbon, absorb surface water, cleanse pollutants, absorb noise and reduce high temperatures.
- 4.3.91. NPS EN-3 (paragraph 2.4.2) requires the design of the development to mitigate impacts such as the effects on ecology.
- 4.3.92. NPS EN-5 (paragraphs 2.7.2-2.7.3) set out applicant's will need to consider whether the proposed line will cause such problems at any point along its length. Consideration should be given to feeding and hunting grounds, migration corridors and breeding grounds.
- 4.3.93. National Planning Policy Framework paragraph 180 advocates policies and decisions should contribute and enhance the natural environment taking into account sites of biodiversity value. Paragraph 187 specifies the following should be given the same protection as habitats sites: Potential Special Protection Areas and possible Special Areas of Conservation; Listed or proposed Ramsar sites; Sites identified, or required, as compensatory measures for adverse effects on habitats

sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed proposed Ramsar sites.

- 4.3.94. From a local policy perspective, the ExA recognises Tendring District Local Plan Section 1 Policy SP7 Place Shaping Principles encourages biodiversity creation and enhancement measures. Tendring District Local Plan Section 2 Policy PPL4 Biodiversity and Geodiversity states sites designated for their international, European, and national importance to nature conservation will be protected from development likely to have an adverse effect on their integrity. As a minimum there should be no significant impacts upon any protected species, and schemes should consider the preservation, restoration, or re-creation of priority habitats.
- 4.3.95. On top of that the Essex Green Infrastructure Strategy aims to enhance the urban and rural environment through delivering tangible wildlife benefits.
- 4.3.96. The ExA agrees with the case made in the ES that embedded mitigation linked to the design of the Proposed Development has meant that the Applicant has avoided statutory and non-statutory designated sites, ancient woodland, UK Habitats of Principle Importance, and habitats connected to supporting protected species abundance as far as practicable.
- 4.3.97. During construction periods mitigation includes the use of trenchless techniques (horizontal directional drilling) and reducing the cable working width to 30m at hedgerow crossings where open cut trenching is required.
- 4.3.98. The Applicant's mitigation measures to reduce the potential impacts on identified bird species have been secured as part of a Code of Construction Practice (Revision 5) [\[REP7-025\]](#); an Ecological Management Plan (EMP) (to be in accordance with the Outline Landscape and Ecological Management Strategy (OLEMS) Revision 4 [\[REP5-024\]](#)) and Horizontal Directional Drill Method Statement and Contingency Plan (the most up to date outline version being Revision 4 [\[REP8-011\]](#)), secured by DCO Requirements 8, 12 and Requirements 23, respectively.
- 4.3.99. Those documents incorporate good practice principles for minimising impacts on notable habitats, species and watercourse disturbance, habitat reinstatement measures and sensitive construction methods such as trenchless techniques.
- 4.3.100. OLEMS Revision 6 [\[REP7-027\]](#) ensures an acceptable level of monitoring can be achieved. This would be undertaken alongside any protected species licensing monitoring commitments.
- 4.3.101. Moreover, dDCO Requirement 14 deals with European protected species onshore adding a further level of protection. That is because it triggers additional surveying and investigation where necessary alongside further any mitigation warranted with the prior approval from the relevant SNCB for the agreement of such details. Plus, Requirement 16 adequately deals with the restoration of land used temporarily for construction.
- 4.3.102. Future onshore decommissioning is also adequately controlled by dDCO Requirement 26 with respect to dealing with wildlife interests.
- 4.3.103. Collectively given those dDCO Requirements and associated documents they relate to, it is sufficiently evidenced the Proposed Development would be able to adapt to local conditions to minimise the risk of effects upon interest features such as

Holland Haven Marshes SSSI during horizontal directional drilling works. As well as other ecological assets identified to be safeguarded by the submitted ES.

- 4.3.104. The ExA has had regard to Table 23.44 and Table 23.45 of ES Chapter 23: Onshore Ecology [\[APP-037\]](#) (and information supplemented by [\[REP5-040\]](#)) which summarises potential environmental effects of NFOWF, alongside all relevant supporting material.
- 4.3.105. With mitigation the ES concludes that there would have no greater than minor adverse effects (not significant in EIA terms) on ecological receptors during all its phases. Aside from permanent and temporary loss of hedgerows and permanent or temporary impacts on bats during construction. The ExA agrees with the ES conclusion.
- 4.3.106. Whilst it is noted that short term moderate adverse effects (which are significant in EIA terms) are identified for each potential impact during the construction phase, long term moderate beneficial effects are also identified, due to the effect of biodiversity enhancement during operation. Subject to the Applicant following through on its stated commitments to enhance biodiversity following further review and finalisation of relevant details in dialogue with relevant parties the ExA concurs with this position. This is secured by Requirement 21 of the dDCO.
- 4.3.107. For construction phases the ExA accepts that cumulative effects arising with Five Estuaries Offshore Wind Farm's onshore connection on hedgerows and commuting/foraging bats may have a significant effect (in EIA terms) based on worst-case scenarios. However, it is not expected by the ES that cumulative effects with Norwich to Tilbury during construction or that cumulative effects with Norwich to Tilbury or Five Estuaries during operation would be significant. The ExA has no strong reason to disagree.
- 4.3.108. The level of permanent hedgerow loss the Applicant's avoidance strategy within the design process is material. But the ExA has no reason to conclude the protected species licensing regime would not be effective for bats, badgers, dormice or any other applicable species.
- 4.3.109. The ecological enhancement including via BNG able to be delivered by the Proposed Development attracts positive weight. The ExA notes the overall package for delivery could be more ambitious and robust, relative to local policy and allowing for host Council and Environment Agency involvement in addition to NE. There is presently a net loss for the watercourse module. Thus, water habitat impact and associated enhancement delivery are a clear weakness. But there is ample scope to further improve the enhancement package overall in the consideration of final details through dDCO Requirements 5, 7, 12, 16, 21 22, 27, and 28 combined.
- 4.3.110. Whilst this ideally should be addressed at the consenting phase, the ExA notes that the Applicant has committed to further explore potential options with relevant stakeholders for watercourse enhancement [\[REP5-056\]](#). The 'final' BNG post-consent assessment as secured by the DCO would consider any changes in policy between application submission and detailed design, including the finalised Essex LNRS (2025). Further consideration of enhancement opportunities would be carried out post-consent in consultation with relevant stakeholders [\[REP7-052\]](#).
- 4.3.111. Given all those above circumstances, the ExA concludes that the onshore ecological impacts associated to the Proposed Development, subject to mitigation, accord with requirements of NPS EN-1, NPS EN-3 and NPS EN-5, and the

objectives of local and national policy overall. The impacts would also be compliant with Tendring District Local Plan Section 1 Policy SP7 Place Shaping Principles encourages biodiversity creation and enhancement measures, subject to further refinement to BNG delivery. There would however be conflict with Tendring District Local Plan Section 2 Policy PPL4 given its specific wording.

4.3.112. Accordingly, even though some environmental improvements of ecological value can be delivered for the long-term benefit of the area, there would still be some unavoidable harmful environmental and wildlife effects largely linked to permanent hedgerow loss (short term moderate adverse effects from hedgerow loss also acknowledging moderate beneficial impacts in the long term for hedgerows) and some residual harms following all mitigation.

4.3.113. In light of all considerations given the strength of mitigation evident, monitoring possible and accepting some meaningful ecological enhancement is possible and likely, the ExA affords little negative weight to the level of overall harms anticipated to arise from the onshore ecological impacts during construction, operation, and decommissioning stages.

ONSHORE ORNITHOLOGY

THE APPLICATION

4.3.114. The likely significant effects of the construction, operation and decommissioning of North Falls offshore wind farm on onshore ornithological features is assessed in ES Chapter 24 [\[APP-038\]](#). The Applicant's assessment should be read in conjunction with following linked ES Chapters and other relevant information:

- ES Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#)
- ES Chapter 22 Land Use and Agriculture [\[APP-036\]](#)
- ES Chapter 23 Onshore Ecology [\[APP-037\]](#)
- ES Chapter 26 Noise and Vibration [\[APP-040\]](#)
- ES Appendix 24.1 Onshore Landfall Area: 2020/21 Non-breeding Bird Surveys Report [\[APP-135\]](#)
- ES Appendix 24.2 (CONFIDENTIAL) Onshore Landfall Area: 2021 Breeding Bird Surveys Report [\[APP-136\]](#)
- ES Appendix 24.3 Onshore Landfall Area: 2021/22 Non-breeding Bird Surveys Report [\[APP-137\]](#)
- ES Appendix 24.4 (CONFIDENTIAL) Onshore Landfall Area: 2022 Breeding Bird Surveys Report [\[APP-138\]](#)
- ES Appendix 24.5 Onshore Cable Route: Non-breeding Bird Surveys 2021/22 Report [\[APP-139\]](#)
- ES Appendix 24.6 Onshore Cable Route: Non-breeding Bird Surveys 2022/23 Report [\[APP-140\]](#)
- ES Appendix 24.7 MKA Ecology (2023): Breeding Bird Survey Baseline Report, Five Estuaries Offshore Wind Farm, Essex [\[APP-141\]](#)
- ES Appendix 24.8 Ecology Resources (2022): Breeding Bird Survey Report, Five Estuaries Offshore Wind Farm Ltd (VEOWL) (Parts 1 and 2) [\[APP-142\]](#) and [\[APP-143\]](#)

BASELINE –HABITATS/SPECIES

4.3.115. The study areas for onshore ornithology are set out in Table 24.2 [\[APP-038\]](#) and shown in ES Figures 24.1 and 24.2 [\[APP-071\]](#). Based on scientific evidence and professional judgement, the Applicant's onshore ornithology study area includes a 400m buffer. For determining possible connectivity with designated sites, a larger

10km study area was used based on the maximum extents of foraging range for any SPA or SSSI species.

- 4.3.116. Table 24.3 [\[APP-038\]](#) sets out the spatial and temporal coverage of ornithology surveys. The Applicant has also identified Compartments A-E. This allowed peak counts per species, per survey to be made consistently within each Compartment. This is shown in ES Figure 24.2 [\[APP-071\]](#). It details the bird species considered.
- 4.3.117. The Applicant's assessment tailors to connection optionality given as Options 1-3 for grid connections. Table 24.4 of ES Chapter 24 [\[APP-038\]](#) sets out the worst-case scenarios of effects.
- 4.3.118. A range of ornithological field surveys were conducted by the Applicant between September 2020 to March 2023. Detailed methods for each survey programme are presented in Appendices 24.1 [\[APP-138\]](#) to 24.8 [\[APP-143\]](#), consecutively.
- 4.3.119. Tally counts were made of relevant species and all other more common species. Table 24.7 [\[APP-038\]](#) lists the Applicant's other available data and information sources.
- 4.3.120. Designated sites with ornithological qualifying features that are located within the 10km study area are presented in Table 24.13 [\[APP-038\]](#) and shown in ES Figure 24.1 [\[APP-135\]](#). Table 24.13 [\[APP-038\]](#) provides a summary of the qualifying features and noted interests of these designated sites. This covers: Holland Haven Marshes SSSI and LNR; Hamford Water SPA; Stour and Orwell Estuaries SPA and Ramsar; Stour Estuary SSSI; Cattawade Marshes SSSI; Wrabness LNR; Upper Colne Marshes SSSI; Colne Estuary SPA, SSSI and Ramsar and Roman River SSSI.
- 4.3.121. Ornithology survey results September 2020 to March 2023, inclusive of full species lists are shown in Appendices 24.1 to 24.8 [\[APP-135\]](#) to [\[APP-143\]](#), consecutively.
- 4.3.122. Table 24.14 [\[APP-038\]](#) identifies the target species peak counts (individuals) per landfall Compartment (Cpt) during Year 1 (2020-21) and Year 2 (2021-22) non-breeding seasons.
- 4.3.123. Full species lists and breakdowns of peak tallies counts per mapping area, and peak total survey count are presented in Annex A of Appendices 24.5 and 24.6 [\[APP-071\]](#). Of these species, a total of 51 were considered to be target species in 2021-22, with 54 target species recorded in 2022-23. Table 24.15 and Table 24.16 [\[APP-038\]](#) summarise the total counts per survey, and peak count for these target species. Species diversity is reasonably consistent across the survey area, with the northwest around Little Bromley, and land near to Hamford Water hosting the most species. Notable numbers of some species were also recorded and may be of importance at a regional (Essex) level. These include reasonably high peak counts in the core winter months of golden plover, lapwing and curlew, and feeding flocks of corn bunting.
- 4.3.124. Table 24.15 [\[APP-038\]](#) shows the target species monthly counts (individuals) within onshore cable route and onshore substation works area survey area in 2021-22.
- 4.3.125. In terms of future baseline conditions, it is assumed by the study area baseline natural changes in the environment/climate will have an effect on any expected species decline.

MITIGATION AND MONITORING

4.3.126. A summary of embedded mitigation is listed in Table 24.5 [APP-038]. As well as [REP7-004]. This includes:

- EMP measures would set out: a programme of works; a list of roles and responsibilities for ecological mitigation, including the role of an ECoW, and any suitably qualified ornithologist; a plan showing ecological and ornithological constraints; full details of good industry practice mitigation in relation to all species and habitats affected; full details of any specific mitigation identified within ES Chapter 24, including habitat creation or species-specific mitigation programmes. Any such programmes would be accompanied by mitigation layout plans as applicable; if considered necessary, a list of Schedule 1 bird species' licences and site consents required to facilitate construction; habitat reinstatement method statements for all habitats proposed to be reinstated following the completion of construction (including grassland, hedgerows, watercourses, arable crops and arable field margins); any associated standalone mitigation plans, e.g., Bird Disturbance Management Plan (or similar). The OLEMS updated to (Rev 2) [REP6-027] sets out the ecological and ornithological mitigation requirements identified within the ES that must be incorporated into the EMP for delivery during the construction phase. The OLEMS acts as the single source for all ecological and ornithological mitigation measures and monitoring. The EMP is secured by dDCO Requirement 12.
- Good practice measures. Ranging from avoiding sensitive times of the year to pre-construction checks of all ecologically sensitive features of conservation importance; ecologically sensitive lighting proposals; effective pollution control and limitations on dust and debris (as per ES Chapter 21 concerning water resources and ES Chapter 20 on Air Quality); as well as reinstatement of habitats temporarily disturbed during construction.
- Mitigation through site selection process. As per ES Chapter 4 Site Selection and Assessment of Alternatives [APP-018]. The Applicant's site selection process has included consideration of: avoidance of statutory and non-statutory designated sites for conservation and associated buffer zones for indirect effects, as far as practicable; where practicable, avoidance of functionally linked land which has been identified as being of relatively higher importance for SPA qualifying features; avoidance of ancient woodland and associated buffer zones for indirect effects, as far as practicable; avoidance of UKHPI as far as practicable; avoidance of habitat potentially suitable for supporting legally protected and notable species as far as practicable.
- Commitments to seeking to use trenchless techniques (e.g., HDD) where practicable at all key sensitive linear features including: all 'important' hedgerows; main rivers and watercourses; veteran trees; woodland UKHPI; and ponds UKHPI.
- HDD Method Statement and Contingency Plan adherence. Outline Horizontal Directional Drill Method Statement and Contingency Plan [APP-250] details the full measures.
- Overall mitigation through design choices. NFOWF has committed to reduce the onshore cable route working width to 30m at hedgerow crossings where open cut trenching is proposed, to minimise the amount of hedgerow removal required. Achieved by not including the topsoil/subsoil storage bunds in the onshore cable route working width at hedgerow crossings. Hedgerows would be replanted in situ following construction. Hedgerow planting would be undertaken in the first winter season following construction. Suitable screening would be erected for the duration of HDD work at landfall, around the landfall compound, in order to reduce the likelihood of visual or noise disturbance to birds utilising

Holland Haven Marshes SSSI and adjoining land. Further information would be included within the EMP developed post-consent, secured by DCO Requirement. To avoid potentially significant disturbance effects to SSSI/SPA qualifying features using functionally linked land within the Proposed Development area, suitable temporary screening could be erected around any other discrete locations of importance for birds. The requirements for restrictions would be informed by pre-construction surveys and may be seasonal, and therefore screening would only be erected should nearby works overlap with key periods for birds recorded utilising such locations.

- Habitat reinstatement covering grassland habitats; trees and hedgerows and arable field margins.

ASSESSMENT OF EFFECTS – DURING CONSTRUCTION, OPERATION/ DECOMMISSIONING

4.3.127. Potential impacts assessed for the construction and decommissioning phases were:

- Habitat loss;
- Construction disturbance; and
- Indirect impacts due to habitat alteration (including smothering or contamination, including bentonite breakout associated with HDD works).

4.3.128. For the operation and maintenance phase, potential impacts assessed were:

- Disturbance due to operation and maintenance activities; and
- Onshore substation operational noise and light disturbance.

4.3.129. The assessment of significance of likely impacts on Important Ornithological Features (IOFs) are applied to those ‘scoped-in’ species of Medium or High nature conservation importance that are known to be present within the onshore ornithology study area, as confirmed through survey results and desk studies.

4.3.130. A summary of scoped-in IOFs with their nature conservation importance is presented in ES Chapter 24 Table 24.17 [\[APP-038\]](#). This includes species: barn owl; cetti’s warbler; corn bunting; grey partridge; hobby; quail; skylark; yellow wagtail; dark bellied brent goose; lapwing; curlew; golden plover; Holland Haven Marshes SSSI assemblage; Hamford Water SSSI assemblage; Stour Estuary SSSI assemblage; Colne Estuary SSSI assemblage.

4.3.131. The Applicant states unmitigated effects on the majority of IOFs during all phases would be negligible or minor adverse. But specific additional mitigation (above that embedded mitigation which is assumed would be implemented) would be required in a small number of cases to reduce the residual effects on a particular IOF’s regional (Essex) population to a non-significant level in EIA terms.

4.3.132. The exception to this would be for corn bunting, as habitat loss and construction disturbance could result in a minor-moderate adverse and therefore significant effect on the regional (Essex) population and there is no suitable mitigation considered possible by the Applicant. A summary of all predicted effects is presented in Table 24.26 [\[APP-038\]](#).

Cumulative / transboundary effects

4.3.133. Cumulative Effects Assessment (CEA) for the Proposed Development alone, as well as in-combination effects on the integrity of any SPA or Ramsar site are considered within the RIAA [\[APP-181\]](#) and [\[APP-182\]](#). Table 24.19 [\[APP-038\]](#) provides a summary of projects considered for the CEA in relation to onshore ornithology.

- 4.3.134. The areas of potential inter-relationships between impacts are presented in Table 24.24 [APP-038]. Table 24.25 [APP-038] then provides an assessment for each IOF as related to these impacts.
- 4.3.135. A summary of the CEA is presented in Table 24.27 [APP-038]. The Applicant's CEA concluded that the effects predicted to arise from the result of the development of Five Estuaries, Norwich to Tilbury National Grid Electricity Transmission and Bradwell B New Nuclear Power Station in addition to NFOWF would not give rise to any greater effects than those predicted for the Proposed Development alone.
- 4.3.136. There are no transboundary effects with regards to onshore ornithology as the onshore project area would not be sited in proximity to any international boundaries. Transboundary effects were therefore scoped out and not considered further and the ExA agrees that is a reasonable approach.

ISSUES CONSIDERED DURING THE EXAMINATION (FOR ONSHORE ORNITHOLOGY)

- 4.3.137. This Report section deals with onshore ornithology and the matters relevant to EIA.
- 4.3.138. The main onshore ornithological examination issue was:-
- Whether the avoidance of land used by birds for foraging, breeding or as habitat has been achieved alongside other EIA related implications for planned gull compensation delivery identified by the application.

WHETHER THE AVOIDANCE OF LAND USED BY BIRDS FOR FORAGING, BREEDING OR AS HABITAT HAS BEEN ALONGSIDE OVERLAPPING EIA RELATED IMPLICATIONS FOR PLANNED GULL COMPENSATION DELIVERY IDENTIFIED BY THE APPLICANT

- 4.3.139. In relation to all onshore ornithological impacts the ExA acknowledges the advice within NPS EN-1, EN-3 and EN5 combined as already stated in the preceding onshore ecological section of this Recommendation Report, along with other local and national policy. Section 24.4.1 of ES Chapter 24 [APP-038] also lists the full relevant policy, guidance and legislative provision which the ExA has factored. Not to repeat that in the interests of efficiency. We have also considered NE's responses at Deadline 8, via Appendix N8 Table 5 [REP8-100] the RSPB's commentary and all other IP information at deadline 8 which is where our findings focus on.
- 4.3.140. Babergh District Council [REP1-065]; East Suffolk Council [REP1-064]; Essex County Council [REP1-065]; and Suffolk County Council's LIR's [REP1-074] combined have been considered by the ExA for offshore ornithological conclusions. Noting there is little reference to those aside from East Suffolk Council providing commentary on LBBG habitat compensation onshore.

EXA'S CONSIDERATIONS

- 4.3.141. The ExA notes there is no specific overarching commitment from the Applicant to avoid work in habitats or foraging areas used by existing birds. This point is particularly relevant to Hamford Water SPA but also applies to all functionally linked land within the submitted Order Limits. Functionally linked land considerations have been addressed in Appendix C and Chapter 7 of this Report.

- 4.3.142. Commitments to avoid impacts to supporting habitats and/or disturbing Annex I bird features during sensitive periods was something NE highlighted as being preferable. But if this was not possible, they did concede an appropriate management plan could ensure impacts are sufficiently minimised.
- 4.3.143. The ExA highlights that the Applicant's 'Response to Relevant Representations from NE' [\[REP1-044\]](#) does focus entirely on mitigation, which should be of secondary concern in accordance with the mitigation hierarchy. However, the Applicant did confirm that further mitigation detail to minimising effects would be 'included in the final Ecological Management Plan, as secured by Requirement 12 of the Draft DCO (Revision 9) [\[REP8-005\]](#)'.
- 4.3.144. Table 24.26 [\[APP-038\]](#) summarises which important ornithological features could be affected because of direct and indirect impacts during the construction, operational and decommissioning phases. Corn bunting is identified as being harmed in the table from likely habitat loss.
- 4.3.145. Following written questions, the ExA accepts that residual effects on the majority of such features during all phases would be negligible or minor adverse, but specific additional mitigation would be required in a small number of cases to reduce the residual effects on particular features of regional bird populations to a non-significant level in EIA terms. The only exception to this would be for corn bunting, where due to an absence of suitable mitigation opportunities, habitat loss and construction disturbance could result in a minor-moderate adverse and therefore significant effect on the regional population within Essex.
- 4.3.146. Whilst commitments to make best endeavours to avoid and minimise impacts to potential bird foraging, breeding or habitat areas were requested by NE, the ExA is satisfied that the Applicant has made reasonable endeavours to avoid such land during site selection stages as demonstrated by the ES.
- 4.3.147. Given the embedded avoidance strategy evident, the ExA finds that further commitments over and above the embedded mitigations already in place would most likely therefore have limited effectiveness from an EIA perspective. The ExA accepts that terrestrial land used by birds for breeding, foraging and habitat has been avoided as far as practicable.
- 4.3.148. A further EIA related aspect arises in relation to terrestrial LBBG compensation delivery planned by the scheme and the Applicant's overall assessments. The delivery of which may have impacts to ornithology and wildlife elsewhere.
- 4.3.149. In reference to LBBG from the Alde-Ore Estuary (AOE) Special Protection Area (SPA), the Applicant's Report to Inform Appropriate Assessment Part 4 (RIAA) [\[APP-178\]](#) determines that Adverse Effect on Integrity (AEoI) cannot be ruled out due to predicted LBBG mortality from collisions, when considered in-combination with other offshore wind farms. The ES assumes this position.
- 4.3.150. Therefore, a suite of documents is presented the Applicant as part of their DCO application identifying compensatory measures. The most up to date being those received at Deadline 8 which include documents [\[REP8-019\]](#) to [\[REP8-022\]](#). It is relevant to mention this point in dealing with onshore ornithology impacts because the nature of the compensatory requirements does have ecological consequence to a range of onshore protected sites which has EIA interface. Therefore, even though LBBG compensation need was not in dispute, the site selection and delivery method to be settled on has been subject to various extensive Examination submissions

from NE and the RSPB [REP4-089]; [REP5-113] to [REP5-115]; [REP8-070] and [REP8-103] as well as the National Trust via [REP2-051]; [REP3-051]; [REP8-078]; and [REP7-084]. The ExA makes conclusions on HRA in Appendix C to this report.

- 4.3.151. East Suffolk Council [REP1-064] provided commentary on LBBG habitat compensation. They do not object to the proposed LBBG habitat compensation for NFOWF which involves onshore commitments. They stated support toward the Applicant's ongoing engagement with the Five Estuaries offshore wind farm, working collaboratively and seeking to possibly provide a coordinated approach to LBBG compensation delivery. However, they contended East Suffolk Council's role in the delivery of the compensation measures appears to have been overlooked, especially if a project alone approach to its delivery is progressed.
- 4.3.152. At Deadline 8 the suite of information within [REP8-019] to [REP8-22] identifies the considerable further activity required in terms of final site selection, adequately addressing these issues. Section 3.4.1 of [REP8-019] lists the pre-construction surveys and data analysis to be undertaken. And Section 3.4.2 of [REP8-019] lists the mitigation expected for Gedrave Marshes and Outer Trial Bank.
- 4.3.153. Considering all of the implications of the planned LBBG compensation delivery onshore relative to gauging EIA/ES related impacts – the view taken by the ExA is that all residual concerns can be successfully addressed, adapted to and managed through the provisions of the DCO. Which secures final iterations of relevant documentation.
- 4.3.154. It is also the case that by Deadline 8, NE via Appendix N8 Table 5 [REP8-100] detailed their Response to the Report on the Implications for European Sites (RIES) [PD-020]. They agreed with the ES/Applicant that various harms can be excluded for:
- Hamford Water SPA for Little Tern (breeding); Avocet (wintering); Dark bellied brent goose (wintering); Shelduck (wintering); Teal (wintering); Ringed plover (wintering); Grey plover (wintering); Black-tailed godwit (wintering) and Redshank (wintering).
 - Hamford Water Ramsar for Ringed plover (migration); Common redshank (migration); Dark bellied brent goose (wintering); Black-tailed godwit (wintering) and Grey plover (wintering).
 - Stour and Orwell Estuaries SPA for waterbird assemblage (owing to disturbances, habitat loss and indirect effects on functionally linked land).
 - As well as the Stour and Orwell Estuaries Ramsar for wintering waterfowl assemblage (owing to direct disturbance on a European site, as well as disturbance, habitat loss and indirect effects on functionally linked land).
- 4.3.155. The ExA has incorporated the above positions into our overall conclusions summarised in Chapter 7. In doing so, for EIA purposes we find that harmful impacts to existing onshore birds and other terrestrial wildlife such as important fauna from compensation delivery have or can be minimised as far as practicable.

CONCLUSIONS (FOR ONSHORE ORNITHOLOGY)

- 4.3.156. The ExA is cognisant that considerations toward minimising onshore ornithology harm avoidance were included within the site selection process undertaken by the Applicant as demonstrated in the content of the ES. These considerations cover: avoidance of statutory and non-statutory designated sites for conservation and associated buffer zones; avoidance of ancient woodland and associated buffer zones; avoidance of habitats and species of principal importance in England; and

avoidance of habitat suitable for supporting legally protected and notable species as far as practicable.

- 4.3.157. The Applicant's mitigation measures to reduce the potential impacts on identified bird species have been secured as part of a Code of Construction Practice (Revision 5) [REP7-025]; an Ecological Management Plan (EMP) (to be in accordance with the Outline Landscape and Ecological Management Strategy (OLEMS) Revision 6 [REP7-027]) and Horizontal Directional Drill Method Statement and Contingency Plan (the outline Revision 3 being [REP7-029]), secured by DCO Requirements 8, 12 and Requirements 23, respectively.
- 4.3.158. Those documents include best practice principles for minimising impacts on notable habitats, species and watercourse disturbance, habitat reinstatement measures and sensitive construction methods such as trenchless techniques. Furthermore, due monitoring can be secured through the OLEMS (alongside any potential protected species licenses).
- 4.3.159. dDCO Requirement 14 deals with European protected species onshore. It triggers additional surveying and investigation where necessary, alongside any further mitigation warranted with the prior approval from the relevant SNCB for the agreement of such details. Decommissioning is also adequately controlled by dDCO Requirement 26, to adequately manage potential further ornithological harms.
- 4.3.160. With the implementation of mitigation measures, North Falls is predicted by the ES to have no greater than negligible or minor adverse (not significant in EIA terms) effects on onshore ornithological receptors during all its phases. One exception is 'corn bunting', where up to moderate adverse (significant in EIA terms) effects are predicted due to the habitat loss and construction disturbance at the onshore substation. Based on all evidence, the ExA has no strong reason to disagree with the conclusions of the ES in that regard.
- 4.3.161. Harm does arise to corn bunting. But habitat avoidance is demonstrated as not possible by the ES. This is because embedded mitigations have sought to avoid and limit such harm as far as possible with the scheme in place via site selection. And further mitigation would not be effective to reduce the degree of harm to that species.
- 4.3.162. The ExA accepts that whilst there is potential for species wide cumulative effects to occur with a number of other offshore wind farms and/or projects in the study area, it is not anticipated that cumulative effects predicted by the ES are likely to be significant in EIA terms.
- 4.3.163. Moreover, the range of compensation options evident for LBBG did generate other onshore wildlife and bird related EIA concerns during the Examination. Nonetheless, the Applicant has largely successfully addressed those issues to the satisfaction of the ExA, with other remaining residual issues being able to be successfully overcome or adapted to through the provisions of the DCO. In saying that the ExA defers to Appendix C of this Report for all relevant HRA technical assessment.
- 4.3.164. In conclusion, the ExA is satisfied that the Applicant has demonstrated compliance with requirements of NPS EN-1, NPS EN-3 and NPS EN-5 in the consideration of all onshore ornithological matters. The ExA also accepts that other relevant legislative, policy and guidance considerations have been paid appropriate regard to.

- 4.3.165. Accordingly, in light of all of the above circumstances, and the limited harm identified in the Applicant's assessments the ExA attributes little weight to the overall adverse impacts arising from onshore ornithological impacts for the purposes of the overall planning balance exercise to be undertaken.

4.4. FLOOD RISK, GROUNDWATER AND SURFACE WATER

INTRODUCTION

- 4.4.1. This section considers the effects of the Proposed Development on water resources and flood risk including the implications of climate change for flood risk, and water quality and compliance with the Water Framework Directive (WFD). The Proposed Development's potential effect on groundwater and private water supplies is also considered.

POLICY BACKGROUND

- 4.4.2. In its consideration of water resources, flood risk and water quality, the Examining Authority (ExA) has had regard to:
- Overarching National Policy Statement (NPS) for Energy EN-1 (NPS EN-1) in particular Sections 5.8 and 5.16;
 - the NPS for Renewable Energy (NPS EN-3), in particular Section 2.8;
 - the NPS for Electricity Networks Infrastructure (NPS EN-5) in particular Section 2.3;
 - the Local Impact Reports (LIRs);
 - any matters prescribed in relation to the development; and
 - any other important and relevant matters including the relevant policies in the National Planning Policy Framework (NPPF) and Planning Policy Guidance note (PPG).

THE APPLICATION

- 4.4.3. The Applicant's assessment of the potential impact of the Proposed Development on water resources and flood risk was presented in:
- Environmental Statement (ES) Chapter 19 Ground Conditions and Contamination [\[APP-033\]](#); and
 - ES Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#), supplemented and linked to other chapters or appendices, including the following:
 - ES Appendix 21.1 Geomorphology Baseline Survey [\[APP-119\]](#);
 - ES Appendix 21.2 Water Environment Regulations Compliance Assessment [\[APP-120\]](#);
 - ES Appendix 21.3 Flood Risk Assessment (FRA) [\[APP-121\]](#);
 - ES Chapter 19 Figures [\[APP-064\]](#); and
 - ES Chapter 21 Figures [\[APP-066\]](#).
- 4.4.4. Additional assessments were submitted during the Examination, including:
- Flood Risk Assessment (Clarification regarding flood risk associated with watercourse crossings) - Technical Note [\[REP4-032\]](#);
 - Flood Risk Assessment (Updated National Flood Risk Assessment (NaFRA) NaFRA2 dataset) - Technical Note (Rev 0) [\[REP4-033\]](#); and
 - Groundwater Risk Assessment and Monitoring Plan - Private Water Supplies and Licenced Abstractions (Parts 1 to 4) [\[REP5-049\]](#) to [\[REP5-052\]](#) inclusive.

BASELINE

- 4.4.5. ES Chapter 21 [APP-035] and ES Chapter 19 [APP-033] set out the baseline environment for the assessment of the Proposed Development's likely impact on hydrology and flood risk, ground conditions and contamination.
- 4.4.6. The Applicant defines the study area for water resources and flood risk based on surface hydrological catchments. Catchments were included within the study area if crossed anywhere within the Proposed Development throughout the proposed onshore area, or if they are hydrologically connected downstream. The onshore study area, showing surface water catchments and main rivers, is shown in ES Figure 21.1 [APP-066] extracted below as Figure 6. When considering the potential impacts to groundwater, the study area was limited to those groundwater bodies that lie directly beneath the onshore project area, shown in ES Figure 21.2 [APP-066].

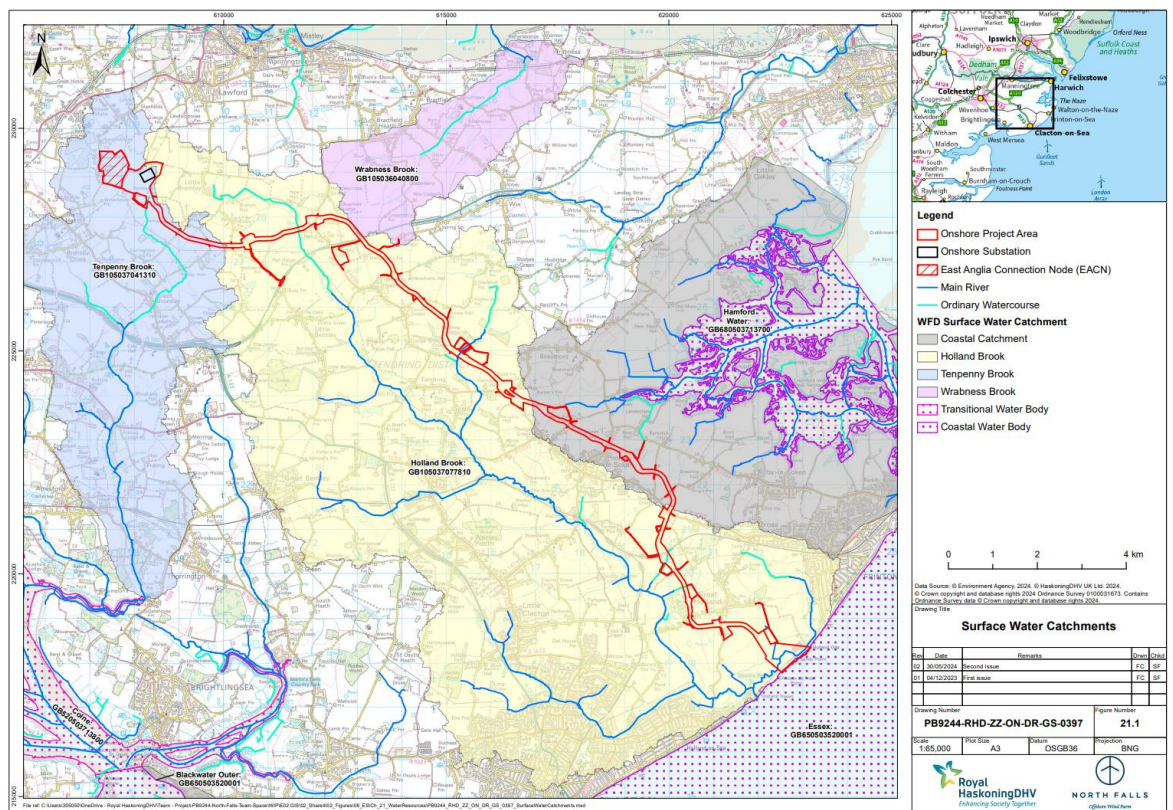


Figure 6: Surface Water Catchments (Source: ES Figure 21.1 [APP-066])

- 4.4.7. The Applicant's study was based on a review of existing data sources such as the British Geological Survey (BGS) and Environment Agency (EA) flood risk data, as well as the findings of a site-specific geomorphological baseline surveys. The study area for water resources and flood risk includes river water body catchments based on surface hydrological catchments with an area greater than 5km².

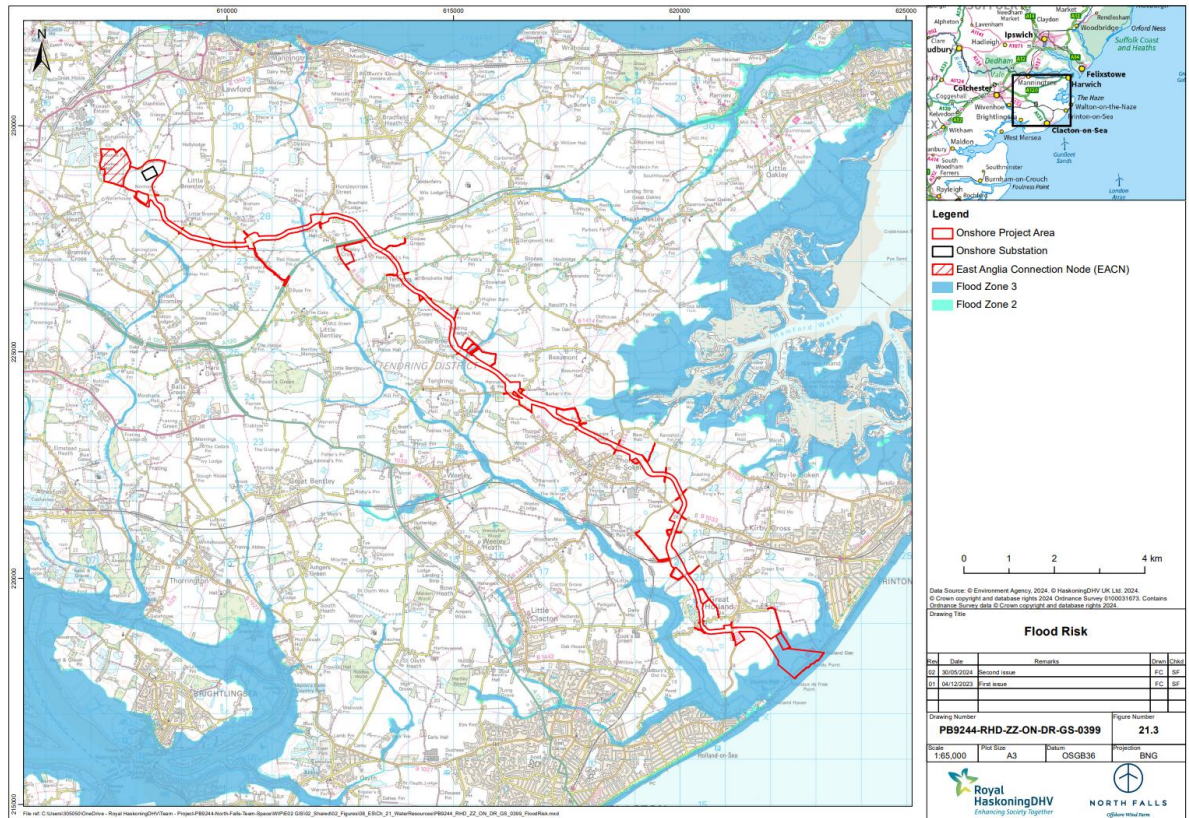


Figure 7: Flood Risk (Source: ES Figure 21.3 [APP-066])

4.4.8. The ES sets out that the majority of the area is in the lower risk Flood Zone 1. Figure 8, above, shows the areas of flood risk as presented in Figure 21.3 [APP-066]. There are three onshore areas within a higher risk of flooding (Flood Zones 2 and 3):

- Upper reaches of Holland Brook, immediately west of Abbott's Hall;
- Tendring Brook, near Tendring Green; and
- Kirby Brook and the lower course of Holland Brook at Holland Haven Marshes. Here is also the most extensive area of surface water flood risk. Much of this area overlaps with assessed river and sea flooding.

4.4.9. The ES also identifies numerous flow paths that drain the low ridge above Holland Haven Marshes which are high risk surface water flow paths (areas with a 3.3% annual probability of flooding). Onshore, across the proposed project area there are some other very minor flow paths associated with hillslope hollows. Several relatively small areas of low to medium surface water flood risk exist to the north of Norman's Farm, in the proximity of the proposed onshore substation (OnSS).

4.4.10. The ES states that most of the onshore area is underlain by unproductive strata, but there are areas of low groundwater vulnerability near Thorpe-le-Soken and medium-low vulnerability north of the A120. The area is underlain by a single groundwater body Essex Gravels. The ES states that this is currently assessed as poor due to diffuse pollution as a result of poor livestock and nutrient management. Ongoing initiatives are in place to reduce existing and potential new pressures on groundwater to achieve compliance with the Water Environment Regulations (WER) which suggests that there would be potential for groundwater quality and quantity to improve.

4.4.11. In summary, ES Chapter 19 [APP-033] and ES Chapter 21 [APP-035], together with supplemental assessments, set out that:

- The WFD assessment within the WER Compliance Assessment [APP-120], concludes that the Proposed Development is assessed to have no effects that would be likely to cause deterioration in WFD status or prevent waterbodies from achieving WFD objectives, provided that best practice and established guidance are followed. Embedded mitigation measures are identified in ES Chapter 21 [APP-035] and [APP-120], together with the outline Code of Construction Practice (OCoCP) [REP7-025] secured by Requirement (R) 8 of the DCO;
- no potential for transboundary effects for water resources and flood risk or potential for transboundary effects were identified;
- whilst surface and groundwater receptors could be affected because of direct disturbance, the ES considers that the significance of effect on receptors during these phases would be negligible or minor adverse. Therefore, effects are not likely to be significant in EIA terms;
- surface and groundwater receptors could be affected by the supply of contaminants and changes to flow patterns during the operational phase. However, the nature of operational activities would be sporadic. Therefore, the effects would be negligible or minor adverse and not likely to be significant in EIA terms; and
- cumulative effects would not be anticipated associated with the construction of operation of the proposed Five Estuaries Offshore Windfarm (VEOWF), or any other projects.

4.4.12. A full assessment of flood risk from all sources is provided in ES Appendix 21.3 [APP-121]. The majority of the onshore project area would be in Flood Zone 1: land with less than a 0.1% annual probability of river and sea flooding. Three areas of the proposed onshore project area would be in areas at higher risk of flooding (Flood Zones 2 and 3).

4.4.13. Because the majority of the Proposed Development would be principally located in Flood Zone 1 [APP-121] the majority of the onshore cable route and the proposed OnSS would be at low risk of surface water flooding. The Applicant's FRA concludes that there would also be a low risk of flooding from all other sources of flood risk including surface water flooding.

SEQUENTIAL TEST

4.4.14. The Applicant addresses the sequential test in the FRA. The Applicant recognises that due to the large-scale, and linear nature, parts of the Proposed Development would pass through Flood Zones 2 or 3. It states that these have been avoided where practicable. The Applicant considers that flood risk concerns have been appropriately mitigated within the design, and in accordance with the sequential test in that principally areas of low risk have been identified.

EXCEPTION TEST

4.4.15. The FRA concludes that the first part of the exception test (the provision of wider sustainability benefits to the community) is passed on the basis that the Proposed Development would provide energy certainty from a sustainable and renewable source of energy at a national scale.

4.4.16. The scale of the Proposed Development provides the context for the second part of the test: the majority of the onshore cable route, as well as the proposed OnSS,

would not be located within an area considered to be at risk of fluvial or tidal flooding. The FRA notes that only proposed subterranean development would pass through areas at increased risk of flooding, i.e. Flood Zone 3 or high surface water flood risk. Following construction, these would not be vulnerable to flood risk during the operational lifetime and would not increase flood risk elsewhere. It is only during the construction works that there would be potential for a temporary increase in flood risk. Appropriate mitigation and management measures for the construction phase are summarised in the OCoCP [\[REP7-025\]](#).

NATIONAL FLOOD RISK ASSESSMENT (NAFRA)

4.4.17. Prior to, and during the Examination, the EA published new national risk information for flooding and coastal erosion including future scenarios accounting for climate change. The guidance provides information on changes and includes:

- 17 December 2024: 'National assessment of flood and coastal erosion risk in England 2024' report published providing a summary new data;
- 28 January 2025: New (NaFRA) 'Risk of flooding from rivers and sea' and 'Risk of flooding from surface water' data released;
- 28 January 2025: New National Coastal Erosion Risk Map (NCERM) data was released; and
- 25 March 2025: New NaFRA Flood Zone data on Flood Map for Planning made available on data.gov.uk. This allows developers and planners to find the data they need to undertake flood risk assessments.

4.4.18. The ExA sought an update on these through ExQ1 [\[PD-009\]](#) Q.11.1.1. The Applicant submitted, at Deadline (D)4, an updated FRA: 'Updated NaFRA2 dataset - Technical Note' [\[REP4-033\]](#). Overall, the updated FRA concludes that the surface water flood risk to the landfall, onshore cable route and OnSS works area remains similar to that presented in ES Appendix 21.3 [\[APP-121\]](#). On that basis, it concludes that there would be no material change in the surface water flood risk to the Proposed Development as a result of the new and updated surface water mapping.

PROPOSED MITIGATION

4.4.19. The Applicant states that embedded mitigation measures would be included within project design, as well as to meet legislative requirements or adopted industry practice. Table 21.3 of the ES [\[APP-035\]](#) sets these out including:

- All main rivers, and most ordinary watercourses would be crossed using trenchless techniques such as Horizontal Directional Drilling (HDD) to avoid direct interaction. An Outline HDD Method Statement and Contingency Plan [\[REP8-011\]](#) has been submitted. Mitigation measures would be secured by R22 of the DCO;
- access across watercourses may include temporary bridges where direct access is not readily available from both sides;
- where temporary dams are used, onshore export cables would typically be a minimum of 3m below the channel bed to avoid exposure during periods of higher energy flow;
- the Applicant would appoint a land drainage consultant to develop pre-and post-construction agricultural drainage plans. Land drainage systems would be reinstated following completion of construction works. The OCoCP includes outline soil management measures and outline the mitigation measures and industry good practice techniques, which contractors would be obliged to comply with. The final CoCP and Soil Management Plan (SMP) would be secured by R8 of the DCO, submitted prior to commencement of construction;

- adherence to EA and industry good practice measures;
- changes in surface water runoff resulting from the increase in impermeable area, particularly at the OnSS, would be attenuated and discharged at a controlled rate. Essex County Council (ECC) is the Lead Local Flood Authority (LLFA) and would be consulted on this, as well as the EA. All details of the construction drainage strategy at the OnSS are contained within the outline Operational Drainage Strategy (oODS) [APP-254]. R22 of the DCO secures an ODS in accordance with the oODS. The Applicant considers that the onshore cable route has been developed to avoid interaction with the Groundwater Source Protection Zone (SPZ) and it therefore minimises potential for impact on abstractions for public water supply secured by the onshore order limits in the dDCO.

APPLICANT'S ASSESSMENT OF EFFECTS

- 4.4.20. Section 21.6 of ES Chapter 21 [APP-035] identifies the potential effects during the construction, operation and maintenance, and decommissioning phases of the Proposed Development. Table 21.2 provides a realistic worst-case scenario against which it assesses effects. The potential impacts would include:
- Direct disturbance of surface water bodies;
 - increased sediment supply;
 - supply of contaminants to surface and groundwater;
 - changes to surface and groundwater flows and flood risk;
 - supply of contaminants to surface and groundwater; and
 - changes to surface and groundwater flows and flood risk.
- 4.4.21. The ES assesses the above impacts for the construction and operational phases. Table 21.31 of ES Chapter 21 summarises these. With the implementation of mitigation measures, ES Chapter 21 concludes that no significant effects would arise from the Proposed Development during the construction, operation and maintenance or decommissioning phases for both flooding and groundwater resources.
- 4.4.22. Cumulatively, effects from VEOWF and, both VEOWF and the proposed Norwich to Tilbury (N2T) projects were also assessed. ES Chapter 21 Tables 21.25 – 21.27 summarise effects from these proposals in conjunction with the Proposed Development. Minor to negligible effects were reported in each phase. Decommissioning effects are also considered to be minor adverse to negligible, which would be the same as for the construction phase. Considering proposed mitigation measures, the ES concludes that that cumulative effects are not likely to be significant in EIA terms as set out in ES Chapter 21 Table 21.32. As no potential transboundary impacts were identified in ES no further mitigation was proposed.

WFD ASSESSMENT

- 4.4.23. The Applicant undertook a WFD assessment within the Water Environment Regulations Compliance Assessment [APP-120]. ES Chapter 21 [APP-035] also addresses WFD issues. A Groundwater Risk Assessment and Monitoring Plan - Private Water Supplies and Licenced Abstractions (Parts 1 to 4) was submitted at D5 [REP5-049], [REP5-050], [REP5-051], [REP5-052].
- 4.4.24. The ES concludes that the Proposed Development would have no effects that would be likely to cause deterioration in WFD status or prevent waterbodies from achieving their WFD objectives, provided that best practice and established guidance are followed. Embedded mitigation measures are identified in ES Chapter

21 [APP-035] and [APP-120] and would be secured through the OCoCP [REP7-025].

ISSUES CONSIDERED DURING THE EXAMINATION

4.4.25. ECC as LLFA confirmed in its LIR [REP1-065] that it considers the Applicant's FRA [APP-035] and Appendix [APP-121] provide details of good practice during the construction phase to mitigate surface water runoff and would manage any pollution. ECC confirms that it engaged collaboratively to scope the detail required to assess the proposed surface water drainage strategy and other supporting documents. For matters relating to flooding, groundwater and surface water, therefore, ECC supports the proposed flood management scheme, noting that the FRA has considered the risk of flooding for the construction and operational phases of the Proposed Development [REP1-065].

4.4.26. The main issues considered during the Examination in relation to the water environment were:

- The adequacy of the FRA and updates, including the application of the Sequential and the Exception Tests;
- impacts of construction on flood risk, including flood risk at the proposed substation and proposed drainage works and culverting/crossing; and
- impact on groundwater, including drinking water from wells.

THE ADEQUACY OF THE FRA, AND UPDATES, INCLUDING THE APPLICATION OF THE SEQUENTIAL AND THE EXCEPTION TESTS

4.4.27. ECC as LLFA confirmed in its LIR that it agrees with the FRA which has considered the risk of flooding for the construction and operational phases. ECC also confirmed that the EIA methodology as set out in Section 21.4 of ES Chapter 21 [APP-035] is appropriate for assessing impacts on water resources receptors. The FRA methodology, and its findings address both the sequential and exception tests [REP1-065].

4.4.28. During the Examination, the ExA sought updates to the FRA based on new EA data, through written questions at ExQ1 [PD-009] and ISH1 [EV5-001]. The EA confirmed that the Applicant should be using the latest data to re-assess risk.

4.4.29. At D4 the Applicant submitted an updated FRA [REP4-033]. The update concludes that the surface water flood risk to the landfall, onshore cable route and OnSS works area remains similar to that presented in ES Appendix 21.3 [APP-121]. On that basis, it concludes that there is no material change in the surface water flood risk to the Proposed Development as a result of the new and updated surface water mapping. The ExA raised further questions at ExQ2 [PD-013] Q11.0.5. In its response, the EA confirmed its agreement with the update [REP5-088].

EXA'S CONSIDERATIONS

4.4.30. The ExA considers that the Applicant has provided a methodologically sound FRA which accounts for the impacts of climate change on flood risk based on the most up-to-date available data, including the updated NaFRA2 dataset. On the matter of the sequential and exception tests, the ExA agrees that both elements have been demonstrably passed. The LLFA raised no objections and the ExA has no reason to conclude otherwise.

4.4.31. The ExA has had regard to the agreement with the EA, in the final SoCG, that in its view the FRA is adequate [\[REP8-076\]](#), and that the Applicant has given consideration to the operationality of the Proposed Development during a flooding event. The ExA agrees that appropriate mitigation would either be embedded or would be secured through:

- R8 Code of Construction Practice;
- R22 Operational Drainage Strategy; and
- R23 Horizontal Directional Drilling Method Statement.

IMPACTS OF CONSTRUCTION ON FLOOD RISK, INCLUDING FLOOD RISK AT THE PROPOSED SUBSTATION AND PROPOSED DRAINAGE WORKS AND CULVERTING/CROSSING

4.4.32. ECC, as LLFA, noted in its LIR that the Applicant developed surface water management in accordance with the ECC's surface drainage systems (SuDS) Guide [\[REP1-065\]](#). Discussions between ECC and the Applicant had also taken place to ensure that the proposal would comply with the Essex Design Guide. SuDS have been developed in accordance with local standards and the NPPF. Additionally, industrial best practice guidance has been followed to minimise the impact from the proposed scheme to quantity and quality of the surface water runoff.

4.4.33. ES Appendix 21.3 [\[APP-121\]](#) confirms that all main rivers and the majority of ordinary watercourses would be crossed using HDD methods as set out in Appendix 5.1 Crossing Schedule [\[APP-092\]](#). The EA [\[RR-091\]](#) raised concerns that at 2 haul road crossings (WX22-A and WX-23) associated flood risk would not be considered until the detailed design stage. The EA set out that these crossings have the potential to interfere with the flow of flood water which could increase the risk of flooding to third parties, and sought further assurance as to the impacts arising from the crossings.

4.4.34. The ExA sought to specifically address this point through ExQ1 [\[PD-009\]](#) Q11.1.8. The Applicant's response [\[REP2-020\]](#) refers to paragraph 220 of ES Chapter 5 Project Description [\[APP-019\]](#) which confirms that measures would be in place to ensure any haul road crossing would not restrict flow. If haul road crossings were found to be needed, then the culverts would be sized accordingly to ensure continued conveyance of flow.

4.4.35. At ISH1 [\[EV5-001\]](#) the EA sought further assurance regarding impact on third parties from proposed watercourse crossings at WX22-A and WX-23. As a result, at D4, the Applicant submitted 'FRA (Clarification regarding flood risk associated with watercourse crossings) - Technical Note' [\[REP4-032\]](#). This considers flood risk at the watercourse crossings rather than leaving it until detailed design post consent. Further, at D7, at the request of the ExA and EA, the EA was added as a named consultee to the following requirements in the dDCO [\[REP8-005\]](#):

- R8 Code of Construction Practice;
- R12 Ecological Management Plan;
- R15 Groundwater Monitoring;
- R22 Operational Drainage Strategy; and
- R23 Horizontal Directional Drilling Method Statement.

EXA'S CONSIDERATIONS

- 4.4.36. The ExA notes that the signed SoCG [\[REP8-060\]](#) between ECC and the Applicant, and with the EA [\[REP8-076\]](#) confirms the parties' agreement with all matters relating to flood risk and drainage set out in ES Chapter 19 and 21, including methodology and mitigation. ECC accepts that substantive concerns would be addressed through the temporary drainage strategy provided with the final CoCP secured through R8 of the draft DCO [\[REP8-005\]](#). An operational drainage strategy would be secured through R22 of the DCO, which would be developed in discussion with the LLFA. Operational drainage measures are provided in the oODS [\[APP-254\]](#). R15 Groundwater Monitoring was also updated at D5 to address ECC's concerns.
- 4.4.37. Regarding the impact of construction on flood risk, the ExA agrees with the EA, that it should be a named consultee on Requirements with which it has an interest, and notes that it is included in each request [\[REP8-005\]](#).
- 4.4.38. Overall, the ExA's view is that, in the absence of evidence to the contrary, the Applicant's approach to mitigation proposed is reasonable. The ExA is satisfied that the mitigation measures in the ES to be secured in the DCO including the CoCP, in accordance with the OCoCP [\[REP7-025\]](#), means that there would not be an unacceptable impact on drainage effects from surface water runoff. The additional clarification provided during the Examination through the Technical Note [\[REP4-032\]](#) was agreed with the EA and provides consideration of flood risk at the watercourse crossings. At D7, at the request of the ExA and EA, the EA was added as a named consultee to the requirements in the DCO. This ensures EA input into the discharge of relevant requirements which provides the ExA with reassurance that the relevant bodies would be able to oversee the final mitigation.

IMPACT ON GROUNDWATER, INCLUDING DRINKING WATER FROM WELLS

- 4.4.39. A number of IPs including Little Bromley PC [\[RR-203\]](#) and others including [\[RR-088\]](#), [\[RR-223\]](#), [\[RR-331\]](#) raised concerns that properties in Little Bromley have no mains water connection and are reliant on well water. They submit that the Proposed Development would affect the water sources and supplies, and that extending water mains to these properties would be the only way to guarantee continuity of supply.
- 4.4.40. At ExQ1 Q2.1.4 [\[PD-009\]](#) the ExA sought further information on well water supply and potential impacts. In response, the Applicant stated that it is working with the Applicants of VEOWF to minimise effects on owners of private water supplies. It explained that a joint process of groundwater monitoring was being undertaken to understand the effects on private water supplies. At D2, the Applicant confirmed that it was in the process of preparing a groundwater risk assessment and construction monitoring plan to align with that of the VEOWF. The construction phase mitigation proposals to minimise impacts upon ground water resources would be captured in the final Code of Construction Practice, secured by R8 of the dDCO. Groundwater monitoring would also be secured by R15 of the dDCO [\[REP2-020\]](#).
- 4.4.41. In response to ExQ1 Q11.1.2, the Applicant explains that it identified twenty-three domestic and one commercial potable abstraction wells within 1km of the onshore project area reliant on well water or boreholes. Water testing was carried out at properties in proximity to the Order Limits to establish a baseline dataset [\[REP2-020\]](#).
- 4.4.42. The Applicant sets out potential impacts on groundwater and abstractions in ES Chapter 19 which commits to further consideration of all licensed abstractions within 250m of the onshore project area [\[APP-033\]](#). During the Examination, the Applicant

collaborated with the applicant of VEOWF to seek to minimise effects on owners of private water supplies. As a result, the groundwater risk assessment and construction monitoring plan was submitted at D5 [\[REP5-049\]](#). This concludes that a total of eight private water supplies, and one licenced abstraction are located within a 250m radius of the onshore cable corridor. These could feasibly be impacted by construction activities including dewatering and construction. It also concludes that there are no groundwater dependent ecological sites along the proposed project area.

- 4.4.43. The qualitative hydrogeological impact assessment concludes that if works are undertaken in accordance with appropriate good practice, and measures outlined within management plans, the potential risk to the identified groundwater abstractions is low to moderate. The groundwater monitoring plan allows for ongoing monitoring of water supplies throughout the construction phase. This would ensure that there would be no adverse impacts on water supplies [\[REP5-052\]](#). A summary of the findings of this assessment is included as Table 15, and the 8 affected abstractions are identified within Figure 8 [\[REP5-049\]](#).

EXA'S CONSIDERATIONS

- 4.4.44. Regarding the impact on groundwater and drinking water, the ExA notes that in the signed SoCG between the Applicant and the EA, matters relating to groundwater are all agreed. Discussions with owners of local private water supplies to understand the nature of potential effects upon these supplies during construction have informed the Groundwater Risk Assessment for private water supplies. These resulted in the submission at D5 of the Groundwater Risk Assessment and Monitoring Plan - Private Water Supplies and Licenced Abstractions [\[REP5-049\]](#). This includes an outline monitoring plan, which sets out the proposed approach to monitoring of potentially affected private water supplies during construction. It includes outline details of the mitigation proposed in the event of a potential effect on private water supplies being identified during monitoring. The ExA is satisfied that these measures would adequately mitigate the risks associated with private water supplies.
- 4.4.45. The mitigation proposals to be implemented during construction would also minimise impacts upon groundwater resources would be captured in the final CoCP, secured by R8 of the dDCO. Groundwater monitoring, following the recommendations in the Outline Plan, would also be secured by R15 of the dDCO.
- 4.4.46. The relatively small scale of construction activities comprise trenched crossings and small areas of disturbed ground, which when combined with embedded mitigation should mean that activities that have the potential to cause non-temporary effects to the status of any of the river and groundwater bodies would be minimised. Potential operational activities would be limited to the OnSS, and construction activities would not prevent water body status objectives being achieved in the future. The Project is therefore considered to be compliant with WER requirements.

CONCLUSIONS

- 4.4.47. An FRA in accordance with section 5.8 of the NPS EN-1 has been undertaken. The ExA considers that the FRA meets the minimum requirements for FRAs in paragraph 5.8.15 of NPS EN-1, and in accordance with paragraph 5.8.36, and is satisfied that the application is supported by an appropriate FRA. The ExA is also satisfied, and agrees with the LLFA and EA, that the sequential and related exception test requirements have been met, and that the requirements set out in NPS EN-1 in this regard have been addressed. The Applicant adequately

considered alternative sites, none of which could be considered as reasonably available.

- 4.4.48. Further, as the LLFA has acknowledged, the Applicant developed surface water management in accordance with the ECC's SuDS Guide [\[REP1-065\]](#). In compliance with paragraph 5.8.39 of NPS EN-1, the Secretary of State can therefore be satisfied that the most appropriate body would be given the responsibility for maintaining any SuDS. R22 would secure that no part of Work No. 11 or Work No. 12 may commence until an ODS for operation of that part has been submitted to and approved by the ECC as discharging authority and LLFA, in consultation with the EA.
- 4.4.49. With regard to river flooding and surface water runoff, the ExA is content that the mitigation proposed would adequately deal with the impacts. This covers all phases of development. The same conclusion is drawn in relation to cumulative impacts.
- 4.4.50. In reaching these conclusions the ExA has considered the concerns expressed by IPs about drinking water and well water issues in this area. However, there is no cogent evidence before the ExA to indicate that the Proposed Development with associated mitigation measures would exacerbate this situation.
- 4.4.51. Chapter 19 and 21 of the ES sets out the embedded mitigation relating to flood risk and drainage matters. Further mitigation would be secured through the following requirements within the dDCO, each of which would involve the EA as a named consultee:
- R8: Code of Construction Practice.
 - R12: Ecological Management Plan
 - R14: European Protected Species; onshore
 - R15: Groundwater Monitoring
 - R22: Operational Drainage Strategy
 - R23: Horizontal Directional Drilling Method Statement
- 4.4.52. An appropriate WFD Assessment has been prepared. The ExA is satisfied that the effect of the Proposed Development on WFD waterbodies would not be unacceptable, and would meet the requirements of the WFD in accordance with Section 5.16 of NPS EN-1. The EA also confirmed in its RR [\[RR-091\]](#) that it is content that environmental concerns could be managed through embedded mitigation. The EA made a case that it should be listed as named consultee where processes fall under its remit, namely Rs 8, 12, 15, 22 and 23. Regarding groundwater, the EA sought to be a named consultee for the Code of Construction Practice mitigation – R8. The ExA agree that the EA should be a named consultee for these requirements, and notes that the Applicant has agreed to the EA inclusion in each within the DCO [\[REP8-005\]](#).
- 4.4.53. Paragraph 5.16.2 of NPS EN-1 notes that development can lead to increased demand for water, involve discharges to water, and cause adverse ecological effects resulting from physical modifications to the water environment. There may also be an increased risk of spills and leaks of pollutants to the water environment which could result in surface waters, groundwaters or protected areas failing to meet environmental objectives established under the WFD. The ExA is satisfied that the WFD Assessment is appropriate and that no material harm that would arise following implementation of appropriate mitigation.

- 4.4.54. The ExA is content that matters relating to cumulative mitigation measures have been satisfactorily addressed. The range of mitigation measures, including requirements, PPs and maintenance buffers to watercourses and main rivers are satisfactory. By the end of the Examination, no matters of dispute regarding cumulative impacts existed between the Applicant and either of the LLFA or EA.
- 4.4.55. The ExA agrees with the Applicant's assessment that the Proposed Development meets the relevant policy requirements and that the potential consequences of a flood event have been considered. Mitigation that was factored into the assessment would be secured by R8 of the Applicant's final dDCO. The Proposed Development is consistent with NPS EN-1.
- 4.4.56. The ExA is therefore satisfied that the Applicant's assessment considers all relevant potential environmental impacts in respect of flood risk and water quality, during the construction, operation and decommissioning phases of the Proposed Development both individually and in combination with other plans and projects in accordance with Section 5.8 and 5.16 of NPS EN-1.
- 4.4.57. The Proposed Development's potential impacts both individual and cumulative, on flood risk and water quality, including climate change predictions, would be satisfactorily mitigated and managed through the measures contained within the relevant management plans. The OCoCP is secured by R8 of the dDCO. Overall, the ExA finds that there would be no significant adverse effects or significant cumulative effects on flood risk and water quality arising from the Proposed Development. The Applicant's associated assessment has followed the mitigation hierarchy and met the policy tests of NPS EN-1, NPS EN-3 and NPS EN-5. The ExA concludes that effects on flood risk and water quality do not weigh for or against the making of the Order.

4.5. HUMAN HEALTH

INTRODUCTION

- 4.5.1. This section considers the effects of the Proposed Development on human health and how the potential for adverse effects on human health would be managed in the construction and operation of the Proposed Development. Related matters including traffic and transport, noise and vibration, air quality and cumulative effects are covered in other sections.

- 4.5.2. In its consideration the ExA has had regard to:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Sections 4.4.1, 4.4.4 and 4.4.6;
- The National Policy Statement for Renewable Energy (NPS EN-3); and
- The National Policy Statement for Electricity Networks Infrastructure (NPS EN-5) in particular Sections 2.9.46-2.9.50 and 2.9.53

THE APPLICATION

- 4.5.3. Environmental Statement (ES) Chapter 28 Human Health [\[APP-042\]](#) presents the assessment of the potential impacts of the Proposed Development on Human Health and is supported by ES Appendix 28.1 Health Baseline Statistics [\[APP-169\]](#) which sets out the baseline statistics used in the health assessment. This is a desk based review of available health and population data in particular relating to sensitive population groups. The health baseline statistics are taken from a number of sources and are split into local, regional and national statistics, with statistics

provided on a ward basis for those wards directly affected by the Proposed Development in terms of the landfall, onshore cable route and onshore substation.

BASELINE

- 4.5.4. The Applicant assessed the realistic worst case scenario which was the development of the Five Estuaries Offshore Wind Farm (VEOWF) alongside the Proposed Development, with a shared onshore cable route and separate onshore substations. Table 28.4 sets out the summary of the potential impacts of the Proposed Development on human health during all phases. These were:

- Construction
 - Noise;
 - air quality;
 - ground and/or water contamination;
 - physical activity;
 - journey time and/or reduced access; and
 - employment.
- Operation
 - Employment;
 - noise;
 - electro magnetic fields (EMF); and
 - wider societal benefits.

- 4.5.5. The study areas were divided into geographic area classifications, namely:

- Site specific-onshore project area including landfall, onshore cable route and onshore substation;
- local-Tendring District;
- regional-Essex County;
- national; and
- international.

- 4.5.6. The Applicant identified broadly defined population groups within the study area, with a split on a geographic basis and the vulnerable population groups. The vulnerable population groups included children and young people, older people, people living in deprivation, people living with heightened sensitivity and people with existing poor health.

MITIGATION

- 4.5.7. The Applicant proposes measures to reduce the impact of the Proposed Development on human health. These measures which would be incorporated into the design of the Proposed Development are outlined in Section 28.3.5 of ES Chapter 28 [[APP-042](#)]. These include:

- The work undertaken in the site selection so that the proposed activities that have a potential to generate human health effects would be sited away from receptors;
- the use of trenchless crossings to minimise the disruption to the public and transport users;
- commitments to the occupational health and hygiene services for the workforce;
- road diversions to be put in place where appropriate with signage;
- cable design to reduce electro magnetic fields (EMF);
- implementation of the outline construction traffic management plan (OCTMP);

- management of dust and vehicle emissions;
- local community liaison officer and stakeholder communications plan; and
- communication plan for mitigation of effects on emergency services in the outline code of construction practice (OCoCP) [\[REP7-025\]](#)

4.5.8. The Applicant does not propose to undertake any monitoring of the impacts as it considers that provided the mitigation measures are implemented, the impacts would be no greater than minor adverse (i.e. not significant in EIA terms). Embedded mitigation would be secured through the Outline Code of Construction Practice (OCoCP) [\[REP7-025\]](#) and the Outline Construction Traffic Management Plan (OCTMP) [\[APP-251\]](#) under Requirement (R) 8 and 9 respectively in the dDCO [\[REP8-005\]](#).

ASSESSMENT OF EFFECTS

4.5.9. The Applicant concludes that the residual effects on the majority of the population groups would be no greater than minor adverse. A moderate beneficial effect was noted in respect of employment during both the construction phases and the operation and maintenance phases. Moderate wider societal benefits were identified during the operation phase though these were not considered significant in Environmental Impact Assessment (EIA) terms.

4.5.10. The Applicant identified a potential for cumulative effects with other projects. They concluded that there are no likely significant adverse health effects resulting from the Proposed Development and other projects in the area. They further concluded that there may be some likely significant beneficial effects arising from the impact on employment related to the Proposed Development and other projects on a cumulative basis.

4.5.11. Table 28.30 sets out a summary of the potential likely significant effects on human health and Table 28.31 summarises the potential inter-project cumulative effects on human health for site-specific geographic population groups.

ISSUES CONSIDERED DURING THE EXAMINATION

4.5.12. The main issues relating to health and well-being in the Examination were in respect of:

- Electromagnetic fields (EMF);
- impacts on vulnerable people and the Equality Act 2010; and
- impacts on mental health.

ELECTROMAGNETIC FIELDS

4.5.13. The UK Health Security Agency set out its concerns in its Relevant Representation (RR) [\[RR-344\]](#), requesting the calculations for the proposed onshore 275kV and 400kV cables, as evidence of compliance with exposure guidelines in line with the UK Government's Code of Practice on EMF compliance. The Applicant provided the Electro Magnetic Fields Technical Statement [\[REP4-024\]](#) and the Electro Magnetic Fields Non-Technical Statement [\[REP4-025\]](#). In this, the Applicant states that the underground cables would emit very low levels of EMF that would be well within the guidelines. The Applicant states it would adhere to established safety standards and EMFs would pose no risk to human health. In the Statement of Common Ground (SOCG) with the UK Health Security Agency [\[REP5-073\]](#), the position relating to the EMF calculations were agreed.

- 4.5.14. The Applicant in ES Chapter 28 [\[APP-042\]](#) provides a commitment to the compliance with the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines for EMF. The Applicant states:

“The high-voltage underground cables to be installed for North Falls will be surrounded by a metal sheath/screen to provide mechanical protection. This eliminates the electric field outside the cable. The magnetic field is not affected by the metal sheath/screen.

Large electrical substations do not produce significant electric fields outside their boundary because the perimeter fence screens the electric field generated by any sources within the substation. There is equipment inside substations which produces magnetic fields. But the field falls rapidly with distance, and at the perimeter fence the magnetic field from inside the substation is usually approaching background levels.”

- 4.5.15. ECC requested that the information relating to EMF's be set out in the Applicant's website along with visual representation so that the public could understand the levels of EMF and the implications relating to them [\[REP4-072\]](#). The Applicant responded that the information is available in the Electro Magnetic Fields Technical Statement [\[REP4-024\]](#) and the Electro Magnetic Fields Non-Technical Statement [\[REP4-025\]](#) and that these documents conclude that there is no risk to human health arising from the underground cables relating the Proposed Development.
- 4.5.16. In the Applicant's response to EXQ2 Qq3.0.3 [\[REP5-054\]](#), the Applicant refers to any complaints regarding EMFs to be unlikely but if any complaints arise, these would be dealt with by the community liaison officer, provided for in the OCoCP [\[REP7-025\]](#)

EXA'S CONSIDERATIONS

- 4.5.17. In respect of EMF, the ExA notes that the 1998 ICNIRP guidelines and electricity has informed the Applicant's assessment of human health effects associated with EMFs in accordance with NPS EN-1. The ExA further notes that paragraph 2.11.13 of. NPS EN-5 refers to the undergrounding of lines to reduce the level of EMFs experienced though high magnetic field levels may still occur immediately above the cable. UK Health Security Agency as a statutory consultee has considered the risks associated with EMF and have concluded that on the basis of the calculations provided by the Applicant, the EMF levels would be within the ICNIRP guidelines. The ExA notes that the UK Health Security Agency agreed the calculations provided for the EMF predicted to occur at ground level in the SOCG [\[REP5-073\]](#).
- 4.5.18. The ExA is therefore satisfied that the Applicant has adequately addressed the issue of EMF and that the EMF that would be produced would be within the ICNIRP guidelines. The Applicant has confirmed that the EMF levels would not pose a risk to human health and this has been accepted by the UK Health Security Agency.

IMPACTS ON VULNERABLE PEOPLE AND THE EQUALITY ACT 2010

- 4.5.19. In ExQ2 Q13.0.2 [\[PD-012\]](#), the ExA asked what opportunities had been identified that would enhance or improve the health and wellbeing of the population in the locality, particularly in respect of vulnerable groups and those identified as having protected characteristics under the Equality Act 2010.
- 4.5.20. In the Applicant's response to ExQ2 Q13.0.2 [\[REP5-054\]](#), they referred to the following documents:

- ES Chapter 31 Socio-Economics [APP-045];
- Equality Impact Assessment (EqIA) [REP1-049];
- Outline Skills and Employment Plan (OSEP) [APP-253]; and
- ES Chapter 28 Human Health [APP-042],

to outline the steps being taken to ensure opportunities would be available which would enhance or improve health and wellbeing of the population in the locality, in particular vulnerable groups and those identified as having protected characteristics under the Equality Act 2010.

- 4.5.21. The Applicant assessed the potential effects of the Proposed Development on equality in the EqIA [REP1-049] and concluded that there are no disproportionate or differential effects on groups with protected characteristics anticipated for the Proposed Development. They identified some small positive effects resulting from good quality employment which would also have a positive impact on health inequalities.

EXA'S CONSIDERATIONS

- 4.5.22. The ExA is satisfied that the Applicant has adequately assessed the impact of the Proposed Development on equality in the EqIA. The Applicant has considered the opportunities to mitigate indirect impacts, by promoting local improvements to encourage health and wellbeing in accordance with paragraph 4.4.6 of EN-1. The proposed mitigation measures including the local community liaison officer and the stakeholder communications plan which would be secured in the Code of Construction Practice (CoCP) in R8 of the dDCO [REP8-005] would satisfy the requirement to protect and enhance the health and wellbeing of the population in the locality.

IMPACT ON MENTAL HEALTH

- 4.5.23. Relevant Representations (RRs) were made by persons with land interests and members of the public in respect of the impact of the Proposed Development on mental health. RRs from T & R Fairley Farming Partnership [RR-324] and T Fairley & Sons Ltd [RR-326] raised concerns about the impact on physical and mental health living next to a substation
- 4.5.24. Further RRs raised concerns about the impact of the Proposed Development on mental health, including those from Elspeth Elinor Knott [RR-088], Pauline Clifton [RR-263], Andrew McDonald [RR-014] and Sarah Lodge [RR-297].
- 4.5.25. The Applicant responded to the RRs at [REP1-047] and [REP1-048] and states that the impact of the Proposed Development had been assessed in ES Chapter 28 [APP-042] and that once the mitigation measures were applied, including noise screening and dust management, they did not predict significant effects on mental health. The Applicant referred to the proposed activities to support mental health such as maintaining access for active transport and physical activity and the commitment to communicate with local residents. The Applicant added that the OCoCP [REP7-025] refers to a Stakeholder Communication Plan and a local community liaison officer to allow communication with residents and this would be secured in R8 of the dDCO [REP8-005]. The intention of the Applicant is to work collaboratively with stakeholders and to be a considerate developer. The Applicant also referred to the Scoping Opinion [APP-260] which agreed that matters relating to stress and disturbance as a result of construction and operation of the Proposed Development could be scoped out of the ES.

- 4.5.26. The ExA in ExQ2 Q13.0.2 [\[PD-012\]](#) asked the Applicant what opportunities there would be to enhance health and wellbeing. The Applicant responded to ExQ2 Q13.0.2 [\[REP5-054\]](#) that the assessment in ES Chapter 28 [\[APP-042\]](#) was that the improvements to the socio-economic circumstances of residents, namely the opportunities for employment, as a result of the Proposed Development would have a positive benefit on mental and physical health

EXA'S CONSIDERATIONS

- 4.5.27. The ExA notes that the Applicant has provided mitigation measures set out in the OCoCP [\[REP7-025\]](#) to provide the means of communication with local residents and a local community liaison officer. The ExA is satisfied that this would be sufficient to ensure that local residents would be able to raise issues that affect health and wellbeing so that they could be addressed by the Applicant and the ExA further notes the Applicant's statement that they intend to be a considerate developer, working collaboratively with stakeholders. The ExA has noted that the matters relating to stress and disturbance had been scoped out of the ES. The ExA is satisfied that the Applicant has adequately addressed the potential impact on mental health and that the measures proposed to mitigate the impacts on mental health and manage the effects of disruption on local residents are sufficient so that there would not be significant effects on mental health .

CONCLUSIONS

- 4.5.28. The ExA is satisfied with the scope of information submitted in respect of human health and wellbeing and as set out, is satisfied that the potential impact of EMF does not weigh against the Proposed Development.
- 4.5.29. The ExA finds that with respect to NPS EN-1, the Applicant has demonstrated that:
- Its assessment [\[APP-042\]](#) considered the effect for the construction, operation and decommissioning phases of the Proposed Development on health and identified measures to avoid and reduce the impacts in accordance with paragraph 4.4.4;
 - they have considered the cumulative impact in accordance with paragraph 4.4.5; and
 - provided opportunities to mitigate direct impacts by the promotion of local improvements to encourage health and wellbeing in accordance with paragraph 4.4.6, including potential impacts on vulnerable groups or those with protected characteristics under the Equality Act 2010.
- 4.5.30. The ExA is satisfied that the mitigation proposals which would be secured in the CoCP by R8 of the dDCO [\[REP8-005\]](#) would be sufficient to protect health and wellbeing of the local population and in particular, vulnerable groups. The ExA does not consider that any additional mitigation or monitoring is required.
- 4.5.31. The ExA is satisfied that the Applicant has adequately addressed all other issues related to human health and wellbeing raised at all the Examination deadlines. The ExA concurs with ES Chapter 28 Human Health [\[APP-042\]](#) that the significance of the Proposed Development on human health would not be significant
- 4.5.32. The ExA is satisfied that the Applicant has demonstrated that such risks associated with the Proposed Development can be satisfactorily mitigated and managed and that appropriate mitigation would be embedded into the design of the Proposed Development and would be secured via the OCoCP [\[REP7-025\]](#) and the OCTMP [\[APP-251\]](#) under R8 and R9 respectively of the dDCO [\[REP8-005\]](#). At the end of the

Examination, all of the issues relating to human health have been adequately addressed by the Applicant.

- 4.5.33. The ExA is satisfied that the Proposed Development is in accordance with NPS EN-1, NPS EN-3 and where relevant NPS EN-5 as well as local policies and strategies and all other relevant legislation and there are no other important or relevant considerations.
- 4.5.34. Whilst the ExA is satisfied that the Proposed Development meets the requirements of NPS EN-1, NPS EN-3 and NPS EN-5, the ExA concludes that there is the potential for some impact on the health and wellbeing of the local population, in particular where there are sensitive receptors. Paragraph 4.4.1 of NPS EN-1 sets out that energy infrastructure has the potential to impact on health and well-being and the construction of energy infrastructure may have negative impacts on some people's health. The proposed embedded mitigation provides measures to avoid or reduce the impacts and the ExA conclusion is that matters relating to health attaches a little negative weight in the overall planning balance.

4.6. LANDSCAPE, AND VISUAL EFFECTS

INTRODUCTION

- 4.6.1. This section considers the landscape and visual effects of the Proposed Development relating to the construction, operation and maintenance, and decommissioning of the onshore works. Seascape, landscape and visual effects related to the offshore works, are addressed in Section 5.4 of this Report.

POLICY BACKGROUND

- 4.6.2. In its consideration of the landscape and visual effects, the ExA has had regard to:
- The Overarching National Policy Statement (NPS) for Energy EN-1 (NPS EN-1), in particular Section 5.10;
 - the NPS for Renewable Energy EN-3 (NPS EN-3), in particular Section 2.8;
 - the NPS for Electricity Networks Infrastructure EN-5 (NPS EN-5), in particular Sections 2.2, 2.9, and 2.11;
 - the Local Impact Reports (LIRs);
 - any matters prescribed in relation to the development; and
 - any other important and relevant matters.

THE APPLICATION

- 4.6.3. The Applicant's assessment of Landscape and Visual Impact Assessment (LVIA) effects is set out in Environmental Statement (ES) Chapter 30 LVIA [\[APP-044\]](#). ES Chapter 29 [\[APP-043\]](#) covering Seascape, Landscape and Visual Impact Assessment (SLVIA) is also relevant. The LVIA includes a series associated figures at Parts 1-6 [\[APP-083\]](#), [\[APP-084\]](#), [\[APP-085\]](#), [\[APP-086\]](#), [\[APP-087\]](#), [\[APP-088\]](#) including landscape visualisations. ES Appendix 29.1 SLVIA and Visualisation Methodology [\[APP-170\]](#) sets out the detailed methodology used for offshore SLVIA and onshore LVIA, including consideration of cumulative effects. The following assessments and supporting information are also relevant:
- Design Vision [\[REP5-004\]](#);
 - Design and Access Statement (DAS) [\[APP-235\]](#);
 - ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#);
 - ES Appendix 4.1 Site Selection Golden Rules [\[APP-091\]](#);

- Planning Statement [[REP8-003](#)];
- ES Chapter 5 Project Description [[APP-019](#)]; and
- Outline Landscape and Ecological Management Strategy (OLEMS) [[REP7-027](#)].

4.6.4. Additional visualisations were provided during the Examination at Deadline (D)4. Further visualisations were provided at D6 and D7:

- Cumulative visualisations at the proposed onshore substation (OnSS) including the Norwich to Tilbury (N2T) Pylons wirelines Part 1 of 2 [[REP4-029](#)] and Part 2 of 2 [[REP4-030](#)];
- new visualisations at (Viewpoint (VP) 09) from Barn Lane - Grange Road in 2 Parts [[REP7-046](#)] and [[REP7-047](#)].

BASELINE

4.6.5. ES Chapter 30 describes the proposed OnSS works area as being located to the north-east of the existing Lawford primary substation, to the north of Ardleigh Road. It would be located approximately 2km to the south-west of the settlement of Lawford.

4.6.6. The landform at the proposed OnSS works area is generally flat, approximately 35m Above Ordnance Datum (AOD). The land is characterised by arable farmland with a large-scale field pattern. Field boundaries are generally open in character with some hedgerow boundaries and occasional hedgerow trees. A higher level of tree cover exists along the boundary with Barn Lane and Grange Road, to the north and west and around the existing Lawford substation on Ardleigh Road, to the south-west of the proposed OnSS works area.

4.6.7. Open farmland lies to the east and south. A steel-tower overhead electricity line crosses the north-western edge of the proposed OnSS works area. The proposed OnSS area is not located in any nationally or locally designated landscapes. The proposed landfall would be located on the coastline between Frinton-on-Sea and Clacton-on-Sea.

4.6.8. The onshore export cables would link the landfall to the OnSS which would be situated to the north of Ardleigh Road. The boundary of the proposed onshore cable route is shown on in Figure 8 below, illustrating where the cable route would terminate at the OnSS.

4.6.9. From the landfall location, the proposed cable route would travel north-west, through Tendring, to the north of Thorpe-le-Soken, then continue north-west, where it would cross the A120 near Horsley Cross and then take a westerly direction on the approach to the OnSS. A short section of 400kV cable would then link the proposed substation to the proposed N2T project substation.

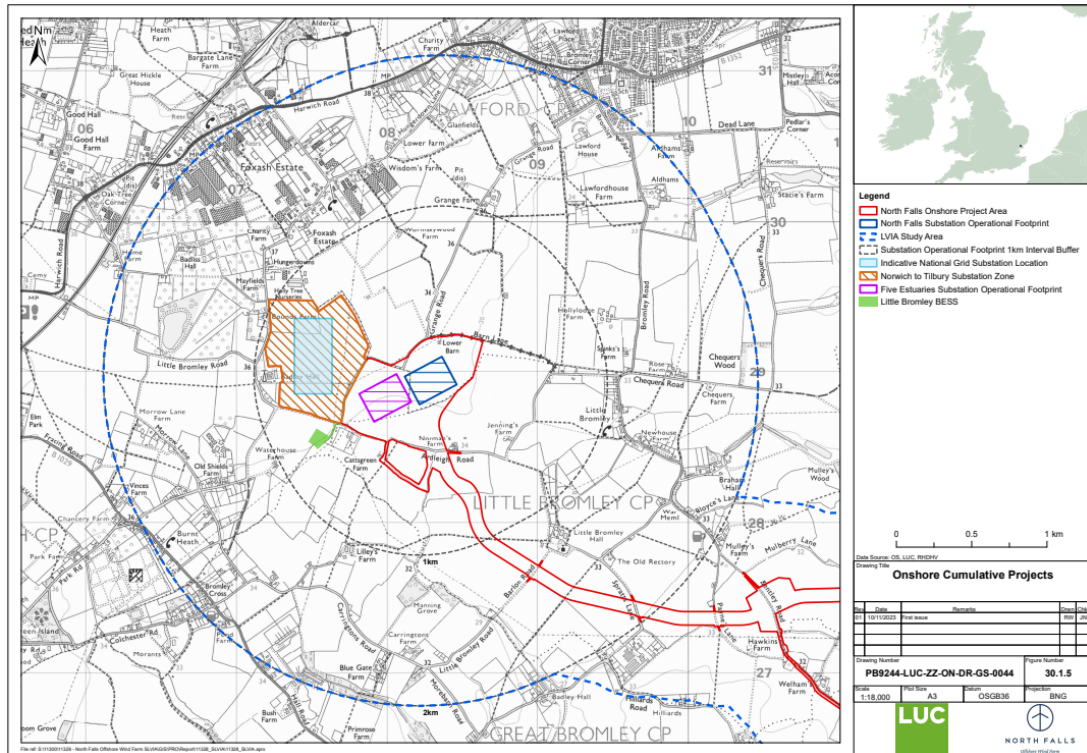


Figure 8: Cumulative onshore projects at proposed OnSS location (Source ES Figure 30.1.5 [APP-083])

- 4.6.10. The LVIA study area is within an area covered by the Tendring District Landscape Character Assessment (TDLCA) (LUC, 2001). The landscape character areas (LCAs) within the TDLCA form the primary reference, together with an assessment of the Essex Coast provided by the Essex Coast landscape character assessment (ECC, 2002). This overlaps with the TDLCA, and provides detail on typology of coastal character. The landscape units within the TDLCA are considered to be the most appropriate reporting units. LCAs are shown below in Figure 9.

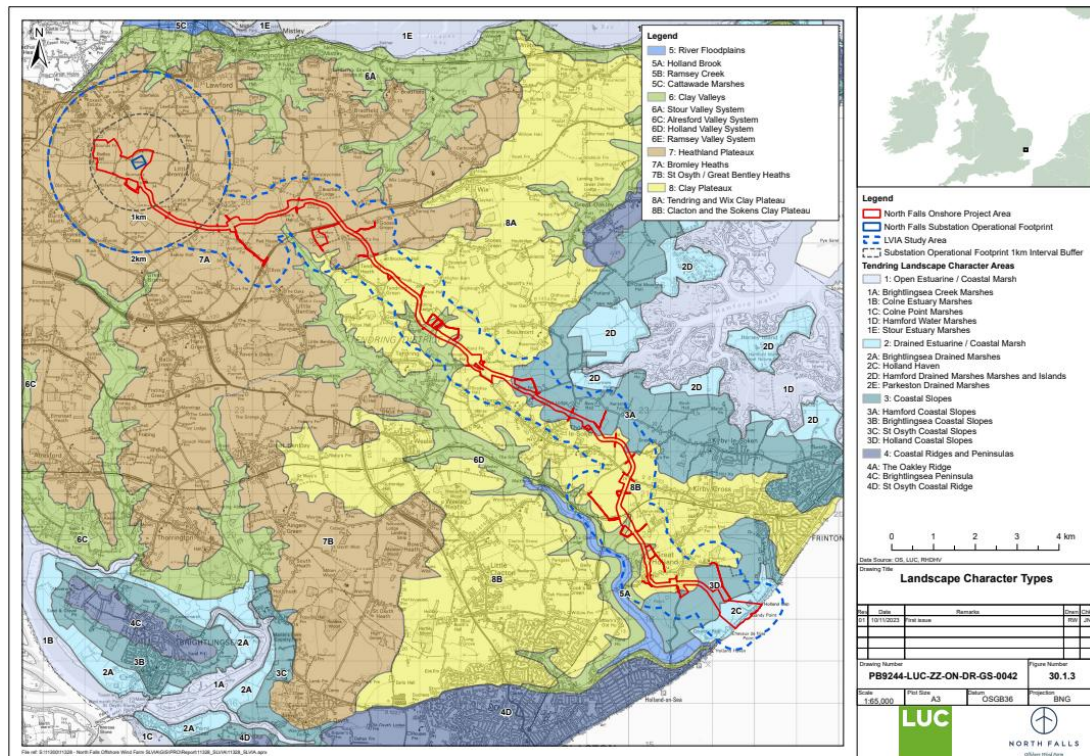


Figure 9: Landscape Character Areas (Source: ES Figure 30.1.3 [APP-083])

- 4.6.11. The proposed OnSS works area would be in LCA 7A Bromley Heaths, within the Heathland Plateaux Landscape Character Type (LCT).

SUFFOLK AND ESSEX COAST AND HEATHS NATIONAL LANDSCAPE

- 4.6.12. The Suffolk and Essex Coast and Heaths National Landscape (SECHNL), previously an Area of Outstanding Natural Beauty (AONB), is now designated as a National Landscape (NL). It is located outside the LVIA study area. ES Chapter 30 therefore concludes that any effects would be indirect. The potential for more open views south, towards the proposed OnSS, from the north of the River Stour is recognised, and an assessment VP is included in the assessment as VP01 (see Figure 10, below).

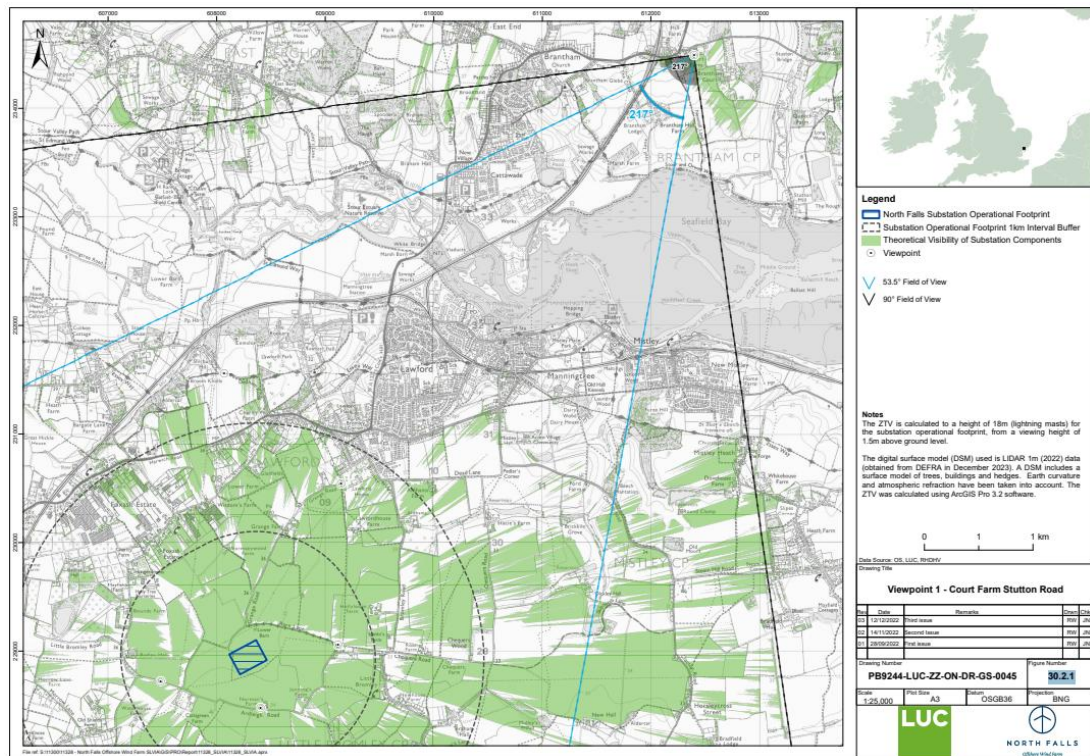


Figure 10: ES VP01 Court Farm Stutton Road within SECHNL (Source Figure 30.2.1 [APP-083])

- 4.6.13. VP01 [APP-083] illustrates visibility from the SECHNL, towards the OnSS. ES Chapter 30 considers that due to viewing distance and limited nature of visibility, landscape effects on the special qualities of this NL would be unlikely to be significant. As such, landscape effects relating to the onshore features of the Proposed Development on the special qualities of SECHNL were not considered further in the LVIA.

DEDHAM VALE NATIONAL LANDSCAPE

- 4.6.14. The Dedham Vale National Landscape (DVNL) is located to the north of the LVIA study area. Its southern boundary is within 2km of the proposed OnSS works area. The Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks, Final Report (2016) identifies the special qualities of the area and provides further detailed evidence to support these qualities. These include:

- Iconic lowland river valley associated with the artist John Constable;
- historic villages with timber framed housing and prominent churches;
- valley bottom grazing marshes with associated drainage ditches and wildlife;
- naturally functioning River Stour with associated tributaries, meres and historic river management features;
- semi natural ancient woodlands on valley sides and associated wildlife;
- traditional field boundaries intact and well managed; and
- long distance views from higher ground along the valley in an area associated with large skies.

- 4.6.15. Being approximately 1.8km from the NL, the Applicant's view is that any effects on the DVNL would be indirect. Landscape features such as the lowland river valley, historic villages, grazing marshes, River Stour, ancient woodlands, traditional field boundaries and archaeology would all remain intact.

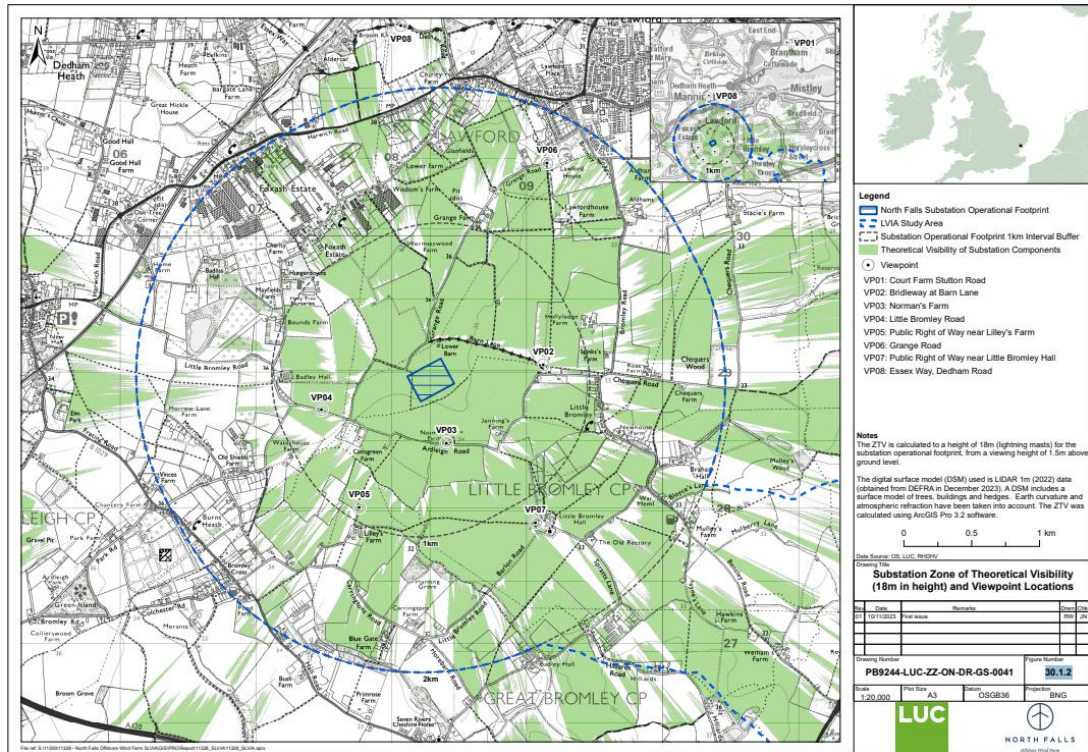


Figure 11: Proposed OnSS ZTV (18m in height) and VP locations (Source: ES Figure 30.1.2 APP-083)]

- 4.6.16. The Zone of Theoretical Visibility (ZTV) (See Figure 11, above) identifies a small area of theoretical visibility from the southern edge of the NL (within 2km) along Harwich Road. The Applicant states that intervening woodland cover and built form largely screens views towards the proposed OnSS from here. The large steel tower overhead electricity line crosses the foreground of the view when looking south, from Harwich Road. Views, from this southern edge of the NL have therefore been influenced by electricity infrastructure. VP08 (Figure 12, below) illustrates theoretical visibility from the southern edge of the NL.

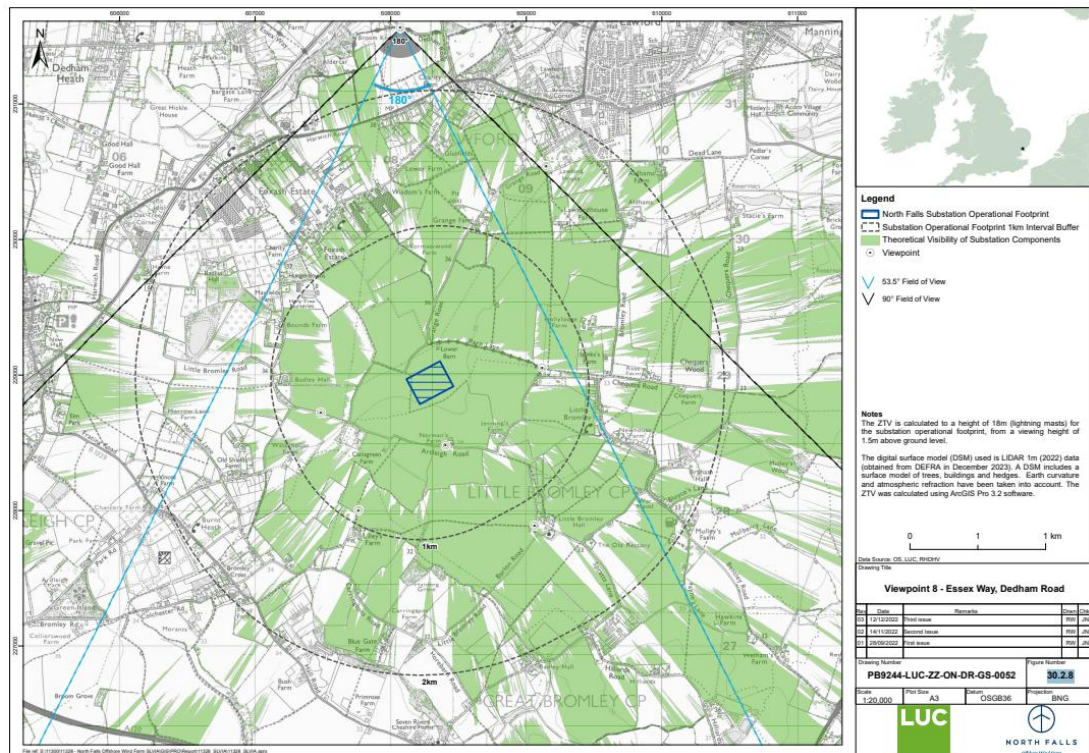


Figure 12: ES VP08 Essex Way, Dedham Road (Source: ES Figure 30.2.8 [APP-088])

PROPOSED MITIGATION

- 4.6.17. Embedded mitigation relevant to the onshore landscape and visual assessment, incorporated into the design of the Proposed Development is set out in ES Chapter 30 Table 30.3. Measures include:
- Mitigation by site selection which included an extensive process taking account of landscape and other factors detailed in ES Chapter 4 Site Selection [APP-018];
 - mitigation by construction method selection, for example use of Horizontal Directional Drilling (HDD) where possible;
 - hedgerow crossings working width restrictions to 30m, where required with replanting during the first winter season following construction;
 - landscape and habitat reinstatement following construction where temporary disturbance occurs. The details of the reinstatement for each habitat would be set out within an Ecological Management Plan (EMP), developed post-consent in accordance with the Outline Landscape and Ecological Management Strategy (OLEMS) [REP7-027]. Table 30.3 of ES Chapter 30 [APP-044] sets out core principles; and
 - detailed design would include mitigation measures. The submitted Design Vision [REP5-004] sets out principles that would guide the post-consent detailed design process. It aims to ensure good design would be embedded within the later design stages.
- 4.6.18. The design vision includes details on likely plant species, specifications and details on planting areas through a Landscape Mitigation Plan. Requirement (R)5 of the dDCO [REP8-005] requires that details of the OnSS must be substantially in accordance with this. The proposed landscape mitigation seeks to integrate the OnSS into the existing landscape of arable fields, woodlands, boundary trees and

hedgerows. As planting establishes and matures, the aim would be to offer enhanced screening of the proposed OnSS. The Landscape Mitigation Plan (ES Figure 30.1.6 [\[APP-083\]](#)) is considered to be embedded mitigation.

- 4.6.19. The Applicant recognises that mitigation planting would not be fully effective until plants grow and mature. The LVIA reports on effects at year 1 following completion, when the effectiveness of planting would be least, and represents a worst-case assessment. The LVIA also reports on effects at year 15, as planting would have matured by this time and be more effective in mitigating the effects. This assessment is the residual effect. Further mitigation would be secured by the DCO through R6 detailed design parameters, and R7 Provision of Landscaping which would secure the implementation of the landscape mitigation proposals as set out in the OLEMS dDCO [\[REP8-005\]](#).

LIKELY EFFECTS

Construction

- 4.6.20. Changes arising from the construction of the Proposed Development would be primarily associated with construction of:

- Onshore export cables, jointing bays and link boxes;
- temporary cable construction compounds and haul roads;
- Bentley Road improvement works;
- onshore substation; and
- temporary OnSS construction compound.

- 4.6.21. During the construction phase, the ES reports potential short-term landscape and visual impacts from partially constructed infrastructure, and the undertaking of construction activities and movement of construction vehicles. The Applicant considers that where these would be adverse, they would be short-term and reversible, except where stated as otherwise.

Operation

- 4.6.22. The operational lifespan is assumed to be 30 years. The main operational impacts of onshore components on landscape and visual amenity would arise from the presence of the OnSS, and other above ground structures. Impacts occurring during the operational phase are considered to be long-term and permanent except where stated. Proposed landscape mitigation would include areas of native woodland planting and hedgerows. During operation there should be no further requirement for land to be disturbed or excavated. However, instances where onshore cables require repair or maintenance may occur, or the OnSS access works need to be reinstated. If such activities were required, they would not extend beyond the construction footprint and would be rare and localised. The OnSS access haul road, required in the unlikely event of transformer failure, would potentially be in place for up to 7 months over land previously disturbed during construction. As such, the LVIA scoped out direct and indirect physical impacts on landscape and visual receptors arising from these activities during operation.

Decommissioning

- 4.6.23. No decision has been made regarding the final decommissioning policy for the OnSS, due to future changes in industry best practice, rules and legislation. The OnSS equipment would most likely be removed and reused or recycled. The LVIA, as a worst-case scenario, assumes the presence of the OnSS to be permanent. It expects that the onshore export cables would be removed from ducts and recycled,

with transition pits and ducts left in situ. The detail and scope of the decommissioning works would be determined by relevant legislation and guidance at the time. It is anticipated that the decommissioning impacts would be similar in nature to those identified during construction.

ASSESSMENT OF EFFECTS

- 4.6.24. Table 30.35 of ES Chapter 30 [\[APP-044\]](#) summarises the assessed LVIA findings. The Applicant considers that there would be significant moderate adverse effects on the landscape fabric of the proposed OnSS works area and its surroundings during the construction and operational stages. The construction of the proposed OnSS would change the character from open arable fields to a construction site and subsequently to an operational substation.

Landfall and onshore cable route

- 4.6.25. The LVIA concludes that effects on views around the landfall and onshore cable route would be localised, short-term and reversible. Up to moderate (significant) effects are predicted on high sensitivity visual receptors at the landfall and onshore cable route during construction. These would be short-term. Effects during operation would be negligible and therefore not significant.

Onshore Substation Works Area

- 4.6.26. Table 30.13 of ES Chapter 30 [\[APP-044\]](#) provides an assessment of effects on the landscape of the OnSS during construction, operation and decommissioning. During construction and decommissioning the magnitude of landscape impact for the OnSS works area during construction is judged to be high. Combined with a medium-low sensitivity of the OnSS works area, the landscape effect during construction is judged to be moderate adverse, which is significant in EIA terms. However, effects would be short term.
- 4.6.27. The magnitude of landscape impact at year 1 is judged to be high, reducing to medium-high at year 15. Combined with the medium-low sensitivity of the OnSS works area, the landscape effect at the OnSS during operation (year 1 and year 15) is judged to be moderate adverse, which is significant in EIA terms. Effects would be long-term. The ES reports that the area within which significant effects would occur is bounded by Ardleigh Road to the south, Grange Road to the south-west, Wormseywood Farm to the north, and the junction of Barn Lane and Ardleigh Road to the east. The flat nature of the landscape, woodland and hedgerow cover limits the potential for wider effects on landscape character.
- 4.6.28. Significant visual effects are predicted at VP02: Barn Lane (moderate at construction and year 1, reducing to minor and not significant at year 15), and at VP03 Norman's Farm (major at construction and year 1, reducing to moderate at year 15). Figures 13 and 14 below illustrate these effects.



Figure 13: ES VP02 Barn Lane – Visualisation including 1 Year Planting (top) and 15 Year Planting (bottom) (Source: 30.2.e and 30.2.f of [APP-084])



Figure 14: VP03 Norman's Farm - Visualisation including 1 Year Planting (top) and 15 Year Planting (bottom) (Source: 30.3.e and 30.3.f of [APP-084])

4.6.29. These VPs represent higher sensitivity residential and recreational receptors and are within 1km of the proposed OnSS.

- 4.6.30. Proposed landscape and visual mitigation is discussed in the Design Vision Document [\[REP5-004\]](#) and is shown on the Landscape Mitigation Plan (ES Figure 30.1.6). Landscape mitigation proposals would be secured through DCO requirements (R5 Substation works, R6 detailed design parameters, and R7 Provision of Landscaping – see Applicant's Assessment of Effects and Proposed Mitigation, above). The OLEMS [\[REP7-027\]](#) details long-term management. The Landscape Mitigation Plan is considered to be embedded mitigation. The Applicant recognises that the planting would not provide effective mitigation from year 1. However, at year 15 the maturing landscape has been designed to allow the OnSS to be integrated into the landscape.

Onshore Landscape Character

- 4.6.31. Table 30.11 of ES Chapter 30 [\[APP-044\]](#) identifies and gives consideration to the following LCAs:
- 7A Bromley Heaths LCA
 - 2C Holland Haven LCA
 - 3D Holland Coastal Slopes LCA
 - 8B Clacton and the Sokens Clay Plateau LCA
 - 3A Hamford Coastal Slopes LCA
 - 8A Tendring and Wix Clay Plateau LCA
 - 6D Holland Valley System LCA
- 4.6.32. Table 30.13 of ES Chapter 30 describes effects on these LCAs including key characteristics of each LCA and receptor. Residual effects would reduce to minor adverse effects at year 15. The Applicant concludes that no significant effects are predicted beyond the localised area around the proposed OnSS works area within LCA 7A Bromley Heaths. The effects would arise due to the construction of the proposed OnSS.
- 4.6.33. Within LCA 7A there would be predicted moderate adverse effects at year 1 of operation, though these effects would be minor adverse for the wider LCA. These localised effects would also reduce to residual minor adverse effects at year 15 due to the effect of mitigation.
- 4.6.34. No significant effects on landscape character at the other 6 LCAs are reported. Construction effects associated with the onshore export cables would be localised and transient in nature. Once operational, the Applicant concludes that landscape effects associated with the underground cable would not be significant. The LVIA concludes that there would be no significant effects on designated landscapes, including NL designations.

Cumulative impacts

- 4.6.35. ES Chapter 30, Table 30.36 [\[APP-044\]](#) provides a summary of the cumulative LVIA findings. The cumulative assessment considered two scenarios. The first of these is in relation to the NFOWF plus Five Estuaries Offshore Windfarm (VEOWF), where the LVIA concludes that significant (moderate) cumulative effects on the landscape of the proposed OnSS works area and the local area of the Bromley Heaths LCA 7A, would occur during construction and year 1. These would be moderate adverse locally, but minor adverse effects for the wider LCA during operation. All effects would reduce to minor adverse after 15 years.
- 4.6.36. Significant effects on views were identified at:

- VP02 (moderate at construction and year 1, reducing to minor adverse at year 15);
- VP03 (major adverse at construction and year 1, moderate adverse at year 15); and
- VP05 (moderate adverse at construction and year 1, reducing to minor adverse at year 15). VP05 is shown in Figure 15, below.



Figure 15: VP05 Public Right of Way near Lilley's Farm Visualisation including 1 Year Planting (top) and 15 Year Planting (bottom) (Source: Figure 30.2.5c and 30.2.5d [APP-084])

- 4.6.37. Cumulative effects on views along the onshore cable route were assessed as moderate and significant during construction only and therefore short-term.
- 4.6.38. The proposed NFOWF plus all projects scenario additionally considered the N2T substation and overhead line, and the Little Bromley Battery Energy Storage System (BESS). This assessment found the same distribution of significant cumulative effects as in the NFOWF plus VEOWF scenario. Interactions between LVIA and other topic areas, and interrelationships within LVIA impacts, were not found to give rise to any additional significant effects.

ISSUES CONSIDERED DURING THE EXAMINATION

- 4.6.39. The main issues considered during the Examination related to the following:
- Effects of the onshore cable route and OnSS on landscape character, including cumulative effects;
 - effects of the onshore works on visual amenity during construction and operation including at Barn Lane and Norman's Farm and the cumulative effects of the onshore works; and
 - effect of the proposed OnSS on the DVNL and public vantage points, including the cumulative effects, and the duty to further the purposes of the NL.

EFFECTS OF THE ONSHORE CABLE ROUTE AND ONSS ON LANDSCAPE, INCLUDING CUMULATIVE EFFECTS

- 4.6.40. ECC and TDC set out concerns that there is the potential for residual adverse landscape and visual impacts both during construction and operation [[RR-093](#)] [[REP1-065](#)]. The Councils consider that harm from the proposed OnSS on local landscape character and visual receptors would be due to the scale of the proposed OnSS. The Councils are concerned that it would take up to 15 years for the mitigation to take full effect, which is half the identified expected 30-year life of the OnSS. The Councils consider that the proposed mitigation planting would not reduce all negative effects on the immediate landscape, setting and visual receptors. They would expect to see compensation for any residual landscape and visual effects in line with NPS EN1 Paragraph 4.1.5.
- 4.6.41. Cumulatively, the Councils consider the scheme would have a significant effect on both landscape and visual receptors. Amongst other IPs, ECC noted that the N2T pylons and the proposed OnSS were absent within the submitted cumulative LVIA visualisations. NE shared the Councils' concerns. However, following the Applicant's D4 submissions [[REP4-029](#)] [[REP4-030](#)] [[REP4-045](#)], NE confirmed a change to its Risk and Issues Log from red to green because these submissions had provided the missing cumulative visualisations, and had therefore assuaged NE's concerns.
- 4.6.42. ECC and TDC maintained their positions regarding concerns of the cumulative effects of the Proposed Development. Their view is that the proposed VEOWF OnSS, the EACN, and connecting pylons from the proposed N2T scheme would have a significant cumulative effect on both landscape and visual receptors. The Council's view is that when judging the proposed NFOWF OnSS in isolation, there would be significant residual negative effects at a site level in terms of landscape and visual issues. These effects are magnified when judged cumulatively [[REP8-101](#)]. These issues remained not agreed between parties at the close of the Examination within the final SoCG [[REP8-060](#)].

EXA'S CONSIDERATIONS

- 4.6.43. The ExA agrees with ECC, TDC and others that changes to the landscape would have an adverse impact on visual amenity and landscape character. ES Chapter 30 also recognises significant effects at the localised area around the proposed OnSS within LCA 7A Bromley Heaths.
- 4.6.44. As such, mitigation measures and landscape enhancements must ensure that impacts are minimised. The ExA is satisfied that the further assessments, together with the evolution of the design vision [[REP5-004](#)], and the OLEMS, provide sufficient reassurance that the Proposed Development would provide necessary mitigation measures. The design vision is discussed in detail in Section 6.4 (Design). It provides information on landscape mitigation and enhancement measures through the outline landscape strategy within the OLEMS. It includes a stand-alone and combined landscape planting scheme for the proposed NFOWF OnSS, as well as providing a scheme for both the proposed NFOWF and VEOWF OnSSs. If consented, the Proposed Development would progress landscape mitigation plans in line with the OLEMS. This would be subject to the approval of the discharging authority. A Joint Design Guide (JDG) (see Section 6.4 for further details), together with the following information demonstrates that the Applicant has adequately addressed these matters:

- Indicative planting at cross-sections at the OnSS [[REP4-023](#)];

- cumulative visualisations at the OnSS, including the N2T Pylons wirelines Part 1 and 2 [\[REP4-029\]](#) [\[REP4-030\]](#);
- Landscape and Visual Impact Assessment Viewpoints and the Dedham Vale National Landscape Plan [\[REP4-045\]](#); and
- OnSS ZTV and viewpoint locations within DVNL [\[REP4-047\]](#).

4.6.45. Overall, the ExA agrees that no significant effects would arise beyond the localised area around the proposed OnSS works area. Within LCA 7A moderate adverse effects would occur at year 1 of operation. However, the ExA considers that these would be minor adverse for the wider LCA, and as they would be localised effects, would also reduce to residual minor adverse effects at year 15.

4.6.46. In conclusion, the ExA considers that the proposed landscape scheme, secured by R5 and R7 would adequately mitigate the effects of the onshore cable route and OnSS. The visualisations showing VP02 and VP03 (see Figures 13 and 14 above) - specifically the year 15 visualisations - confirm that as proposed landscaping measures mature, the OnSS would be integrated into the wider landscape fabric of farmland. Hedgerows and areas of woodland would help to reduce the level of impact on landscape and visual receptors, helping to reduce landscape and visual impacts.

4.6.47. The localised residual landscape and visual effects that would remain significant for certain receptors are discussed in the following section.

EFFECTS OF THE ONSHORE WORKS ON VISUAL AMENITY INCLUDING AT BARN LANE AND NORMAN'S FARM AND THE CUMULATIVE EFFECTS

4.6.48. ECC's and TDC's LIR [\[REP1-065\]](#) raised concerns of the potential for residual adverse landscape and visual impacts from the OnSS where it takes up to 15 years for mitigation to take full effect. In their view, the proposed mitigation planting would not reduce all the negative effects on the immediate landscape, setting and visual receptors to non-significant.

4.6.49. The ExA questioned the Applicant and IPs on these issues through ExQs [\[PD-009\]](#) [\[PD-013\]](#), [\[PD-016\]](#) and at ISH1 [\[EV-001\]](#). ExQ1 [\[PD-009\]](#) Q14.1.6 specifically examined the magnitude of effect regarding the mitigation planting at 15 years. In response, ECC [\[REP2-036\]](#) agreed with the LVIA conclusion that some the long-term landscape effects are significant in EIA terms. However, for VP03 it is ECC's judgement that the effects would not reduce to moderate at year 15 because most of the current character of the landscape would remain impacted.

4.6.50. The Applicant responded [\[REP2-020\]](#) that it is reasonable to conclude that after 15 years, the impact of the OnSS on local landscape character would have reduced. Landscape mitigation, once established, would help to screen and soften views of the proposed OnSS, including at VP02 and VP03. The Applicant recognises that during winter, when intervening planting is not in leaf, there would be a reduction in the level of screening provided. However, it considers this reduction to be slight and unlikely to alter the level of effect identified in the year 15 assessments.

4.6.51. ECC considers that impacts at VP02 would be lower than at other points closer to the OnSS, because VP02 is at a distance of nearly 700m. ECC queried why a closer VP on the Public Right of Way (PRoW) had not been selected. In its view, a closer VP could provide evidence that users of the PRoW would receive increasingly significant adverse impacts as they get closer to the proposed OnSS.

- 4.6.52. For VP02 and VP03, the Year 1 visualisations show that at this distance, the Proposed Development would remain visible until Year 10-15. The Year 15 visualisations also show that the Proposed Development would continue to be seen above the mitigation planting. ECC considers that views from approximately 700m would give the perception of a partially hidden industrial landscape which could affect the perception of rurality and tranquillity, and this effect would increase during winter. ECC therefore judged that the residual impacts would likely be moderate adverse (significant), and not minor adverse as reported in ES Chapter 30. ECC concurs with the LVIA that adverse effects result partially from the change in view from open agriculture to views of maturing landscape mitigation [\[REP2-036\]](#).
- 4.6.53. At ExQ2 [\[PD-013\]](#), Q14.0.2 and Q14.0.4, the ExA sought further detail on landscaping screening at the OnSS. It was agreed between parties that full screening is unachievable given the size and industrial nature of the substations [\[REP2-036\]](#) [\[REP4-072\]](#). IPs and the Applicant were asked to set out any further enhanced compensatory measures. ECC suggested that further visualisations are required. A landscape scale approach in line with the Lawton principles would require the Applicant to think outside the red line boundary to create an integrated landscape approach and could include the planting of trees and renewal of hedgerows in the wider landscape area.
- 4.6.54. Although the Applicant disagreed on the need for, and value of, additional visualisations at Grange Road, the ExA agreed that they would assist the Examination and assessment of the Proposed OnSS from the north. These were submitted at D6 as a new VP (VP09) along the PRoW (Barn Lane) [\[REP6-065\]](#) and [\[REP6-066\]](#). As with VP02 and VP03, ECC considers that users of Barn Lane would be likely to have a view over the top of the hedgerow and that there would be a loss of the existing openness of the local landscape, as well as the loss of this experience for the users of the PRoW. VP09 is reproduced below in Figure 16.

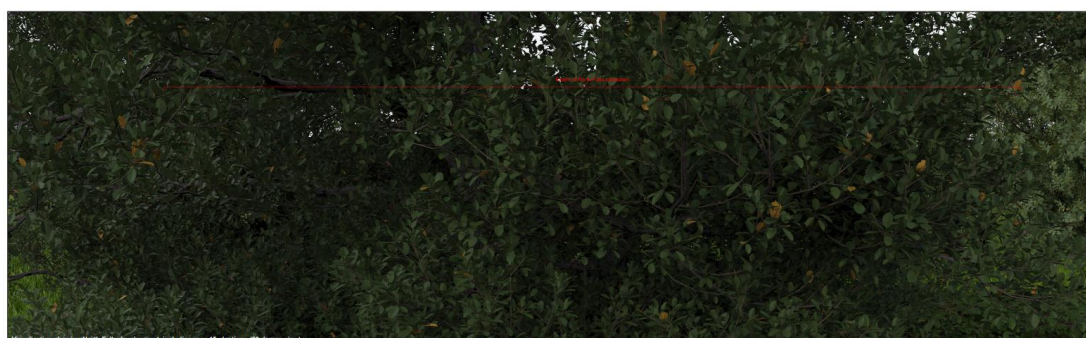


Figure 16: VP09 Barn Lane – Grange Road Visualisation including 1 Year Planting (top) and 15 Year Planting (bottom) (Source: [\[REP6-065\]](#) and [\[REP6-066\]](#))

- 4.6.55. The ExA also notes that ECC sought additional visualisations beyond the additionally submitted VP09 – specifically additional VPs within DVNL. This issue remained a matter not agreed between parties in the final SoCG and is explored in a later section of this Report.

EXA'S CONSIDERATIONS

- 4.6.56. With regards to the effect on receptors at VP02 Barn Lane and VP03 Norman's Farm, the ExA notes the issues raised and acknowledges that receptors at these locations would be sensitive to the elements of the Proposed Development. The ExA also recognises the effects which proposed cumulatively developments would have on VP05.
- 4.6.57. The ExA has had regard to the locations of the VPs, the additional and further VPs submitted during the Examination and the proximity of the receptors to the proposed OnSS. The ExA has viewed the proposed OnSS site and its environs during USI1 [\[EV2-001\]](#) and an accompanied site inspection (ASI) [\[EV4-001\]](#). Taking these into account, the ExA considers that the Applicant has sufficiently justified its approach to VP02, VP03 and VP05 within its LVIA. Further, the ExA is satisfied that other VPs submitted sufficiently represent the effects that visitors to the area would experience at each VP.
- 4.6.58. The ExA has considered ECC's assessment that residual impacts at year 15, VP02 would likely be moderate adverse, not minor adverse. The ExA agrees with the Applicant's LVIA for VP02 and considers that as a result of the proposed mitigation, in addition to the distance between the receptor and proposed OnSS, the impact would not be significant. It considers that, even in winter, proposed hedgerow and planting would have matured by year 15, and it would provide a level of screening which would reduce the impact of the proposed OnSS.
- 4.6.59. In reaching this conclusion, the visualisations at additional VP09 have assisted with the assessment in the near distance of approximately 150 metres [\[REP7-046\]](#) [\[REP7-048\]](#). The effects of VP09 were assessed by the Applicant as major adverse at year 1, reducing to moderate adverse at year 15, both of which are significant in EIA terms. In each, there is a clear distinction between Figure 14 showing VP03 and Figure 16 showing VP09, between each of the year 1 and year 15 landscape as it matures. Although it is noted that the VP09 visualisation does not illustrate the winter view, USI1 had taken place in the winter season, and the ExA considers that the combination of intervening distance and proximity to proposed landscaping is a material difference in the judgment of effects.
- 4.6.60. Cumulatively, the year 1 moderate (significant) effects on VP05 are not disputed. The ExA agrees, for the reasons above, that these would reduce to minor effects by year 15. The overall effects on the fabric of the landscape are also considered to be moderate adverse including during the operational phase with visual mitigation secured in R5 and R7 of the dDCO.
- 4.6.61. The ExA also agrees with the Applicant's assessment of effects for other VPs, including VP01 and VP08 from within the DVNL. These VPs, supplemented with ASI and USI opportunities, have provided sufficiently representative views to illustrate impacts, including cumulative impacts.

EFFECT OF THE PROPOSED SUBSTATION ON THE DVNL AND PUBLIC VANTAGE POINTS, INCLUDING THE CUMULATIVE EFFECTS, AND THE DUTY TO FURTHER THE PURPOSES OF THE NL

- 4.6.62. In their LIR, ECC and TDC expressed concerns that only one VP, VP08, had been provided from the nearer extent of the DVNL [\[REP1-065\]](#). The Councils consider that VP08 is a substantial distance from the OnSS area. Other areas within theoretical visibility, and within DVNL are closer. In response, following ISH1, the Applicant submitted further information on the VPs, the ZTV and NL boundaries, to assist in the understanding of their relationship [\[REP4-047\]](#). Nonetheless, ECC [\[REP5-089\]](#) proposed that additional VPs would be required to demonstrate that there would be no significant impacts on the NL. The Councils' view is that the success of planting mitigation depends on the aftercare set out in the OLEMS, monitoring, and whether the mitigation planting is maintained for the life of the installation.
- 4.6.63. In addition to the statutory duty at s85 of the Countryside and Rights of Way Act 2000 (CRoWA), the NPPF provides that great weight should be given to conserving and enhancing landscape and scenic beauty in an NL. Policy PPL3 of the Tendring District Local Plan similarly seeks to protect the rural landscape where development would cause overriding harm to its character or appearance with particular regard to the conservation and enhancement of the special character and appearance of the DVNL.
- 4.6.64. The special qualities of the DVNL include its lowland river valley associated with the artist John Constable and historic villages with timber framed housing and prominent churches. Additionally, there are well managed, traditional field boundaries and long-distance views from higher ground along the valley in an area associated with large skies. The Tendring District LCA notes that the settlement form and pattern LCA7A is characterised by scattered halls and churches, rural farms and villages. Agricultural barns are often distinctive features in the landscape.
- 4.6.65. The key characteristics include exposed windswept plateau at the highest point of the district, large scale arable fields divided by low, gappy hedgerows where hedgerow oaks stand out against the skyline, low density rural settlement pattern with scattered farms and halls, hamlets and villages. Characteristics also include a network of narrow lanes which connects the scattered farmlands, and dramatic, dominating skyline. The LCA has been eroded over time, and the character is considered to be moderate, whilst the condition is in decline due to condition of declining hedgerows and woodland and the lack of management.
- 4.6.66. The ExA considered the impacts of the Proposed Development on the characteristics throughout the Examination, including during ISH1 [\[EV-001\]](#) and through ExQs. At USI1, and reiterated at ISH1, the ExA requested that the Applicant should provide a plan showing the boundary of the DVNL in relation to the location of the proposed OnSS. This had not been included in the ES. Supplemental information was submitted at D4 which includes a plan detailing the location of the OnSS and the distances from the boundaries of the NLs and VPs [\[REP4-045\]](#). An extract from this plan is reproduced below in Figure 17.

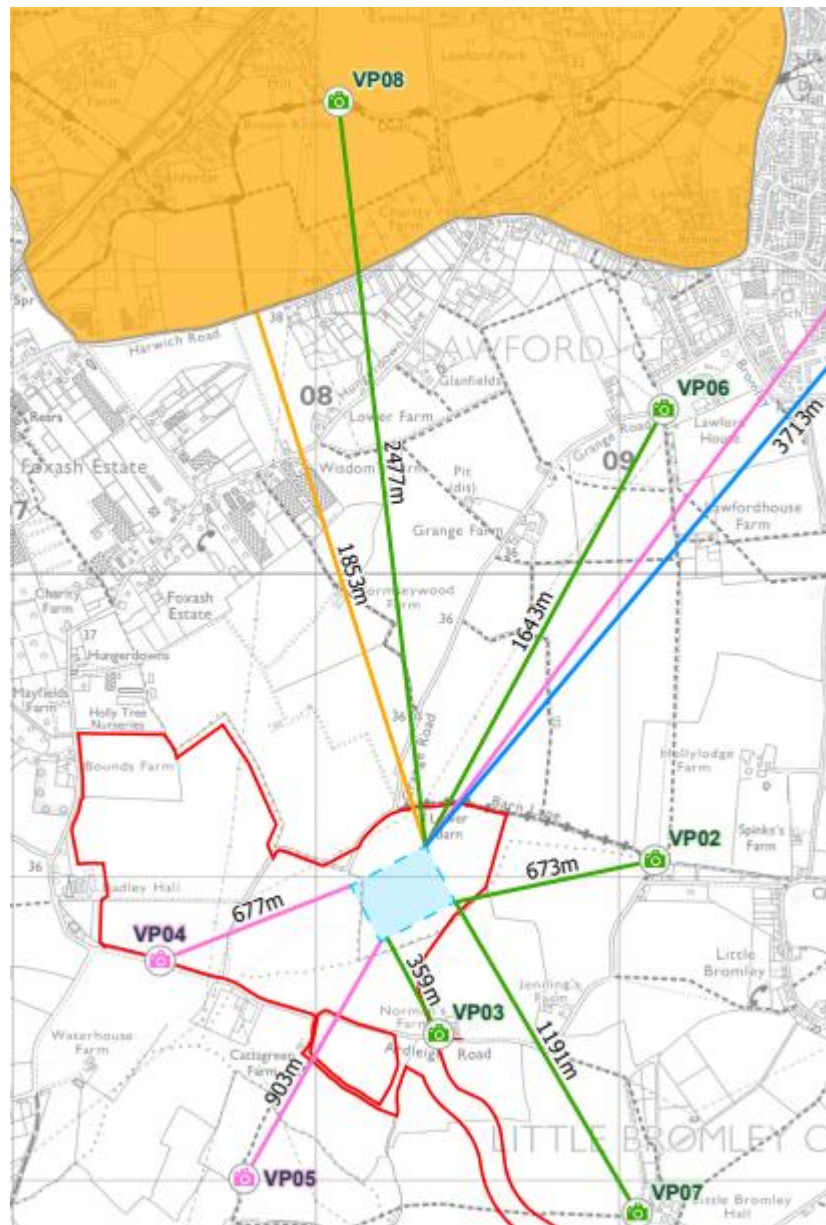


Figure 17: Landscape and Visual Impact Assessment Viewpoints and the Dedham Vale National Landscape Plan – Distances to VPs (Source: Extracted from [REP4-045])

- 4.6.67. In the final SoCG between ECC and the Applicant there remains disagreement between parties regarding the level of landscape and visual mitigation [REP8-060]. ECC does not consider that compensation is commensurate with the scale of the proposed OnSS and considers that proposed planting should extend beyond the red line. The proposed OnSS is potentially visible from additional points other than VP08, either within the NL or within its setting. The Councils consider that visual impacts would be escalated in combination with VEOWF, the EACN and the overhead lines and pylons of N2T.
- 4.6.68. The Councils set out that there remain unassessed locations of theoretical visual influence in the DVNL. They accept that the impact on these locations would be unlikely to meet the threshold of a significant effect. Nonetheless, the Councils consider that the Applicant must ensure that it complies with the updated wording of s85 CRoWA. This amended duty requires relevant authorities when exercising or performing any function in relation to, or so as to affect, an area of outstanding

natural beauty, to seek to further the purpose of conserving and enhancing the protected landscape. The duty, as written, is not limited in its application only to instances where significant adverse effects on designated landscapes are identified.

- 4.6.69. The Applicant's Closing Statement [\[REP8-036\]](#), identifies that its position on this point has been set out in various documents submitted to the Examination [\[REP1-045\]](#), [\[REP4-037\]](#), [\[REP5-068\]](#), [\[REP7-053\]](#) and [\[REP6-059\]](#). The Applicant submits that both it and the Secretary of State (SoS) can discharge the duty in respect of the DVNL on the basis of actions already undertaken without the need for the imposition of any additional measures.
- 4.6.70. The Applicant submits that this is supported by guidance published by Defra on 16 December 2024 titled 'Guidance for relevant authorities on seeking to further the purposes of Protected Landscapes' and relevant case law including New Forest National Park Authority v Secretary of State for Housing, Communities and Local Government and Mr Simon Lillington [2025] EWHC 726.
- 4.6.71. The Applicant's Position Statement on issues relating to the NL [\[REP6-059\]](#) maintains that the proposed OnSS would have no impact on the DVNL and that, accordingly, the SoS can be confident that the duty can be discharged without the need to impose additional compensatory measures or requirements. However, the Applicant contends that the SoS would still be able to discharge the duty in respect of the Proposed Development even if the SoS determines that the OnSS does have a minor impact on the DVNL. The Applicant submits that the SoS must exercise judgement as to whether the measures proposed as part of the Proposed Development to avoid and reduce impacts on the statutory purposes of the DVNL are appropriate, reasonable and proportionate and whether it would be appropriate, reasonable and proportionate to require any further measures.
- 4.6.72. The Applicant contends that the SoS, when considering the application of the duty, must also comply with the legal obligation under s104(3) PA2008 to determine the DCO application in accordance with the relevant national policy statements. It contends that the Critical National Priority (CNP) policy is relevant when determining whether the measures proposed as part of the Proposed Development to avoid and reduce impacts on the statutory purposes of the NL are appropriate, reasonable and proportionate and whether it would be appropriate, reasonable and proportionate to require any further measures.
- 4.6.73. The Applicant explains that the DVNL was a key consideration for it when considering and developing the alignment of the cable corridor as set out in ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#). It contends that the cable corridor alignment and location of the OnSS for the Proposed Development have been sensitively designed so that those elements would have no impact on the DVNL. The Applicant asserts that these design choices are clear examples of it exercising or performing its functions (i.e. designing and developing a project to deliver electricity generating infrastructure) in relation to the DVNL in a way that seeks to further the purpose of conserving and enhancing the NL.
- 4.6.74. The Order Limits do not fall within the DVNL and, as outlined in sections 4.8.1 and 4.8.2 of ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#), national landscapes (such as the DVNL) were given due weight in the site selection process for the OnSS. The Applicant submits that the impacts of the OnSS on landscape character and visual amenity are localised, as set out in the LVIA in Chapter 29 of the ES [\[APP-044\]](#). It is the Applicant's position that there would be no impacts on the special qualities of the DVNL as a result of the Proposed

Development [REP8-036]. The implementation of the landscape mitigation proposals as set out in the OLEMS would be secured by R7 of the dDCO [REP8-005], and approval of the final landscape scheme would be within the control of ECC. The Applicant accepts that the proposals do not fully mitigate the adverse effects but submits that they are appropriate and proportionate to the scale and nature of the Proposed Development and are in character with the receiving landscape.

EXA'S CONSIDERATIONS

- 4.6.75. S245 LURA amended several statutes concerned with the purposes of conserving and enhancing the natural beauty of designated landscapes including NLs. The new duty requires that authorities must seek to further statutory purposes. It strengthens the duty in terms of making it a more proactive consideration of how those purposes may be furthered. The NPPF also promotes the duty to protect and enhance landscapes, and Local Plan policies reiterate this.
- 4.6.76. Therefore, what was previously a passive requirement to take statutory purposes into account is now a proactive requirement in which decision-makers should consider how the statutory purposes of the NL can be furthered. The duty does not require these purposes to be achieved but rather, it encourages seeking to further them. The purpose of conserving and enhancing should be considered as disjunctive rather than conjunctive. Therefore, a decision-maker needs to show that they have sought to advance one or other of these aims.
- 4.6.77. During USI1 and USI2 [EV2-001] [EV2-002], the ExA visited a number of VPs during daylight and in darkness. The ExA revisited these during the ASI [EV-001]. Additional visualisations were provided showing cumulative impact at D4 [REP4-029] and [REP4-030]. On the basis of these submissions, the ExA considers that the combination of the distance to the proposed OnSS, the intervening vegetation, and presence of other intervening development would mean that the proposed OnSS would be viewed as a distant feature when viewed from the ZTV within DVNL and its setting. The ExA also notes the presence of other built structures including existing overhead electricity transmission infrastructure and settlement boundaries.
- 4.6.78. The presence of intervening tree and hedgerows is such that views from the DVNL towards the proposed OnSS would be unharmed. Whilst long-distance views of the proposed OnSS would be possible they would be seen from within the context of a working agrarian landscape including greenhouses and existing energy infrastructure often found in the countryside. The context is also set by the other pre-existing buildings and uses. Additionally, the proposed OnSS is not within an area of pristine countryside where development would be likely to be more apparent. Overall, the proposals would not be intrusive and would not spoil the landscape or visual qualities of the NL.
- 4.6.79. From the distances shown in [REP4-045] (see Figure 17), and as seen at site inspections and visualisations provided, the ExA considers that from the DVNL it would be difficult to distinguish the proposed OnSS from other features in the area. The implications for the NL and its setting would therefore be limited. This can be seen in Figure 18 below, which shows VP08 Essex Way Dedham Road, as representative of views from DVNL. VP08 is 2.48km from the proposed OnSS, whilst the closest boundary of DVNL is 1.85km distant. The ExA notes that ECC continued to seek additional visualisations from within the DVNL. However, from its USI and ASI, the ExA concludes that there is relatively little availability of alternative representative options.



Figure 18: VP08 Essex Way Dedham Road (Cumulative visualisations at the onshore substation, including the Norwich to Tilbury Pylons wirelines Part 2 of 2 (Source: [REP4-030])

- 4.6.80. In reaching this conclusion, the ExA notes that VP06 Grange Road (see Figure 19), at a distance of 1.64kms from the Proposed OnSS also affords views from a northern orientation. Although it is not within DVNL, it provides a view looking south from the setting of the DVNL towards the proposed OnSS and allows an assessment of effects, in addition to the views taken during the USI and ASI.



Figure 19: VP06 Grange Road Year 1 (top) and Year 15 (bottom) (source [APP-087])

- 4.6.81. Based on this and consideration of the visualisations, the ExA therefore agrees with the Applicant's LVIA conclusions that the Proposed Development would have a negligible magnitude of change for receptors from within the DVNL, including PRowWs in the NL.
- 4.6.82. VP08 (Figure 18) illustrates the nature of visibility from within the NL, from 2.48kms. The ExA considers that this demonstrates negligible effects on perceptual aspects of the NL, such as the sense of tranquillity and large skies. The ExA agrees with the Applicant's assessment as reconfirmed in its Closing Statement that due to the distance and intervening screening by buildings and trees, any views of the onshore substation from within the DVNL would be very limited [REP8-036].
- 4.6.83. Following ISH1, the Applicant provided further detail on the likely visibility of the proposed OnSS from within the DVNL [REP4-036]. It is the Applicant's position that there would be no impacts on the special qualities of the DVNL. The ExA visited areas within the DVNL with theoretical visibility of the proposed OnSS. From within the DVNL, the ExA considers that broad open views are available over the River Stour. The existing electricity pylons are visible but are viewed as small features against a wooded skyline and the proposed OnSS would be lower than them. Views of the OnSS would only be glimpsed through the trees. The OnSS would not be a clearly visible feature from the VP or other locations of theoretical visibility within the NL. All views would be very limited and would not add up to a sequential impact.
- 4.6.84. Regarding the setting of the DVNL, the ExA agrees that the proposed OnSS would be in a separate, distinct landscape to that of the DVNL. The ExA considers that the proposed OnSS would be outside of the Stour Valley, within a more intensively farmed landscape. Features such as large fields and glasshouses characterise the landscape which contrasts with that of the DVNL. The ExA agrees with the

Applicant's conclusion that there would be no effect on the landscape of the DVNL, or on any views from the DVNL [\[REP4-036\]](#).

- 4.6.85. The ExA agrees with the Applicant's assessment of sensitivity for DVNL. Users of PROWs are rightly afforded very high sensitivity which is the highest level, and landscape receptors are afforded high sensitivity. Given the presence of some views of the Proposed Development from the DVNL towards the proposed OnSS site, this is considered appropriate.
- 4.6.86. Overall, the ExA concludes that there would be no impacts on the special qualities or setting of the DVNL as a result of the Proposed Development, or cumulatively, and agrees with the reasoning for this provided in ES Chapter 29 [\[APP-044\]](#).
- 4.6.87. The overall effect on the landscape and scenic beauty of the DVNL would be conserved and no harm would be caused to other important aspects of this designated area. In this respect, the ExA considers that the Proposed Development would accord with NPS EN-1 paragraph 5.10.34, as well as the NPPF and Local Plan policy. The ExA finds that the onshore elements of the Proposed Development would not conflict with the purpose of conserving and enhancing the natural beauty of the DVNL, and that the Applicant has sought to avoid harm to the purposes of designation of DVNL through the landscaping mitigations set out in the OLEMS, secured by R7 of the dDCO [\[REP8-005\]](#).
- 4.6.88. In relation to the s85 CROWA duty to seek to further the purpose of conserving and enhancing the natural beauty of the NL, the ExA has had regard to the Defra guidance and relevant case law. The ExA recognises that the Applicant has achieved some degree of pro-activity in its considerations of the design of the Proposed Development and the landscape mitigation proposals. The implementation of the landscape mitigation proposals as set out in the OLEMS is secured by R7 of the dDCO [\[REP8-005\]](#), and approval of the final landscape scheme would be within the control of ECC. The Applicant accepts that the landscape mitigation proposals do not fully mitigate all the adverse effects but submits that they are appropriate and proportionate to the scale and nature of the Proposed Development and are in character with the receiving landscape.
- 4.6.89. Taking all relevant factors together, the ExA accepts the Applicant's position that there would be no impacts on the special qualities and key characteristics of the DVNL as a result of the Proposed Development. The ExA considers that the steps taken by the Applicant to date to fulfill the duty are reasonable and proportionate in the context of this case. The ExA agrees that the onshore elements of the proposed OnSS would accord with the purpose of conserving the natural beauty of the DVNL and that the mitigation accords with the mitigation hierarchy. Therefore, in relation to the DVNL, it would not be reasonable or appropriate to impose additional compensation measures.

OTHER MATTERS

ECC and TDC proposed phasing Requirement

- 4.6.90. ECC, together with TDC, seeks a phasing, or Grampian style requirement [\[REP4-073\]](#) [\[REP5-091\]](#). Within [\[REP4-073\]](#) the Council explains this as an additional phasing requirement, preceded in the Viking Carbon Capture and Storage Pipeline Order 2025 (Viking CCS). The Council justifies this on the basis that there is a link between the Proposed Development and OnSS, and the EACN substation proposed by National Grid.

- 4.6.91. The EACN is not the subject of this Examination, and its merits are not being considered. Therefore, the ECC asks the ExA to note that the EACN substation which is proposed to connect NFOWF to the grid. ECC considers the impact would greatly affect its administrative area. ECC is seeking to consider the risk that the DCO is consented for the Proposed Development but is not consented for the EACN substation. In such a scenario, ECC would be in a position where there would be no benefit, as there would be no connection of the Proposed Development to the proposed EACN substation. To mitigate this risk, ECC request a new phasing requirement that the Proposed Development should only commence once a DCO for the proposed EACN had been granted. ECC provided the updated wording [\[REP7-073\]](#):

“No part of the:

(a) onshore site preparation works except for operations consisting of pre-planting of landscaping works, ecological mitigation works, archaeological investigations, intrusive and other environmental surveys, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, and the temporary display of site notices or advertisements may take place; and

(b) authorised development may commence, until evidence of development consent being granted for National Grid’s East Anglian Connection Node substation which will connect the North Falls development to the grid.”

- 4.6.92. In response to ExQ2 Q2.9.14 [\[REP5-091\]](#) ECC provided further justification including its view that there is a “functional link between North Falls and the EACN substation that is proposed by National Grid”. Given the risk that the scenario described above could occur, ECC considers it necessary and relevant to impose such a condition. ECC considers this to be reasonable and relevant to the development due to the interdependence of the projects, and as the EACN is currently the only connection option available to the Proposed Development for connection to the grid. ECC also submits that the proposed requirement is sufficiently precise and enforceable. It would prevent commencement as defined under s56(4) of the Town and Country Planning Act 1990, of the Proposed Development until evidence of DCO being granted for the EACN has been provided to the discharging authority.

- 4.6.93. In response to ExQ3 9.1.6 [\[REP7-072\]](#), TDC takes the view that there is no realistic prospect of achieving the 2030 connection date other than through the proposed EACN connection. TDC therefore maintains that the Grampian requirement proposed jointly by ECC and TDC would serve a clear and legitimate purpose. Whilst TDC accepts that the onshore and offshore works for the Viking CCS Carbon Dioxide Pipeline Project were all part of that project, it submits that this does not change the fact that NFOWF and VEOWF would be wholly dependent upon EACN gaining DCO consent.

- 4.6.94. ECC confirms its position in relation to the proposed Grampian requirement in its final comments [\[REP8-101\]](#). It regards such a requirement as being crucial in order to prevent unnecessary detrimental localised impacts should the EACN as part of the N2T project not receive consent. It submits that given the current timeline for the EACN project the imposition of such a requirement would not hinder the NFOWF project timeline.

- 4.6.95. The SoCG [\[REP8-060\]](#) between the parties confirms that ECC is requesting a phasing/Grampian requirement to tie the NFOWF and VEOWF to the EACN

obtaining development consent. ECC submits that each windfarm, itself, would have no tangible benefits, if it were not able to connect to the grid via EACN. Therefore, it contends that the Proposed Development would be wholly dependent on the EACN as part of the N2T DCO in order to successfully deliver the renewable energy generated.

- 4.6.96. The Applicant in response to ExQ2 Q9.1.14 [\[REP5-054\]](#) submits that the components of the Viking CCS projects are functionally interdependent which is therefore in contrast to the Proposed Development. Conversely, the Proposed Development and the proposed N2T project and EACN are not functionally interdependent. The Applicant has signed a connection agreement with National Energy System Operator (NESO) and the delivery of that connection is a matter for National Grid Electricity Transmission (NGET) and NESO. This might be through the proposed N2T project, but it also might be via an alternative approach as NGET sees fit.
- 4.6.97. Therefore, the Applicant asserts that the Proposed Development could connect to the grid via an alternative means in a scenario where development consent for the EACN substation is not granted. Additionally, the NFOWF application is to be determined under s104 PA2008 which means that the SoS must give required weight to policies within the relevant NPSs. Such weighting includes that it is CNP infrastructure. The Applicant contends that this should be taken into account when determining whether the proposed Grampian condition by TDC and ECC would be reasonable and necessary.
- 4.6.98. The Applicant's response to ExQ3 9.1.6 [\[REP7-072\]](#), draws support from the comments by the ExA at paragraphs 5.4.19 and 5.4.20 in the Recommendation Report for the Sheringham Shoal and Dudgeon Offshore Windfarm Extension Project. That ExA was of the view that provision of a connection to the grid is a matter for NGET to address and not the applicant given the signed grid connection contract that was in place. The ExA further noted that, as set out in the NPS EN-5, (then, paragraph 2.3.5; now, paragraph 2.8.5), that NGET has a statutory duty to provide a connection where requested. The Applicant submits that these comments also apply to the Proposed Development and its connection agreement with NESO.
- 4.6.99. Furthermore, the Applicant contends this would mean that the Proposed Development could not be developed if the EACN was not consented which represents a completely unreasonable outcome as it does not allow for another connection option to be provided by NGET. The Applicant's position is that the Proposed Development would still be a valuable source of renewable energy with a wide range of benefits including economic growth, energy security and decarbonisation targets if connection to the grid occurred after the 2030 connection date.
- 4.6.100. The Applicant understands that ECC and TDC want to ensure that a grid connection is available to connect the Proposed Development to the Grid to capture its full benefits. The Applicant accepts that this is similar, in principle, to the concerns of the ExA relayed in the SoS decision letter in respect of the Viking CCS Carbon Dioxide Pipeline project. However, as indicated in response to ExQ3 9.1.5, the EACN connection point is the optimal connection point, but others could be made available as required.
- 4.6.101. The Applicant refers to the various factual differences identified between the onshore and offshore works comprising the Viking CCS project and the Proposed Development as set out in its response to ExQ2 Q9.1.14(iii) [\[REP5-054\]](#). It

maintains its position that the proposed Grampian condition would fail the relevant legal tests for a requirement in the specific context of the Proposed Development. Its view is that it would not be necessary and would be unreasonable for the reasons given in its response to item 3.1.32 in the Applicant's Response to Actions List for ISH1 and ISH2 [\[REP4-036\]](#) and its responses to ExQ2 Q9.1.13(ii), (iv), (v) and (vi) in [\[REP5-054\]](#).

- 4.6.102. The Applicant makes further submissions on this topic in response to ExQ3 Q 9.1.6 [\[REP7-051\]](#) including that the imposition of such a requirement would have delay implications for the completion of integral preparatory steps for the Proposed Development. This, in turn, would create a significant delay to construction timeframes making the Proposed Development's delivery by 2030 unachievable and jeopardising its ability to contribute to the UK's renewable energy targets in a timely manner. It also confirms that, provided that the proposed phasing requirement is not imposed, the progress of the N2T DCO application would not restrict its ability to commence these steps and engage with the supply chain as required, should development consent be granted.

EXA'S CONSIDERATIONS

- 4.6.103. The ExA has considered the proposed new requirement having regard to NPS EN-1 which states that the SoS: "should only impose requirements in relation to a development consent that are necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in all other respects". Given the reliance placed by ECC on the phasing requirement imposed in the Viking CCS Pipeline Order 2025, we have also considered whether the equivalent requirement does, in fact, represent a comparable precedent to be followed in this case.
- 4.6.104. The development authorised by the Viking CCS relates to the construction of a carbon dioxide (CO₂) intake facility at Immingham. As confirmed by the Applicant, the Viking CCS only authorises the construction, operation and maintenance of the onshore gas gathering and transportation pipeline [\[REP5-054\]](#). The overall Viking CCS project constitutes three separate elements, not all of which are provided for in the Viking CCS. These include the infrastructure to capture CO₂ at source; an onshore gas gathering and transportation pipeline; and an offshore transportation pipeline with subsequent subsea storage facilities. The onshore and offshore works subject to the Grampian condition are a part of the same overall project and are promoted by the same applicant.
- 4.6.105. Conversely, the N2T proposal and the EACN substation are separate projects being consented under a separate DCO process and under separate Electricity Act 1989 licences. We do not therefore regard the particular circumstances of the Viking CCS to be directly comparable to the Proposed Development and hence it does not provide a reliable precedent.
- 4.6.106. NPS EN-1 is also relevant to this consideration. Section 4.11 confirms that an applicant must liaise with NG who own and manage the transmission network, or the relevant regional DNO or TSO to secure a grid connection. In terms of decision-making, paragraph 4.11.12, NPS EN-1 requires the SoS to be satisfied that appropriate network connection arrangements are/will be in place for a given project regardless of whether one or multiple (linked) applications are submitted.
- 4.6.107. In this case ECC/TDC, submit that the EACN is the only connection available and there is no prospect of NFOWF achieving a connection to the grid by the 2030 date

without the EACN. TDC regard the Proposed Development as being wholly dependent on the EACN. In contrast, the Applicant contends that it is not wholly dependent on the EACN connection.

- 4.6.108. NGET has a statutory duty to provide a grid connection, and the Applicant has a connection agreement with NESO in place for the Proposed Development. The ExA is satisfied from the information provided by the Applicant that the Proposed Development could potentially connect to the grid via an alternative means, if development consent for the EACN substation is not granted. The signed grid connection contract does not depend on the delivery of the N2T project or the EACN. Whilst this might result in delay to Proposed Development, it would still provide a valuable source of renewable energy with associated benefits if connection to the grid occurred after the 2030 connection date. For these reasons, the ExA draws a distinction between the separate projects' interdependence and finds that the Proposed Development and EACN are not functionally interdependent.
- 4.6.109. In addition, we accept the Applicant's position in relation to the delay that could be caused by the imposition of such a requirement to the carrying out of integral preparatory steps including the procurement process for the Proposed Development. Furthermore, the anticipated delay to construction timeframes would have consequential implications for its ability to contribute to the UK's renewable energy targets in a timely manner. We therefore agree that such a requirement could in practice be unduly restrictive.
- 4.6.110. The ExA concludes that, in contrast to the circumstances of the Viking CCS, imposing a requirement on the Proposed Development, linked to a project over which the Applicant lacks the power to control would be unreasonable and unnecessary. It would be unduly restrictive on NFOWF and could prevent its pursuit of other connection options, if required, with NESO. Furthermore, it would not be reasonable to impose such a requirement given the implications in terms of uncertainty and potential delay to the Proposed Development that would flow from it. We do not therefore consider that the phasing requirement proposed by the Councils should be imposed.

CONCLUSIONS

- 4.6.111. NPS EN-1 acknowledges that virtually all nationally significant energy infrastructure projects have effects on the landscape and that all proposed energy infrastructure is likely to have visual effects for receptors around proposed sites.
- 4.6.112. NPS EN-5 also recognises that new substations can give rise to landscape and visual impacts. The ExA is satisfied that the Applicant has undertaken an appropriate landscape and visual assessment and has adequately identified the effects of the Proposed Development on landscape and visual receptors.
- 4.6.113. With regards to NPS EN-1 paragraph 5.10.34, the ExA considers that for the onshore elements of the Proposed Development the Applicant has sought to avoid harm to the purposes of designation and to minimise adverse effects on the National Landscape through the landscaping mitigations set out in the OLEMS and the Design Vision.
- 4.6.114. The onshore elements of the Proposed Development (the proposed cable corridor and OnSS) would give rise to some localised significant effects on landscape character and visual receptors during construction from the Proposed Development

alone. However, the effects on visual amenity for VP02, VP03 and VP09 have been adequately assessed, and would be appropriately mitigated. The same is true considering cumulative impacts where VP05 is included.

- 4.6.115. The presence of the proposed OnSS would give rise to localised significant effects on landscape character and visual receptors during the early years of its operation. This ExA agrees that the overall effect on landscape fabric would be moderate adverse during construction and at year 1 of the operational phase. Nonetheless, as a result of the establishment and maturing of proposed landscape planting, the ExA is satisfied that for most receptors, such significant effects would diminish considerably by year fifteen. This is with exception to VP03 and VP09 where the ExA agrees that the effects would remain moderate adverse, and therefore significant at year fifteen.
- 4.6.116. Cumulatively, the ExA agrees with the Applicant's conclusion that there would be no additional cumulative effects to visual receptors from the Proposed Development.
- 4.6.117. NPS EN-1 and NPS EN-3 promote the sensitive design of energy infrastructure and highlight that siting, colours, materials and landscaping can assist with minimising landscape and visual harm. The ExA is satisfied that such matters have been addressed by the Applicant and that the mitigation hierarchy has been applied. Further consideration of design is undertaken in section 6.4 of this report.
- 4.6.118. Mitigation and control for the avoidance and reduction of adverse landscape and visual effects, where reasonable and appropriate, would be adequately secured through the dDCO. This includes the following requirements:
- Requirement 5 – Substation works;
 - Requirement 6 – Detailed design parameters onshore; and
 - Requirement 7 – Provision of landscaping.
- 4.6.119. Regarding the duty in s85 of the CRoWA placed on public bodies, the ExA has given consideration that the duty referred to in paragraph 5.10.8 and 5.10.34 of NPS EN-1, to seek to further the purposes of nationally designated landscapes. This relates to the wording in the CRoWA that was amended by s245 Levelling Up and Regeneration Act 2023 (LURA). The ExA considers that the ES and this Report are sufficient to inform the SoS in this respect and that the duty can be discharged for the following reasons:
- The onshore elements of the Proposed Development would accord with the purpose of conserving the natural beauty of the DVNL;
 - the Applicant has sought to avoid harm to the purposes of designation of DVNL through the landscaping mitigations set out in the OLEMS, secured by R7 of the dDCO [\[REP8-005\]](#).
 - the ExA considers that the mitigation provided accords with the mitigation hierarchy, therefore compensation would not be appropriate.
- 4.6.120. Taking the above matters into account, the ExA is satisfied that the Proposed Development would accord with the provisions set out in NPS EN-1, NPS EN-3 and NPS EN-5 in respect of landscape and visual matters relating to the proposed onshore works. It would also be in accordance with the s85 duty under the CRoWA. Residual significant adverse effects in respect of landscape and visual matters would occur, however, these would be both limited and localised. Residual significant adverse effects would be limited to VP03 and VP09, as well as the OnSS area generally. Cumulatively, a similar level of harm would occur, within limited areas confined to the VPs identified and their immediate surroundings. Therefore,

the ExA attributes a little weight relating to these matters against the Order being made.

4.7. NOISE & VIBRATION

INTRODUCTION

4.7.1. This section considers the onshore effects of the Proposed Development on noise and vibration. Other impacts on Human Health are discussed further in Section 4.5 of this Report. The impacts of underwater noise are considered in Section 5.2 of this Report.

4.7.2. In its consideration of noise and vibration below, the Examining Authority (ExA) has had regard to:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Section 5.12;
- the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8;
- the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5), in particular Sections 2.9 and 2.11;
- the Local Impact Reports (LIRs) to the extent they are relevant to the topic;
- any matters prescribed in relation to the development; and
- any other important and relevant matters.

THE APPLICATION

4.7.3. Environmental Statement (ES) Chapter 26 Noise and Vibration [\[APP-040\]](#) presents the assessment of the potential onshore impacts of the Proposed Development. Chapter 26 is supported by figures [\[APP-073\]](#) and [\[APP-074\]](#) and Appendix 26.1 Baseline Noise survey [\[APP-161\]](#), Appendix 26.2 Road Traffic Noise Assessment [\[APP-162\]](#), Appendix 26.3 Construction Noise and Vibration Calculations [\[APP-163\]](#) and Appendix 26.4 Operational Noise Calculations [\[APP-164\]](#). The Chapter:

- Presents the existing noise and vibration environment baselines and identifies any assumptions and limitations encountered in compiling the environment baseline information;
- presents the potential environmental effects of the Proposed Development on noise and vibration during the construction, operation and decommissioning phases; and
- highlights any necessary monitoring and/or mitigation measures which could avoid, reduce, or mitigate the possible environmental effects of the Proposed Development on noise and vibration.

BASELINE

4.7.4. As set out by the Applicant, the study area for noise and vibration has been defined on the basis of the nearest noise and vibration sensitive receptors (NVSRs) to the onshore Proposed Development area including the landfall and nearshore works, onshore cable route, Bentley Road improvement works, proposed National Grid substation connection and onshore substation works area.

4.7.5. The nearest NVSRs to the onshore substation works area, landfall, onshore cable route and those with the potential to be affected by road traffic noise are shown on Figures 26.1, 26.2, 26.3 and 26.4 [\[APP-073\]](#) respectively. The noise and vibration study area also includes road traffic links with the potential to be affected by the

Proposed Development during the construction phase, as defined in ES Chapter 27 Traffic and Transport [[APP-041](#)].

- 4.7.6. The Applicant considers that Grid connection Option 2 is the realistic worst-case scenario for the noise and vibration assessment because the build out requires four sets of cable ducts and associated joint bays to be installed, requiring the greatest intensity of noise-generating activity of the three options.
- 4.7.7. To provide site-specific and up to date information on which to base the impact assessment, a baseline sound survey within the vicinity of the landfall and onshore substation was conducted by the Applicant during June 2022. The scope and extent of the baseline survey was agreed with Tendring District Council (TDC). Other available sources used to inform the assessment is presented in ES Chapter 26, Table 26.5 [[APP-040](#)].
- 4.7.8. In the absence of baseline noise data along the entire route, the Applicant has assumed that existing noise levels at residential receptors are low and has adopted the Category A threshold values, based on the ABC method (British Standard (BS) 5228) for assessment of construction noise, ES Chapter 26, Section 26.4.3.3. This approach was agreed with the Expert Topic Group (ETG), a forum for targeted engagement with regulators and interested stakeholders through the Evidence Plan Process (EPP).
- 4.7.9. Construction traffic noise impacts along existing roads have been estimated based on the Calculation of Road Traffic Noise (CRTN) methodology for the calculation of the Basic Noise Level (BNL) at a reference distance of 10m from the nearside carriageway. Calculations have been undertaken for both the 'with' and 'without' construction traffic scenarios for the peak construction year, for each road link in the construction traffic model, ES Chapter 26, Section 26.4.3.4.
- 4.7.10. In relation to construction vibration effects, the ES adopts a methodology based on guidance in BS 7385-2 and BS 5228-2, ES Chapter 26, Section 26.4.3.5. The ES refers to the Design Manual for Roads and Bridges (DMRB) LA111 which notes that a study area of 100m from the closest construction activity with the potential to generate vibration is normally sufficient to encompass vibration sensitive receptors. On this basis, the assessment of vibration impacts only extends to NVSRs which are no further than 100m from the onshore Proposed Development area. The closest identified NVSRs to the proposed landfall and onshore substation locations are further than 100m away; hence, assessment of vibration impacts due to construction of the landfall and onshore substation has been excluded from the assessment scope. Furthermore, the DMRB LA111 states that a maintained road surface would be free of irregularities as part of project design and under general maintenance, so operational vibration would not have the potential to lead to significant adverse effects. The ES states that on this basis, the assessment of vibration impacts due to construction traffic using public roads has been excluded from the assessment scope.
- 4.7.11. The Applicant has assessed operational noise from the proposed onshore substation in accordance with BS 4142 which the Applicant states is the accepted UK standard for rating and assessing the impact of sound of an industrial and / or commercial nature and is referred to in NPS EN-1.

MITIGATION

- 4.7.12. The Applicant has proposed several embedded mitigation measure parameters to reduce the impact of the Proposed Development on noise and vibration. These are outlined in Table 26.3 of ES Chapter 26 Noise and Vibration [APP-040] in three categories: mitigation by site selection, construction phase noise and vibration, and operational substation vibration. Embedded mitigation specific to the onshore construction effects includes:
- The Outline Code of Construction Practice (OCoCP) [REP7-025], which includes working hour restrictions, and exceptions, outside of normal working hours, and control measures (best practicable means) for noise and vibration. This would be secured by Requirement (R) R8 of the draft Development Consent Order (dDCO) [REP8-005];
 - Article 14 of the dDCO [REP8-005] and the associated Temporary Traffic Regulation Order plans [REP1-010] for a temporary reduction in the speed limit to 40mph along the affected section of Bentley Road; and
 - the Outline Construction Traffic Management Plan (OCTMP) [REP8-013], which provides details of how the traffic targets and measures would be monitored and enforced. This would be secured through R9 of the dDCO [REP8-005].
- 4.7.13. Control of noise for the proposed onshore substation during the operational stage would be secured through R17 of the dDCO [REP8-005]. R17(2) includes that prior to the commencement of operation of Work No. 11 a noise investigation protocol must be submitted to and approved by the discharging authority. The Applicant submitted an onshore substations operational noise and the outline noise complaints protocol (Rev 0) at deadline (D) D3 [REP3-043].
- 4.7.14. The Schedule of Mitigation [REP7-004] identifies a range of potential additional mitigation measures within the OCoCP for noise and vibration sensitive receptors. Section 1.11.1.3 of the OCoCP [REP7-025] also identifies measures specific to cumulative noise and a range of potential additional noise mitigation measures is also identified in Section 4.12 of the OCTMP [REP8-013].
- 4.7.15. As there would be a secured commitment to implementing the above measures, the Applicant has considered these measures in its assessment of residual effects.

ASSESSMENT OF EFFECTS

CONSTRUCTION, OPERATION AND DECOMMISSIONING

- 4.7.16. For the construction phase of the Proposed Development, the onshore impacts assessed included:
- Noise of landfall and nearshore works;
 - noise of onshore cable route works;
 - noise of onshore substation works;
 - noise of Bentley Road improvement works;
 - noise from off-site construction traffic; and
 - construction vibration.
- 4.7.17. For the operation phase of the Proposed Development, the impact of operational onshore noise was assessed. For the decommissioning phase of the Proposed Development, the Applicant considers that the onshore effects would be no worse than the those of the construction phase.

- 4.7.18. A summary of the potential likely significant effects, mitigation measures that would be adopted as part of the Proposed Development and residual effects for onshore noise and vibration can be found in Table 26.44 of ES Chapter 26 Noise and Vibration [APP-040]. A summary of the potential cumulative effects and additional mitigation can be found in Table 26.45 of ES Chapter 26 Noise and Vibration [APP-040], which includes reference to proposed additional mitigation to mitigate potentially significant adverse cumulative noise effects from off-site construction traffic along Bentley Road.
- 4.7.19. Overall, the Applicant concluded from the assessment that with the implementation of embedded and additional mitigation measures, there would be no significant effects arising from the Proposed Development alone or alongside other offshore wind farms and/or projects during the construction, operation or decommissioning phases.

ISSUES CONSIDERED DURING THE EXAMINATION

- 4.7.20. Issues emerging during the Examination that the ExA has examined, considered and concluded on are:
- Construction noise – adequacy of monitoring and mitigation;
 - impact on construction noise effects if working hours would be reduced;
 - construction vibration assessment; and
 - operational noise effects from the substation.
- 4.7.21. Essex County Council's (ECC) concerns in its Local Impact Report (LIR) [REP1-065] relating to noise and vibration can be summarised as the following:
- A proposal that the OCTMP [APP-251] should include a commitment to reduce noise by limiting Heavy Goods Vehicles (HGV) movements outside of the core working hours.
 - there is considerable uncertainty as to the potential for noise from the substations when the Proposed Development is looked at in combination with Five Estuaries Offshore Wind Farm's (VEOWF) and East Anglia Connection Node's (EACN) substations; and
 - that a Joint Noise Complaint Handling Protocol is absolutely necessary to protect the amenity of the adjacent local residents during the operational phase of the proposed substations.
- 4.7.22. There were no substantive comments relating to noise and vibration in any of the other submitted LIRs.

CONSTRUCTION NOISE – ADEQUACY OF MONITORING AND MITIGATION

MONITORING

- 4.7.23. In ExQ1 7.1.4 [PD-009] the ExA queried if TDC was content with the procedures relating to baseline noise level monitoring and noise mitigation for cumulative effects in the OCTMP [APP-251]. TDC responded [REP2-036] that it was satisfied that the proposed mitigation measures would be sufficient to ensure noise levels remain non-significant in cumulative impact scenarios.
- 4.7.24. In response to ExQ1 1.4.6, the Applicant confirmed [REP2-020] that noise and vibration monitoring would not be anticipated to be required for the Proposed Development alone because the residual effects identified would not be significant. However, for Bentley Road, monitoring and further mitigation may be required

because of the potential for significant effects from cumulative road traffic noise. The Applicant confirmed that construction noise and vibration would be monitored in line with the final CoCP, which would detail the procedure for dealing with complaints and managing potential exceedances of relevant noise and vibration criteria. The Applicant confirmed that the noise and vibration limits which would apply to any monitoring are set out in ES Chapter 26 [APP-040] and that, for example, at a medium sensitivity receptor, this would equate to a medium impact, which for construction noise, would be 68 dB LAeq, if exceeded for a period of at least ten in any 15 consecutive days.

- 4.7.25. In ExQ2 1.01 [PD-012], the ExA further explored what consideration had been given to limiting the timings or noise levels, and sought views on noise limits and the control of noise and vibration. TDC [REP5-091] confirmed its view that no works should take place outside of the hours 0800 -1800 and expressed concern that the exceptions in the OCoCP, paragraph 50 [REP3-017] for activities outside of working hours would be unenforceable. The Applicant's response [REP5-054] included that construction noise limits were not recommended, due to the potential conflict with the requirement of the Control of Pollution Act 1974 (CoPA1974) to implement Best Practicable Means (BPM) to minimise noise and vibration.

MITIGATION

- 4.7.26. Little Bromley Parish Council (LBPC) [RR-203] had concerns that the construction noise would be hugely disruptive for many years (12 hours per day, 6 days per week) and that it would be helpful to understand what additional mitigation could be included to reduce construction noise. The Applicant's response [REP1-046] provided reference to the construction programme in ES Chapter 5 [APP-019] and to the example mitigation measures for construction noise identified in the OCoCP [APP-248].
- 4.7.27. The Applicant confirmed [REP2-020], in its response to ExQ1 1.4.6, that the OCoCP [REP1-033] (Sections 1.11.1.1 and 1.11.1.2) identifies all practicable construction noise and vibration mitigation measures and that there are no additional measures which could be applied specifically to cumulative noise. Further, the Applicant explained, if additional measures are required to mitigate cumulative effects, these would be selected from those identified in Section 1.11.1.2 of the OCoCP [APP-248]. The OCoCP [REP3-018] was updated to include that the final CoCP would include a procedure for investigating noise and vibration complaints during construction. Following a request from the ExA to the Applicant to provide this procedure at D5, this was not forthcoming, however in their response to ExQ2 1.0.2 [REP5-054], the Applicant did refer to the construction contractor's responsibility to produce this procedure in the final CoCP.
- 4.7.28. In ExQ1 7.1.3 [PD-009] the ExA queried whether the mitigation measures for cumulative effects should not be implemented prior to the start of construction in noise sensitive locations such as the section of Bentley Road to be widened. The Applicant [REP2-020] referred to paragraph 99 of the OCTMP [REP1-039] which would require the Traffic Management Coordinator (TMCo) to undertake an updated assessment of whether these effects would be significant, using refined construction vehicle forecast once there is greater certainty regarding schedules.
- 4.7.29. In relation to noise and vibration during the construction phase, ECC confirmed [EV5-005][EV5-009][REP4-072] that as a final CoCP would be required to be discharged by the Council secured by a requirement, it had no further comments nor further measures required at this stage.

- 4.7.30. TDC's [\[REP5-091\]](#) response to ExQ2 1.01 expressed that its primary concern is the cumulative impact of the three – and potentially four – Nationally Significant Infrastructure Projects (NSIPs) and that individual project measures would make it impossible to guarantee any level of certainty, let alone sufficient assurance for all the nearby affected residents.
- 4.7.31. The Applicant confirmed [\[REP5-054\]](#), in their response to ExQ2 7.01 for noise mitigation for cumulative effects, that prior to the construction of the Bentley Road improvement works, consideration would be given as to whether resurfacing to reduce road noise may be appropriate (OCTMP, para 85) [\[REP4-008\]](#).
- 4.7.32. The Applicant updated the OCoCP [\[REP6-033\]](#) to take account of the majority of requests for noise and vibration mitigation measures set out by ECC in its SoCG [\[REP6-073\]](#) which included the removal of daily start up or shutdown activities as exceptions to the general working hours. In addition, to address ECC's concerns about noise, the OCTMP [\[REP7-031\]](#) included an update for mitigation measures for controlling light vehicles arriving early (before 0700).

STATEMENT OF COMMON GROUND

- 4.7.33. ECC/TDC's SoCG [\[REP8-060\]](#) shows that they are generally satisfied with the construction noise assessment, except for following:
- Definition of high impact activities not agreed with both councils;
 - limitations for work outside of working hours not agreed with TDC; and
 - working hours not agreed with TDC.
- 4.7.34. The definition of high impact activities and limitations for work outside of working hours are discussed further below. TDC's request for reduced working hours is discussed in the next section.

EXA'S CONSIDERATIONS

- 4.7.35. The ExA recognises that control of the working hours is a fundamental means of controlling noise and vibration impacts on receptors. Generally, it is preferable for works that generate significant levels of noise or vibration to take place during times when people are less sensitive to them i.e. generally accepted to be weekday daytimes and Saturday mornings, rather than outside of these hours when people expect a quieter environment and, hence, are more sensitive to noise or vibration.
- 4.7.36. Regarding monitoring, the ExA is mindful that the period of 1300 to 1900 on a Saturday is classed as the evening period in ES Chapter 26 Noise and Vibration and therefore is subject to more stringent construction noise limits than the daytime and this is reflected paragraph 49 of the OCoCP [\[REP7-025\]](#), which specifies no high impact activities would take place over this period unless required by the circumstances set out below in paragraph 50.
- 4.7.37. However, the ExA notes that although the construction noise levels for high impact activities are properly defined in Sections 26.4.3.3 to 26.4.3.4 in ES Chapter 26, the same level of detail is not included in the OCoCP. As a result, to aid enforcement, it is recommended that the SoS may wish to consult ECC/TDC and the Applicant to seek an update of the OCoCP to include the definition of the construction noise levels for high impact activities as defined above.
- 4.7.38. The ExA notes TDC's concern regarding the need for limitations for work outside of working hours. The ExA is satisfied that the activities listed in paragraph 50 of the

OCoCP has been sufficiently limited and are justifiable outside of the working hours. The ExA is content that paragraph 51 of the OCoCP sets out both an application process for agreeing these activities in advance with the relevant local authority and a communication process for members of the public to be notified in advance.

- 4.7.39. The ExA notes that while the OCoCP includes that the final CoCP would include a procedure for investigating noise and vibration complaints during the Proposed Development's construction, it does not mention how potential exceedances of relevant noise and vibration criteria would be managed. The ExA also acknowledges that paragraph 114 of the OCTMP [[REP8-013](#)] includes for undertaking baseline noise level monitoring at the worst affected property.
- 4.7.40. However, the ExA considers that monitoring arrangements need to be more clearly articulated with identified channels for addressing exceedances. Such provisions should include measures to notify the undertaker in the result of exceedances, to cease the relevant works and investigate the cause, to apply remedial works to ensure that no repeat of the exceedance was caused and report such exceedances, works implemented and remedial measures enacted to the relevant planning authority. Given the importance of this matter, the ExA considers that a requirement to include such measures should be on the face of the dDCO. Therefore, the ExA recommends that the SoS may wish to consult ECC/TDC and the Applicant on amending R8(1) with the following change to the dDCO (amendment shown in bold):

*8.—(1) No stage of the onshore works may commence until a code of construction practice (which must accord with the outline code of construction practice) for that stage has been submitted to and approved by the discharging authority in consultation with the relevant SNCB and the Environment Agency. **The code of construction practice shall include details of an action plan containing details of the measures that would be implemented in the event of exceedance and repeated exceedances of construction noise threshold levels.***

- 4.7.41. Regarding mitigation, the ExA notes the control measures in Section 1.11 of the OCoCP include Best Practicable Means, mitigation measures, measures specific to cumulative noise and reference to a complaints procedure to be included in the final CoCP. Furthermore, the ExA notes that Section 4.12 of the OCTMP includes specific measures relating to noise from construction traffic including for cumulative effects (which includes baseline noise monitoring for the worst affected property on Bentley Road), monitoring and enforcement of vehicle numbers, routes and agreed working hours. Subject to the above recommendations to the SoS, and noting the qualified agreement from ECC/TDC above, the ExA is satisfied that the embedded and additional mitigation are appropriate and would be secured in the final CoCP and the final CTMP, by R8 and R9 respectively in the dDCO [[REP8-005](#)].
- 4.7.42. On this basis, the ExA concurs with the Applicant's assessment in ES Chapter 26 that with the implementation of embedded and additional mitigation measures, there would be no significant effects arising from the Proposed Development alone or cumulatively during the construction phase.
- 4.7.43. The ExA is mindful of paragraph 5.12.1 of NPS EN-1 which recognises the potential the wide-ranging impacts of excessive noise on the quality of life, health and the use and enjoyment of areas of value such as quiet places and areas with high landscape quality. Subject to the above recommendations to the SoS, the ExA is satisfied that there would be no significant adverse impacts on health and quality of life from noise and that the other adverse impacts would be satisfactorily mitigated

and minimised through R8 of the rDCO by way of the final CoCP. Therefore, the ExA considers that the policy tests of NPS EN-1 have been met in this regard.

IMPACT ON CONSTRUCTION NOISE EFFECTS IF WORKING HOURS WOULD BE REDUCED

- 4.7.44. In response to ExQ1 1.4.4 [\[REP2-020\]](#), the Applicant set out that the proposed working hours are standard for major infrastructure projects and would provide a balance between avoiding the times which would have the greatest potential to disturb people and would enable the works to be completed as quickly as practicable. Further, the Applicant, with reference to BS5228-1, indicated that people are particularly sensitive to noise on Saturday afternoons and referenced the qualified restriction in paragraph 47 of the OCoCP [\[REP1-033\]](#) to working hours whereby between 1300 and 1900 on Saturdays no high impact activities shall take place.
- 4.7.45. In ECC and TDC's response [\[REP2-036\]](#) to ExQ1 1.4.2, TDC had specific concerns regarding the working hours detailed in Section 1.3.1 OCoCP [\[APP-248\]](#). TDC's response stated that the OCoCP currently states:
- Construction work for onshore works must only take place between 0700 and 1900, Monday to Saturday, with no activity on Sundays or Bank Holidays, except as specified; and
 - between 1300 and 1900 on Saturdays, no "high impact" activities (e.g., piling/breaking out) shall occur unless exceptional circumstances apply.
- 4.7.46. TDC considered these provisions to be outside the standard working hours typically applied within the district. TDC's view was that to ensure effective mitigation of potential adverse effects from onshore construction activities, and respite for nearby affected residents, the following amendments should be made:
- No vehicles associated with the works should arrive on-site before 0730 or leave after 1900, except in emergencies;
 - working hours for high-impact (noisy) activities should be restricted to 0800–1800, Monday to Friday, and 0800–1300 on Saturdays; and
 - no construction activity of any kind should be permitted on Sundays or Public/Bank Holidays.
- 4.7.47. Furthermore, TDC set out that these amendments align with local standards and would enhance the robustness, precision, and enforceability of the OCoCP, ensuring effective mitigation of potential adverse impacts on directly affected residents and the surrounding community. In response to ExQ1 1.4.5 [\[REP2-036\]](#), TDC also requested that tighter working hour restrictions should be implemented in locations affecting residential properties.
- 4.7.48. The Applicant stated [\[REP3-036\]](#) with regards to amending construction working hours and timing of works, it is unable to accommodate ECC and TDC's request. Further, the Applicant explained that its proposed working hours were standard for major infrastructure projects (including VEOWF) and provide a balance between avoiding the times which have the greatest potential to disturb people and enabling the works to be completed in a timely manner.
- 4.7.49. Concerning the impact to the onshore construction programme if the working hours proposed by TDC were adopted, the Applicant explained [\[REP7-051\]](#) in its response to ExQ3 Q1.0.1 part (i) that the worst case programme for some sections would be up to 27 months and if the working hours were reduced this would equate to a 28%

reduction in available weekly working time, leading to a further 8 months on the programme. The Applicant clarified that specifically in terms of cumulative effects, extending the duration of the onshore construction works has the potential to lead to the construction period overlapping with that of other projects. The Applicant also noted that it could also increase the duration of peaks in traffic flow movements and the associated risk that the peaks in construction traffic for the Proposed Development and other schemes overlap, resulting in potentially significant effects due to cumulative traffic noise impacts. The Applicant explained that it would also affect the duration of individual tasks taking place during construction, which has the potential to increase the number of NVSRs (including residential properties) subject to significant noise effects without mitigation during construction cumulatively with other projects (as detailed in Section 26.8 of ES Chapter 26 [\[APP-040\]](#)).

- 4.7.50. Regarding overall noise induced annoyance, the Applicant's response to ExQ3 1.0.1 part (iv) [\[REP7-051\]](#) included that the changes to the working hours proposed by TDC could increase overall noise induced annoyance. The Applicant explained that reducing the daily working hours extends the duration of individual work tasks during construction of the onshore cable route. Further, the Applicant added, this has the potential to extend activities beyond the 10-day in 15-day threshold for generating significant noise effects at NVSRs along the route. The Applicant noted that irrespective of whether this 10-day threshold is exceeded, noise-induced annoyance is dependent on duration as well as noise level at the NVSR and that whilst mitigation is available to minimise noise levels at NVSRs, this is not the case for task duration. The Applicant noted that, hence, the changes to working hours proposed by TDC could increase overall noise-induced annoyance.
- 4.7.51. ECC/TDC's SoCG [\[REP8-060\]](#) showed that while ECC agree with the Proposed Development's working hours, TDC continued its objection to these.
- 4.7.52. Section 4.8 of this Report considers the effects on Traffic and Transport if the working hours were to be reduced in line with TDC's proposed working hours.

EXA'S CONSIDERATIONS

- 4.7.53. The ExA recognises that control of the working hours is a fundamental means of controlling noise and vibration impacts on receptors. The ExA has considered both TDC's concerns if the Applicant's proposed hours would be implemented and conversely the potential consequential effects arising if TDC's proposed reduction in hours would be implemented.
- 4.7.54. The ExA notes that TDC has proposed that the weekly working hours be reduced from 72 hours to 55 hours to align with local standards, to ensure effective mitigation of potential onshore construction activities and respite for nearby affected residents and because the in-combination effects with other NSIPs would be very considerable.
- 4.7.55. The Applicant has assessed the impact if a reduction in working hours would be implemented and has found that would be up to an 8 month increase to the construction programme, there could be potentially greater effects from traffic and noise, and the overall noise-induced annoyance could increase. The ExA notes that TDC has not disputed the estimated increase to the construction programme.
- 4.7.56. Regarding the Applicant's proposed hours, as noted in the previous ExA's considerations, the ExA concurred with the Applicant's assessment in ES Chapter 26 that with the implementation of embedded and additional mitigation measures,

there would be no significant effects arising from the Proposed Development alone or cumulatively during the construction phase. Therefore, the ExA is satisfied there would be no unacceptable harm.

- 4.7.57. Regarding TDC's proposed reduction in hours, given the resulting longer construction programme could lead to more harm and that ECC agree with the Applicant's proposed working hours, the ExA is persuaded by the Applicant's case for its proposed working hours.
- 4.7.58. The ExA accepts the Applicant's proposed working hours would provide a balance between avoiding the times which would have the greatest potential to disturb people and would enable the works to be completed as quickly as practicable. The ExA therefore concludes the working hours should remain unchanged as presented in Section 1.3.1 of the OCoCP [REP7-025]. The ExA is satisfied that the working hours would be secured in the Code of Construction Practice (CoCP), which is in accordance with the OCoCP, by R9 of the dDCO [REP8-005].

CONSTRUCTION VIBRATION ASSESSMENT

- 4.7.59. Regarding concerns about vibrations from heavy traffic from LBPC [RR-203], the Applicant's response [REP1-046] included reference to ES Chapter 26 [APP-040] in its assessment of potential structural damage from construction vibration. The Applicant explained that structural damage effects would be predicted to be negligible, except for the ground compaction works to Bentley Road, which have the potential to cause minor (not significant) effects at the closest properties to the road. Nevertheless, the Applicant explained additional mitigation identified within ES Chapter 26 [APP-040] and incorporated into the OCoCP [APP-248], such as using non-vibratory compaction methods, to avoid significant disturbance effects would also minimise the potential for structural damage to occur.
- 4.7.60. Concerning the impact of the Proposed Development on Mulley's Cottage (Grade II Listed), which has no foundations, the Applicant's response to ExQ1 12.1.11 [REP2-020] included that no HGV traffic from the Proposed Development would be proposed to pass along Bentley Road past Mulley's Cottage. The Applicant noted the OCTMP [REP1-039] includes details of the proposed routes that would be used by HGVs and measures to control and monitor and enforce HGV routeing. The Applicant also noted that the temporary haul road would also be located over 300m from Mulley's Cottage. Further, the Applicant explained the assessment in ES Chapter 26 [APP-040] identifies that, for the worst-case construction activity, effects are negligible at buildings further than 23m from the works. The Applicant noted Mulley's Cottage is over 200m from any proposed construction works; hence, its view was effects on this building would be negligible.
- 4.7.61. Relating to the Applicant's approach to, with reference to DMRB LA111, exclude the assessment of vibration impacts due to construction traffic using public roads from the assessment scope, the Applicant confirmed in its response to ExQ1 17.1.16 [REP2-020], it had consulted with ECC and TDC on the scope for the assessment of noise and vibration impacts via the Traffic and Transport, Air Quality, Climate Change and Noise and Vibration Expert Topic Group (ETG) prior to submission of the DCO application; and ECC did not suggest any amendments to the assessment scope.
- 4.7.62. Regarding how the potential for vibration effects from Abnormal Indivisible Loads (AILs) had been assessed and if any mitigation would be required, the Applicant noted in response to ExQ2 Q17.03, [REP5-054], the commitment in the OCTMP

(Section 4.5) [REP4-008] to consider as part of the proposed Bentley Road improvement works whether the existing road needs reconstruction or strengthening prior to construction commencing and confirmed that the Proposed Development's traffic (including AILs) would not have the potential to lead to significant adverse effects.

EXA'S CONSIDERATIONS

- 4.7.63. The ExA notes from ECC/TDC's SoCG that they are generally satisfied with construction vibration, except for the working hours for TDC and definition of high impact activities for both councils, both of which have been discussed in the above section in relation to construction noise. The ExA notes that ECC/TDC [REP8-061] consider that the construction vibration scope and methodology are appropriate. The ExA has no reason to conclude otherwise and considers that the assessment of construction vibration is adequate.

The ExA notes that although the construction vibration levels for high impact activities are properly defined in Section 26.4.3.5 in ES Chapter 26, the same level of detail is not included in the OCoCP. As a result, to aid enforcement, it is recommended that the SoS may wish to consult ECC/TDC and the Applicant to seek an update of the OCoCP to include the definitions of the construction vibration levels for high impact activities as defined above. Subject to this recommendation, the ExA has no reason to conclude otherwise that the proposed mitigation (Section 1.11.1 of the OCoCP [REP7-025]) is appropriate and would be secured in the final CoCP by R8 in the dDCO [REP8-005].

Noting ECC/TDC agree with the Applicant's assessment in ES Chapter 26, except as noted above, the ExA agrees with the Applicant's assessment, that with mitigation the residual effects for construction vibration for the Proposed Development alone or cumulatively would be at worst not significant and therefore the ExA is satisfied there would be no unacceptable harm.

OPERATIONAL NOISE EFFECTS FROM THE SUBSTATION

- 4.7.64. LBPC [RR-203] raised concern that the proposed substation operational noise limit of 35dBA would be too high and believe that any background noise increase with consequent reduction in quality of life for residents is unacceptable. The Applicant's response [REP1-046] stated that all relevant UK professional standards and guidance have been used to determine the threshold level of 35 dB LAr,Tr. and that none of this guidance identifies evidence of adverse effects on health or quality of life from substation noise at or below this level, irrespective of how quiet it is prior to the introduction of the development.
- 4.7.65. In relation to the design of the onshore substation, in response to ExQ1 8.1.3 [REP2-020], the Applicant referred to a hierarchy of potential noise measures in ES Chapter 26 [APP-040] paragraph 225 and that should the need for barriers within the landscape arise, the use of aesthetically pleasing purpose-built options or natural solutions would be considered, as set out in paragraph 7.9.12 of the Design Vision [APP-234]. Furthermore, the Applicant noted that the design of noise mitigation measures would not need to consider the cumulative effects of the VEOWF and EACN design, because specific limits would be assigned to each substation which would need to be complied with. The Applicant noted these limits ensure that cumulative noise from all three substations would not exceed a rating level of 35 dB.

- 4.7.66. The ExA asked [\[EV5-005\]](#)[\[EV5-009\]](#) the Applicant to identify what controls were in place to ensure the detailed design is developed in such a way that sufficient good design is incorporated to reduce and mitigate noise effects. The Applicant responded [\[EV5-005\]](#)[\[EV5-009\]](#)[\[REP4-026\]](#) that R17 of the dDCO sets out operational noise limits for a number of receptors and states that prior to commencement of the operation of the onshore substation, the noise investigation protocol must be submitted to and approved by the discharging authority. In addition, the Applicant noted the design of the Proposed Development sought to control noise at the source, plant could be contained by acoustic enclosures if required, and that good design had already been implemented in the site selection process by maximising the distance to residential dwellings and selection of technology. Furthermore, the ExA notes from the Design Vision [\[REP5-004\]](#) Section 9 Appendices that the two co-located substation footprints would be as far as practicable from critical noise receptors.
- 4.7.67. ECC and TDC requested [\[REP4-072\]](#) that R17 of the dDCO should be revised to reflect a collaborative complaint handling approach in the noise investigation protocol. The Applicant's response to ExQ2 7.02 [\[REP5-054\]](#) noted that the proposed onshore substations operational noise and the outline noise complaints protocol [\[REP5-036\]](#) has been revised with the timeframe for the initial site walkaround reduced to 48-hours and a commitment that each operator would retain an acoustic consultant for at least 18 months following the date of commencement of operation for the relevant onshore substation.
- 4.7.68. In response to ExQ3 9.1.4 [\[REP7-051\]](#), the Applicant explained that Section 6.3 of the onshore substations operational noise and the outline noise complaints protocol [\[REP5-036\]](#) sets out what the final protocol would confirm and includes details of the approach to communication. Furthermore, the Applicant noted that the current drafting of R17 mirrors the agreed drafting:
- In the updated onshore substations operation noise and outline noise complaints protocol (between the North Falls Offshore Wind Farm (NFOWF) Ltd, VEOWF Ltd and National Grid Electricity Transmission Plc (NGET)) submitted at Deadline 5 [\[REP5-036\]](#); and
 - in the corresponding requirement in the draft DCO (rev I) submitted to the VEOWF Examination at Deadline 8a.
- 4.7.69. The Applicant noted that the wording of the requirement needs to be the same across all three relevant DCOs in order to operate effectively.
- 4.7.70. ECC/TDC's final signed SoCG [\[REP8-060\]](#) shows that the onshore substations operational noise and the outline noise complaints protocol has not been agreed. In summary, the areas which ECC/TDC disagree with the Applicant on are:
- The proposed timeframe is also unreasonable lengthy and a much shorter timeframe as suggested by the Councils [\[REP4-072\]](#) should be adopted;
 - any investigation approach should apply to the entire operational period of the substation; and
 - it lacks the necessary joint panel approach between the 3 operators, namely, NGET Plc, VEOWF Ltd and NFOWF Ltd, which should all be accountable to any cumulative operational noise complaints.

EXA'S CONSIDERATIONS

- 4.7.71. The ExA agrees with ECC/TDC that the operational noise scope and methodology are appropriate and therefore the ExA considers that the Applicant has adequately

assessed the operational noise effects of the Proposed Development's substation. The ExA is satisfied that the substation footprint would be as far as practicable from critical noise receptors and that measures would be determined at the detailed design stage in order to meet the noise limits secured by R17 dDCO [REP8-005].

4.7.72. The ExA accepts the Applicant's view [REP8-036] that the discharging authority would have the opportunity to review details, such as timeframes for investigating a noise complaint, in the final version of the onshore substations operational noise and the outline noise complaints protocol, which would be submitted for its approval post-DCO consent and would be secured under R17(2) of the dDCO [REP8-005].

4.7.73. Regarding the proposed changes to R17, the ExA has considered both ECC/TDC's and the Applicant's responses [REP8-044]. However, the ExA is persuaded by ECC's case for the need for a joint approach between the 3 operators to investigate noise to ensure accountability for any cumulative operational noise complaints [REP8-101]. Consequently, the ExA agrees with the wording proposed by ECC's [REP6-081] and recommends the following amendments to R17 (amendment shown in bold):

*17.—(2) Prior to the commencement of operation of Work No. 11, ~~a noise investigation protocol must be submitted to and approved by the discharging authority.~~ **the undertaker will consult and agree with Five Estuaries Offshore Wind Farm Ltd and National Grid Electricity Transmission Plc, a noise investigation protocol to be submitted to and approved by the discharging authority. The noise investigation protocol must identify how the undertaker, Five Estuaries Offshore Wind Farm Ltd and National Grid Electricity Transmission Plc, will jointly investigate noise.***

4.7.74. The ExA notes that TDC/ECC agree that with mitigation the residual effects for operational noise for the substation are not significant for the Proposed Development alone and cumulatively, but also note their concerns above regarding the onshore substations operational noise and the outline noise complaints protocol. Given this agreement from ECC/TDC and that the discharging authority approval is required by R17(2) together with the amendments proposed above, the ExA considers that the noise limits secured by R17 would be appropriate for the Proposed Development and cumulatively. On this basis, the ExA therefore concurs with the Applicant's assessment in ES Chapter 26 that with mitigation the residual effects for operational noise for the substation are negligible to minor adverse for the Proposed Development alone and are not significant for the cumulative case. The ExA is therefore satisfied that any harm would be satisfactorily mitigated.

CONCLUSIONS

4.7.75. The ExA considers that the Applicant has adequately assessed the effects of noise and vibration, both for the Proposed Development alone and cumulatively as required in Section 5.12 of NPS EN-1. Furthermore, subject to the recommendations to the SoS, the ExA is satisfied that, through the embedded mitigation measures and mitigation measures contained in the OCoCP and OCTMP, significant adverse effects would be avoided as required by paragraph 5.12.17 of NPS EN-1 and that other adverse impacts would be mitigated and minimised. Therefore, the ExA considers that the policy tests of NPS EN-1 have been met in this regard.

4.7.76. The ExA finds in respect of noise and vibration that the mitigation hierarchy has been applied and the requirements of NPS EN-1, NPS EN-3 and NPS EN-5 have been met.

- 4.7.77. Article 7 Defence to proceedings in respect of statutory nuisance of the dDCO [\[REP8-005\]](#) would provide a defence to proceedings brought in a Magistrates' court under section 82(1) of the Environmental Protection Act 1990 (EPA 1990) in relation to certain nuisances set out in paragraph 79(1) thereof. These include any noise that is prejudicial to health or a nuisance. The Applicant's Explanatory Memorandum explains the draft Article's provisions in further detail [\[REP8-007\]](#).
- 4.7.78. Regarding TDC's proposal for a reduction in weekly working hours, given the above considerations, the ExA considers that in relation to noise effects, the Applicant's proposed working hours should remain unchanged as presented in Section 1.3.1 of the OCoCP [\[REP7-025\]](#). The ExA is satisfied that with the implementation of the proposed mitigation, the Applicant's proposed working hours would not give rise to unacceptable levels of harm. The ExA is satisfied that the Applicant's proposed working hours would be secured in the CoCP, which is in accordance with the OCoCP, under R9 of the dDCO [\[REP8-005\]](#). Consideration is given to TDC's proposed working hours in relation to Traffic and Transport effects in Section 4.8.
- 4.7.79. Nonetheless, the ExA's opinion is that some harm (not significant) from noise associated with the Proposed Development would still accrue to sensitive receptors, primarily during the construction phase, and therefore concludes that matters relating to noise carry a little negative weight against the Order being made.

4.8. TERRESTRIAL TRAFFIC & TRANSPORTATION

INTRODUCTION

- 4.8.1. This section considers the potential traffic and transport effects of the Proposed Development in relation to the proposed onshore project area and the routes that would be used for construction traffic. This section also considers effects on recreational routes such as Public Rights of Way (PRoW).
- 4.8.2. In its consideration of traffic and transportation below, the Examining Authority (ExA) has had regard to:
- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1) in particular Section 5.14;
 - the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8;
 - the Local Impact Reports (LIRs), to the extent they are relevant to the topic;
 - any matters prescribed in relation to the development; and
 - any other important and relevant matters.

THE APPLICATION

- 4.8.3. Environmental Statement (ES) Chapter 27 Traffic and Transport [\[APP-041\]](#) and Chapter 32 Tourism and Recreation [\[APP-046\]](#) present the assessment of the potential impact of the Proposed Development on Traffic and Transportation, and recreational routes respectively. The Chapters:
- Present the existing baseline and identify any assumptions and limitations encountered in compiling the baseline information;
 - present the potential effects of the Proposed Development on traffic and transportation and recreational routes during the construction, operation and decommissioning phases; and

- highlight any necessary monitoring and/or mitigation measures which could avoid, reduce, or mitigate the possible effects of the Proposed Development on traffic and transportation, and recreational routes.

4.8.4. ES Chapters 27 and 32 are supported by figures [\[APP-075\]](#) [\[APP-090\]](#) and appendices which includes the Transport Assessment (TA) [\[APP-165\]](#), the Abnormal Indivisible Load Access Report [\[APP-166\]](#), Inter-relationships [\[APP-167\]](#) and the Traffic and Transport Consultation [\[APP-168\]](#). Other application documents that are relevant include the Outline Construction Traffic Management Plan (OCTMP) [\[APP-251\]](#) and the Outline Public Right of Way Management Plan (PRoWMP) [\[APP-252\]](#).

4.8.5. While traffic borne air quality, noise, vibration and health effects have been informed by the data in ES Chapter 27, these effects have been assessed in ES Chapter 26 Noise and Vibration [\[APP-040\]](#), Chapter 20 Onshore Air Quality [\[APP-034\]](#) and ES Chapter 28 Human Health [\[APP-042\]](#). A number of plans are also of relevance:

- Works Plans (Onshore) [\[APP-201\]](#);
- Access to Works Plans [\[APP-204\]](#);
- Streets Plan [\[APP-205\]](#); and
- Public Rights of Way Plan [\[APP-206\]](#).

BASELINE

4.8.6. In the Traffic and Transport Study Area (TTSA), the Applicant identified 46 highway links for the assessment of the effects of severance, amenity, highway safety and driver delay (road closures). With agreement from the relevant Highway Authorities, the assessment of effects for driver delay (capacity) was not assessed due to a commitment to ensure that 80% of employees arrive prior to the morning network peak hour and depart before or after the evening peak hour. No assessment of the effects for driver delay (highway geometry) was undertaken because of the commitment to widen Bentley Road between the A120 and Little Bromley. For abnormal loads, the Electronic Service Delivery for Abnormal Loads (ESDAL) would be proposed to be used to ensure timings would be coordinated and potential effects would not be significant.

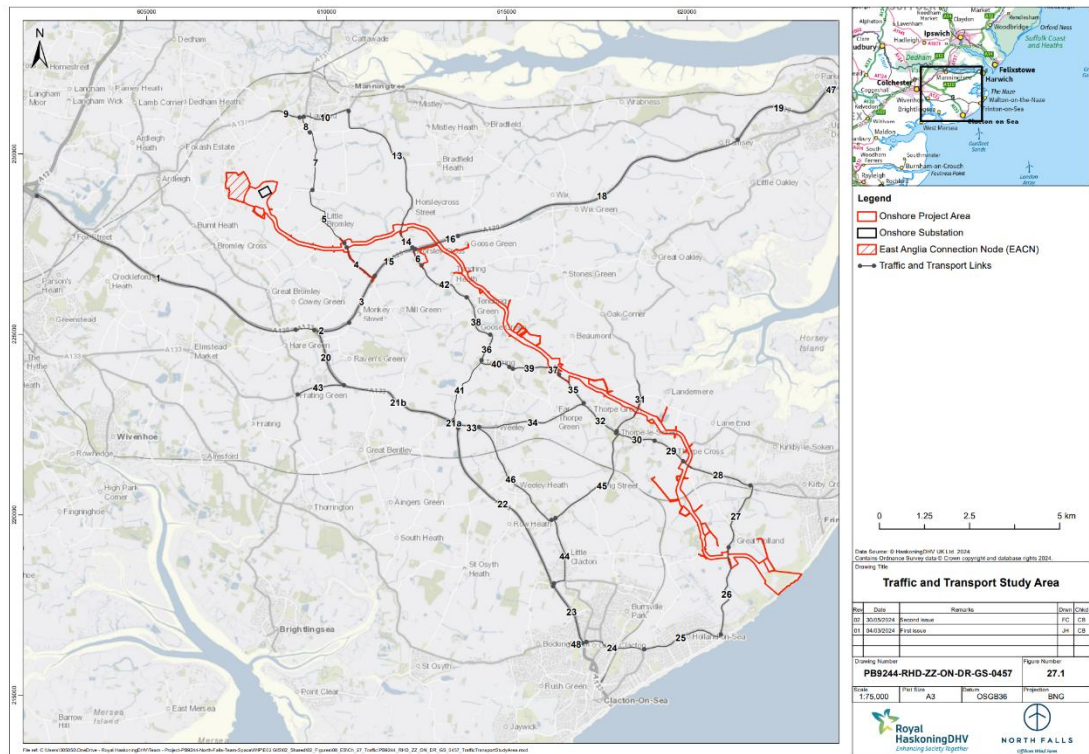


Figure 20: Traffic and Transport Study Area with traffic and transport links (source: Figure 27.1 of ES Chapter 27 Figures [APP-075])

- 4.8.7. The Environmental Assessment of Traffic and Movement (EATM) has been used as the principal guidance for the traffic and transport specific methodologies to inform a significance evaluation. To take account of sub-regional growth in housing and employment, a proportionate approach to forecasting future traffic growth for the 2027 reference year was agreed with Essex County Council (ECC) and National Highways (NH).
- 4.8.8. The baseline traffic flow data for all links within the TTSA has been informed from road traffic statistics and traffic counts, which were undertaken in neutral months. The TA [APP-165] contains full details of this data and a summary of the baseline traffic flows for all links within the TTSA is provided in ES Chapter 27 [APP-041]. The Applicant agreed with ECC (at a meeting on the 9 July 2021) and NH (at a meeting on the 7 June 2022) that the TA would constitute an abridged document providing the technical inputs informing the ES. This included establishing baseline traffic flows, baseline highway safety data, the derivation and distribution of construction traffic and the access strategy. Furthermore, it was agreed that because there would be no significant traffic and transport effects anticipated in the operational phase, no operational phase assessment would be presented in the TA.
- 4.8.9. For recreational routes, the Applicant has assessed the effects of the Proposed Development on PRoWs, long distance trails and cycle routes.
- 4.8.10. The assessment of cumulative effects considers other plans, projects and activities that may impact cumulatively with the Proposed Development. The Cumulative Effects Assessment (CEA) includes the effects from Five Estuaries Offshore Wind Farm (VEOWF) and North Falls Offshore Wind Farms (NFOWF), and other projects.

- 4.8.11. ES Chapter 27 identifies that a concurrent Development Scenario (Scenario 1) is the realistic worst-case scenario of cumulative effects arising from VEOWF and NFOWF.

MITIGATION

- 4.8.12. The Applicant's proposed embedded mitigation for Traffic and Transport is summarised in Section 27.3.3 of ES Chapter 27. Specific mitigation secured within the Applicant's draft Development Consent Order (dDCO) [\[REP8-005\]](#) includes:

- Schedule 1, Part 1, Work No. 9 includes proposed works to permanently widen and improve the existing junction between Bentley Road and the A120 and to permanently widen and improve the existing Bentley Road from A120 to Works No. 6, including temporary provision of area for non-motorised user access.
- Schedule 1, Part 3:
 - Requirement (R) 8 Code of Construction Practice (CoCP);
 - R9 Construction Traffic Management Plan (CTMP);
 - R10 Permanent highway accesses;
 - R23 Horizontal directional drilling method statement (trenchless crossing technique);
 - R24 Public rights of way ;
- Schedule 2 - Streets and Public Rights of Way subject to Street Works; and
- Schedule 3 - Traffic Regulation.

- 4.8.13. The outline CTMP [\[REP8-013\]](#) includes the following proposed control measures and monitoring procedures for managing the potential traffic and transport effects during the construction period:

- An access strategy that includes construction of a temporary haul road along the cable route;
- appointment of a Traffic Management Co-ordinator (TMCo);
- to ensure compliance with the assessed worst-case scenario for heavy goods vehicle (HGV) trips, a booking system for deliveries would be established that would enable a daily profile of deliveries to be maintained (to include specific limits on Links 25 and 35);
- restrictions on HGV timings due to the working hours specified in the Outline Code of Construction Practice (OCoCP) [\[REP7-025\]](#) which includes a list of limited circumstances where onshore works would occur outside of these hours.
- HGV movements through Thorpe-le-Soken would be scheduled outside of school start and finish times;
- control of HGV routes to minimise effects on sensitive receptors;
- formal driver inductions for HGV drivers covering HGV routes, safety concerns and speed limits;
- procedures for abnormal loads;
- to ensure compliance with the assessed worst-case scenario for Light Vehicle (LV) trips, a resource forecast for the numbers of employees that could be travelling would be established and any potential exceedances and would be regularly reviewed / reforecast during construction;
- personnel travel plan measures that could be adopted include car share pick up locations, designated parking, walking / cycling facilities, guaranteed lift home, staff noticeboard and welfare facilities;
- restrictions on LV trips timing due to the working hours specified in the OCoCP [\[REP7-025\]](#) and the assumptions used in the assessment of driver delay (capacity);

- traffic management standards and procedures to secure: control material on the highway; technical approval of accesses, road crossings and highway works; traffic management measures; cable crossings (including road closures and trenchless crossing techniques); road safety; streetworks, parking and loading; traffic incident management; highway condition surveys; and noise management;
- monitoring vehicle movements along Link 24, to ensure that the peak daily change in total traffic flow from the Proposed Development would be less than 30% (compared to background flows); and
- monitoring targets and measures, enforcement to ensure compliance and development of an action plan.

4.8.14. R24 PRoW requires approval by the relevant planning authority of a PRoWMP prior to the onshore works commencing. The Outline PRoWMP [APP-252] provides details of the proposed mitigation to manage the impacts upon PRoWs.

ASSESSMENT OF EFFECTS

CONSTRUCTION, OPERATION AND DECOMMISSIONING

4.8.15. The Applicant's summary in ES Chapter 27 [APP-041] states that a total of 46 highway links and 13 cluster sites within the TTSA have been assessed for the impacts of amenity, severance, highway safety and driver delay (the ExA notes driver delay is from road closures only). With the application of additional mitigation measures (as appropriate) the residual effect upon all receptors was assessed to be not significant in EIA (Environmental Impact Assessment) terms, as shown in Table 27.42, ES Chapter 27. It is noted in Table 27.1, ES Chapter 27, that as set out in the scoping opinion no operational scenarios would be assessed within the traffic and transport impact assessment.

4.8.16. The Applicant's assessment of the potential for cumulative effects with other schemes has also been undertaken, notable schemes considered included, VEOWF and the National Grid Electricity Transmission's Norwich to Tilbury project. A summary of predicted cumulative effects is provided in Table 27.43, ES Chapter 27. With the application of additional mitigation measures (as appropriate) the residual cumulative effects upon all receptors was assessed to be not significant in EIA terms. Additional mitigation includes a commitment to limit HGV numbers, enhanced maintenance measures and enhanced driver inductions.

4.8.17. The Applicant's summary in ES Chapter 32 Tourism and Recreation [APP-046] found that during the construction, operation and decommissioning phases, recreational residual effects are assessed to be negligible or minor adverse. The Applicant's assessment of cumulative effects found they were not significant without the need for additional mitigation.

ISSUES CONSIDERED DURING THE EXAMINATION

4.8.18. The following Interested Parties (IPs) raised the initial concerns below:

- Suffolk County Council (SCC) - effects on onshore port and transportation that could arise from the construction, operation and decommissioning of the offshore works;
- NH - junction capacity assessments;
- NH and SCC - adequacy of mitigation for the risks associated with the abnormal indivisible loads proposals; and
- NH and ECC - adequacy of the outline construction traffic management plan.

- 4.8.19. The above matters were explored during the course of the Examination and subject to submissions made by the Applicant, those matters were agreed by the close of the Examination and shown as agreed in the following Statement of Common Ground (SoCG): ECC [[REP8-060](#)], NH [[REP8-080](#)] and SCC [[REP8-068](#)].
- 4.8.20. The issue emerging during the Examination that the ExA has examined, considered and concluded on is the impact on construction traffic effects if working hours would be reduced.

IMPACT ON CONSTRUCTION TRAFFIC EFFECTS IF WORKING HOURS WOULD BE REDUCED

- 4.8.21. In ECC and TDC's response [[REP2-036](#)] to ExQ1 1.4.2, TDC had specific concerns regarding the Applicant's proposed working hours detailed in Section 1.3.1 Outline Code of Construction Practice [[APP-248](#)].
- 4.8.22. TDC considered the proposed working hours to be outside those normally applied within the district and proposed the following amendments:
- No vehicles associated with the works should arrive on-site before 0730 or leave after 1900, except in emergencies.
 - Working hours for high-impact (noisy) activities should be restricted to 0800–1800, Monday to Friday, and 0800–1300 on Saturdays.
 - No construction activity of any kind should be permitted on Sundays or Public/Bank Holidays.
- 4.8.23. Furthermore, TDC set out that these amendments would enhance the robustness, precision, and enforceability of the OCoCP, ensuring effective mitigation of potential adverse impacts on directly affected residents and the surrounding community.
- 4.8.24. The Applicant stated [[REP3-036](#)] with regards to amending construction working hours and timing of works, it is unable to accommodate ECC and TDC's request. The Applicant's proposed working hours are standard for major infrastructure projects (including VEOWF) and would provide a balance between avoiding the times which would have the greatest potential to disturb people and would enable the works to be completed in a timely manner.
- 4.8.25. In ExQ3 1.0.1 Parts (i) to (iv) [[PD-016](#)] the ExA sought to understand further details of the highway impacts if the working hours proposed by TDC would be adopted. The Applicant's response [[REP7-051](#)] to part (i), sets out that the worst case onshore construction programme for some sections would be up to 27 months and if the working hours would be reduced as proposed this would equate to a 28% reduction in available weekly working time, leading to a further 8 months on the construction programme. The Applicant clarified that specifically in terms of cumulative effects, extending the duration of the onshore construction works would have the potential to lead to the Proposed Development's construction period overlapping with that of other projects.
- 4.8.26. In response to ExQ3 1.0.1 part (ii) [[REP7-051](#)], the Applicant states that reducing the daily working hours may give rise to secondary effects from construction traffic movements by reducing the period in the day in which deliveries would occur, and therefore resulting in higher hourly flows and potentially in greater effects during each hour of the working day. The Applicant highlighted that these higher hourly flows could create conflicts around other sensitive time periods raised by ECC and other relevant stakeholders, for example, following discussions with ECC, the Applicant has committed to avoiding HGV movements through Thorpe-le-Soken

during school start and finish times. The Applicant also noted therefore that restricting working hours until after 0800 could lead to significant driver delay effects without further mitigation. The Applicant clarified that further mitigation would likely comprise the construction of new transport infrastructure and either junction capacity improvements or extensive use of demand management measures. The Applicant also noted that the strategy proposed to avoid peak hours through demand management aligns with the requirement of EN-1 paras 5.14.11 and 5.14.15.

- 4.8.27. In response to ExQ3 1.0.1 part (iii) [\[REP7-051\]](#), the Applicant explained that the changes to working hours proposed by TDC would lead to a redistribution of construction traffic and could lead to increases in peak daily HGV movements on certain links, with the potential to cause significant noise effects.
- 4.8.28. In relation to ExQ3 1.0.1, ECC's summary [\[REP8-101\]](#) included that, in terms of traffic impacts, reducing the working hours would potentially result in significant impacts. Further ECC explained its preference for traffic to travel outside of peak periods (hence the requirement at paragraph 61 of the OCTMP that no more than 20% of the peak daily light vehicle demand would travel during the peak hours), and subsequently reduce traffic impacts during the busiest periods. ECC highlighted that if the working hours were to be reduced, then it would require updating of the transport assessment to identify any further significant impacts and associated mitigation or controls.

EXA'S CONSIDERATION

- 4.8.29. The ExA notes that TDC proposed that the weekly working hours be reduced from 72 hours to 55 hours to align with local standards, to ensure effective mitigation of potential onshore construction activities and respite for nearby affected residents and because the in-combination effects with other Nationally Significant Infrastructure Projects (NSIPs) would be very considerable.
- 4.8.30. The ExA notes ECC's concerns that reducing the working hours would potentially result in significant impacts, and its preference for traffic to travel outside of peak periods (hence the restriction at paragraph 61 of the OCTMP), and subsequently reduce traffic impacts during the busiest periods. The ExA is also mindful of ECC's concerns that if the working hours were to be reduced, then it would require updating of the transport assessment to identify any further significant impacts and associated mitigation or controls. The ExA notes that the mitigation for the Proposed Development includes retiming travel outside of the known peak times in accordance with EN-1 para 5.14.11. If the working hours were reduced this would create a conflict with EN-1 para 5.14.11 as the travel could not be retimed outside of the peak times due to the reduced working hours. The ExA is also mindful of ECC's concerns that if the working hours were to be reduced, then it would require updating of the transport assessment to identify any further significant impacts and associated mitigation or controls.
- 4.8.31. The ExA notes the Applicant has assessed the impact if a reduction in working hours would be implemented and has found that:
- There would be up to an 8 month increase to the construction programme with associated potential for greater cumulative effects from traffic;
 - there would be potential for significant driver delay effects without further mitigation; and

- it could lead to increases in peak daily HGV movements on certain links due to a redistribution of construction traffic.

- 4.8.32. The ExA notes that TDC has not disputed the estimated increase to the construction programme.
- 4.8.33. Regarding TDC's concerns above, the ExA is mindful that all traffic and transport matters were agreed with ECC [\[REP8-060\]](#) and has no reason to agree otherwise with the Applicant's assessment in ES Chapter 27 that with the implementation of embedded and additional mitigation measures, there would be no significant effects arising from the Proposed Development alone or cumulatively during the construction phase. Therefore, the ExA is satisfied there would be no unacceptable harm.
- 4.8.34. Regarding TDC's proposed reduction in hours, given the resulting longer construction programme could lead to more harm and that ECC agree with the Applicant's proposed working hours, the ExA is persuaded by the Applicant's case for its proposed working hours.
- 4.8.35. The ExA accepts the Applicant's proposed working hours would provide a balance between avoiding the times which would have the greatest potential to disturb people and would enable the works to be completed as quickly as practicable. The ExA therefore concludes the working hours should remain unchanged as presented in Section 1.3.1 of the OCoCP [\[REP7-025\]](#). The ExA is satisfied that the working hours would be secured in the Code of Construction Practice (CoCP), which is in accordance with the OCoCP, under R9 of the Applicant's dDCO [\[REP8-005\]](#).

CONCLUSIONS

- 4.8.36. The ExA notes all matters relating to traffic and transportation were agreed in the final signed SoCGs with ECC [\[REP8-060\]](#), NH [\[REP8-080\]](#) and SCC [\[REP8-068\]](#). All organisations were content with both the assessments and the controls in place to manage construction traffic via the OCTMP [\[REP8-013\]](#).
- 4.8.37. The ExA is satisfied that the Applicant's assessment within ES Chapter 27, which includes a Transport Assessment in ES Appendix 27.1 [\[APP-165\]](#), considers all relevant potential transport effects during the construction, operation and decommissioning phases of the Proposed Development alone and cumulatively with other projects in accordance with section 5.14 of NPS EN-1.
- 4.8.38. The ExA is satisfied that transport effects would be satisfactorily mitigated and managed through the measures contained within the OCTMP, secured by R9 of the dDCO [\[REP8-005\]](#). These include, amongst other things, the incorporation of demand management measures, routing of HGV movements, appropriate loading and unloading and parking areas for construction vehicles, and welfare facilities in accordance with section 5.14 of NPS EN-1.
- 4.8.39. Overall, the ExA finds that there would be no significant adverse effects or significant cumulative effects on the surrounding transport infrastructure arising from the Proposed Development. The Applicant's Transport Assessment has followed the mitigation hierarchy and meets the policy tests of NPS EN-1.
- 4.8.40. Regarding TDC's proposal for a reduction in the Applicant's proposed weekly working hours, the ExA considers that in relation to traffic effects, the working hours should remain unchanged as presented in Section 1.3.1 of the OCoCP [\[REP7-025\]](#). The ExA is satisfied that with the implementation of the proposed mitigation, the

Applicant's proposed working hours would not give rise to unacceptable levels of harm. The ExA is satisfied that the working hours would be secured in the CoCP, which is in accordance with the OCoCP, under R9 of the Applicant's dDCO [\[REP8-005\]](#).

- 4.8.41. However, given there would be some temporary minor adverse effects (not significant) during construction on the road network, the ExA concludes that effects on traffic and transport carry a little negative weight against the making of the Order.

5. OFFSHORE ISSUES

5.1. COMMERCIAL FISHERIES

INTRODUCTION

- 5.1.1. This section considers the effects of the Proposed Development in relation to commercial fisheries to include the socio-economic effects.
- 5.1.2. In its consideration of commercial fisheries below, the Examining Authority (ExA) has had regard to:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Sections 4.3 and 4.5;
- the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8;
- the relevant policies of the UK Marine Policy Statement, the East Inshore and East Offshore Marine Plans and the South East Marine Plan;
- any matters prescribed in relation to the development; and
- any other important and relevant matters.

THE APPLICATION

- 5.1.3. Environmental Statement (ES) Chapter 14 Commercial Fisheries [[APP-028](#)] presents the assessment of the potential impacts of the Proposed Development. The chapter:
- Presents the existing baseline and identifies any assumptions and limitations encountered in compiling the baseline information;
 - presents the potential effects of the Proposed Development on commercial fisheries during the construction, operation and decommissioning phases; and
 - highlights any necessary monitoring and/or mitigation measures which could avoid, reduce, or mitigate the possible effects of the Proposed Development on commercial fisheries.
- 5.1.4. Other application documents that are relevant include the associated figures [[APP-059](#)], Commercial Fisheries Technical Report [[APP-105](#)], the Outline Fisheries Liaison and Coexistence Plan [[REP7-021](#)] and ES Chapter 31 Socio-economics [[AS-010](#)].

BASELINE

- 5.1.5. The Applicant has defined the study area using the International Council for the Exploration of the Sea (ICES) divisions. The divisions that overlap with the offshore order limits have been used to define the boundary for the study areas for describing commercial fisheries activity. As shown in Figure 21 below, the Proposed Development would route through both ICES rectangle 32F1 where the majority of the offshore project area would be located and 32F2 where a small section of the array area would be located.

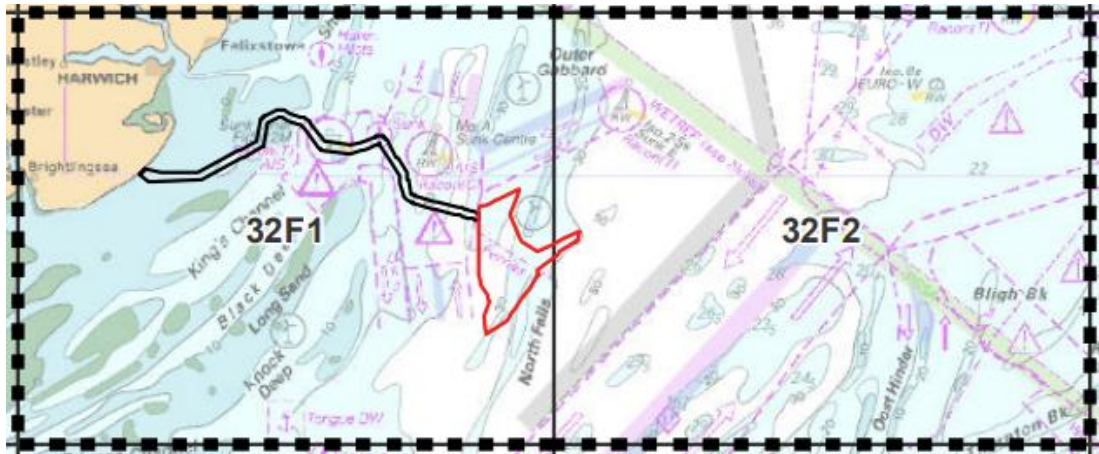


Figure 21 – Commercial Fisheries Study Area showing the Proposed Development
(Source: from Figure 14.1 of ES Chapter 14 [APP-059])

- 5.1.6. Section 14.4.2 of ES Chapter 14 states that the commercial fisheries baseline has been informed through the review and analysis of available fisheries data and information from relevant publications. The available data and information sources are presented in Table 14.7, ES Chapter 14. Table 14.2, ES Chapter 14, presents the consultation undertaken via the Fisheries Liaison Officer (FLO) to gather baseline information to inform Chapter 14.

MITIGATION

- 5.1.7. The impacts against the various commercial fishing receptors have been considered in ES Chapter 14. Embedded mitigation has been set out which applies to all commercial fishing receptors. The Applicant's proposed embedded mitigation is summarised in ES Chapter 14 under Section 14.3.3 and Table 14.4. This includes the following:

- Accidental pollution – final Project Environmental Management Plan (PEMP) [REP6-027] would be agreed with the Marine Management Organisation (MMO);
- appointment of a FLO during construction and as required during operation
- Fisheries Liaison and Coexistence Plan (FLCP);
- notifications – timely and efficient distribution of Notices to Mariners (NtMs), Kingfisher Notifications and other navigational warnings;
- development of a standard procedure for claims for loss of/damage to fishing gears;
- development of a Code of Good Practice for contracted vessels to facilitate co-existence;
- Cable Burial Risk Assessment (CBRA) to include cable protection measures, with rock placement designed to reduce potential gear snagging risk where practicable;
- cable protection charting and dissemination of information to relevant stakeholders;
- post-lay and cable burial inspection to facilitate co-existence and prevent potential damage to and from fishing gear, and reduces potential safety risks;
- communication of and measures for potential cable exposures during the operational phase; and
- Wind Turbine Generator (WTG) spacing.

- 5.1.8. The mitigation measures would be secured in the draft Development Consent Order (dDCO) [REP8-005] through the draft Deemed Marine Licences in Schedule 8 and

10 Part 2, Conditions 15, 21(1) d and k; and in Schedule 9 Part 2, Conditions 16, 22(1) d and k. The FLCP would be required under draft Deemed Marine Licence (dDML) condition 21(1) k or 22(1) k for Schedules 8 and 10, or Schedule 9 respectively. The outline FLCP includes the above embedded mitigation measures, except for WTG spacing. WTG spacing would be secured in the dDCO Schedule 1, Part 3, Requirement 2(2).

- 5.1.9. No additional mitigation specific to commercial fisheries is identified in ES Chapter 14, Tables 14.20 and 14.21. The ExA notes that embedded mitigation relevant to the fish and shellfish ecology is included in Table 11.3 of ES Chapter 11 [\[APP-025\]](#) and this is discussed further in Section 5.2 of this Report.

ASSESSMENT OF EFFECTS

CONSTRUCTION, OPERATION AND DECOMMISSIONING

- 5.1.10. Potential impacts as identified by the Applicant for construction, operation and maintenance, and decommissioning stages (except as noted below) include:
- Temporary loss or restricted access to fishing grounds;
 - long term loss or restricted access to traditional fishing grounds (during operation and maintenance only);
 - displacement of fishing activities into other areas;
 - increased steaming times to fishing grounds;
 - interference with fishing activities (navigational conflict);
 - safety issues for fishing vessels; and
 - impacts on commercial fishing as a result of impacts on commercially exploited species.
- 5.1.11. These impacts have been assessed against a range of commercial fishing receptors such as United Kingdom (UK) local inshore vessels and other commercial fishing vessels, including UK, French, Dutch and Belgian vessels.
- 5.1.12. These are assessed against what is considered worst-case scenarios, based on the potential scenarios for the Proposed Development. As set out by the Applicant in ES Chapter 14 para 15, in the case of commercial fisheries, Options 1 and 2 would be the same and represent the worst-case scenario.
- 5.1.13. ES Chapter 14, paragraph 294 identifies that given the wide operational range of some of the fleets active in areas relevant to the Proposed Development, consideration has been given to projects / activities over a wide spatial extent, including the North Sea and English Channel. ES Chapter 14, paragraph 295 includes that other projects / activities with potential to result in cumulative effects include offshore wind farm projects, aggregate dredging activity, interconnector cables, and the implementation of restrictions to fishing in MPAs (Marine Protected Areas).
- 5.1.14. The summary in ES Chapter 14 states the impacts for the construction, operation and decommissioning of the Proposed Development on commercial fisheries receptors would not be anticipated to exceed minor adverse significance (not significant in Environmental Impact Assessment (EIA) terms).
- 5.1.15. The Applicant also sets out that the cumulative impacts on commercial fisheries were assessed to be minor for the majority of impacts, with the remaining impacts assessed to be below minor.

- 5.1.16. It should be noted that Table 31.58 of ES Chapter 31 Socio-economics [AS-010] summarises that the wider economic effects from disruption to fishing as minor adverse (not significant) for the Proposed Development. Table 31.59 of ES Chapter 31 shows that the potential cumulative effects for wider economic effects from disruption to fishing would also be minor adverse.

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.1.17. Issues emerging during the Examination that the ExA has examined, considered and concluded on are:
- Assessment methodology for effects on commercial fishing;
 - adequacy of the proposed mitigation; and
 - socio-economic effects from disruption to fishing.
- 5.1.18. There are no substantive comments relating to commercial fisheries in any of the submitted Local Impact Reports (LIR).

ASSESSMENT METHODOLOGY FOR EFFECTS ON COMMERCIAL FISHING

- 5.1.19. The Harwich Harbour Fisher's Association (HHFA) objected to the Proposed Development [RR-125] on the grounds of its members would suffer considerable changes to their existing fishing area and the long term effect on the future generation. To support its concerns that the Applicant's assessment does not represent the impact to its vessels under 10m in length, the HHFA submitted to the Examination the MMO's final report (MMO1382) [AS-047] Sensitivity of the under 12m fishing fleet to offshore wind development in the east marine plan areas, dated June 2024. The Applicant responded [REP3-038] that the information contained in this report does not affect the findings of ES Chapter 14 Commercial Fisheries [APP-028] which are based on project specific information and data, including consultation with the fishing industry and the Commercial Fisheries Working Group (CFWG). At Issue Specific Hearing (ISH) 2 [EV6-009], the ExA explored if the HHFA was satisfied with the Applicant's response [REP3-038]. HHFA reiterated its view that the Applicant's assessment wasn't representative of the fishing fleet that is impacted by the wind farm. The Applicant responded [REP4-034] that its assessment had considered all vessel sizes, including vessels less than 12m.
- 5.1.20. In ExQ1 16.1.3, Part (iii) [PD009], the ExA asked the Applicant how it had addressed concerns from the NFFO [RR-238] relating to an underestimation of the impacts in the commercial fisheries assessment.
- 5.1.21. The Applicant's response [REP2-020] confirmed that the assessment was carried out using the standard Environmental Impact Assessment (EIA) methodology described in Chapter 6 EIA Methodology [APP-020] and in line with the established methodology used for assessment on commercial fishing for offshore wind farm projects across the UK. The Applicant explained that the conclusions on impact significance take account of the sensitivity of the receptors, the magnitude of the impact in the context of the commercial fisheries baseline identified and the wide range of embedded mitigation measures (Table 14.4, ES Chapter 14 [APP-028]).
- 5.1.22. The NFFO [RR-238] had particular concerns with:
- The assumption that mobile gear vessels can simply move from the area during construction reduces the level of impact these fisheries will feel;

- the misclassification and the lack of understanding on drift netting that is one of the key stone fisheries methods used in the region.

5.1.23. The Applicant's response [REP1-045] included that the potential impact of construction activities on mobile fishing vessels include consideration of both the magnitude of the impact and the sensitivity of the receptor. Regarding mobile gear vessels, the Applicant further explained that factors that affected the impact significance were the low activity levels in the Proposed Development area, as well as the temporary nature of construction works and the proposed embedded mitigation measures. Regarding drift netting, the Applicant explained that a description is provided in Section 9.7 of Annex 1 ES Appendix 14.1 [APP-105]. Further the Applicant explained that throughout its assessment [APP-028] drift netting is classified as a static / passive gear method and is grouped with other static / passive gear types (i.e. longlines and pots) for the assessments.

5.1.24. The NFFO's final Statement of Common Ground (SoCG) [REP8-066] includes:

- That it is not content with the assessment methodology used to inform Chapter 14 Commercial Fisheries [APP-028];
- that it does not consider that the Proposed Development alone assessment sufficiently assesses the socioeconomic impacts on commercial fisheries and are therefore not content with the conclusions reached; and
- that it is not content with the methodology used for the Proposed Development alone and therefore is also not content with the methodology that underpins the cumulative impact assessment and therefore is not content with the conclusions assessed.

5.1.25. No common ground was agreed with HHFA [REP8-086].

5.1.26. The MMO agreed in its final SoCG [REP8-064] that the conclusions of the Applicant's assessment are appropriate.

EXA'S CONSIDERATIONS

5.1.27. The ExA acknowledges HHFA's concern that the Applicant's assessment did not represent the impact to its vessels under 10m in length. The ExA notes from paragraph 22 of ES Chapter 14 that extensive consultation with local fisheries stakeholders has been carried out to aid the collection of baseline information. The ExA notes that ES Chapter 14 [APP-028], Section 14.5 provides surveillance sightings for UK vessel types and paragraphs 37 to 41 considers UK fishing activity including vessels under 10m in length. Furthermore, the Applicant confirmed [REP4-034] its assessment had considered all vessel sizes, including vessels less than 12m (12m was referred to in the MMO's report [AS-047] as discussed above). Based on the above, the ExA has no reason to agree otherwise that the Applicant's assessment has considered all vessel sizes.

5.1.28. The ExA acknowledges that the NFFO [REP8-066] is not content with the assessment methodology. The ExA notes that the Applicant's assessment was carried out using the EIA methodology described in ES Chapter 6 [APP-020] and in line with the established methodology used for assessment on offshore wind farm projects across the UK. The ExA also notes that the Applicant's conclusions on residual effects take account of the sensitivity of the receptors, the magnitude of the impact in the context of the commercial fisheries baseline identified and the wide range of embedded mitigation measures. The ExA notes the NFFO's [RR-238] particular concerns above regarding the assumptions for mobile gear and drift netting, and is satisfied that the Applicant's response above [REP1-045] has

demonstrated that these have been adequately considered in the assessment. In consideration of the above, the ExA is therefore satisfied with the assessment methodology and that this is in accordance with NPS EN-3 2.8.153 which includes that the Applicant should consider both direct impacts on fishing activity and indirect impacts such as displacement and the ability of fishers to relocate.

- 5.1.29. The adequacy of the proposed mitigation and the conclusions of residual effects, including the NFFO's concerns are discussed further below.

ADEQUACY OF THE PROPOSED MITIGATION

CABLE BURIAL

- 5.1.30. Regarding the safety concern raised by NFFO [\[RR-238\]](#) that the offshore cables could become exposed, the Applicant's response to ExQ1 16.1.3 (v) [\[REP2-020\]](#) includes reference to the embedded mitigation measures in Table 14.4 ES Chapter 14 Commercial Fisheries [\[APP-028\]](#). The Applicant explained if cable exposures were identified during the operational phase, the location of these would be published via the standard notices with additional liaison to be undertaken with fisheries stakeholders. The Applicant also noted, where appropriate, additional temporary measures would also be put in place (e.g. surface marker buoys, use of guard vessels, etc) and that the Applicant must notify mariners in the event of cable exposure, as required by condition under each of the DMLs – see paragraph 15(12) of Schedule 8, paragraph 16(12) of Schedule 9, and paragraph 15(12) of Schedule 10 [\[REP8-005\]](#).
- 5.1.31. In ExQ1 Q15.1.3 [\[PD-009\]](#), the ExA also asked the Applicant how it would mitigate the risk raised by the HHFA [\[RR-125\]](#) of preventing offshore buried cables becoming exposed and causing a snagging hazard to fishing vessels. The Applicant's response [\[REP2-020\]](#) includes reference to the Outline FLCP [\[APP-244\]](#) which includes commitments to bury cables to a minimum of 0.6m where practicable and to evaluate appropriate protection measures for cables that cannot be buried to this depth. Further, the Applicant's response noted that the final burial depth would be based on the Cable Burial Risk Assessment to ensure that every cable is sufficiently protected from any hazards that may occur above it. The Applicant clarified that where rock placement is required for cable protection, designs that minimise potential gear snagging risk would be used, where practicable. The Applicant noted this would facilitate co-existence and minimise potential damage to and from fishing gear and associated safety risk. The Applicant also highlighted that under the DMLs Schedules 8 and 10 Part 2 Condition 21(1)(h)(iv), and Schedule 9 Part 2 Condition 22(1)(h)(iv) [\[REP8-005\]](#) the Applicant must provide proposals for approval by the MMO, in consultation with the MCA and Trinity House, in relation to monitoring offshore cables, including cable protection, during the operational lifetime of the Proposed Development.
- 5.1.32. At ISH2 [\[EV6-009\]](#), the ExA asked the HHFA if it was satisfied that the Applicant's proposed methods of cable protection were adequate to prevent future exposure of cables resulting in them becoming a snagging hazard. The HHFA responded with concerns that it wasn't just the cable exposure that creates the hazard it is also how many cable crossings and how they would be covered. The Applicant's response [\[REP4-034\]](#) included that indicative locations requiring cable protection along the export cable route were shown on the plans [\[REP1-059\]](#). The HHFA also added that protection with rock is a hazard to fishing, although it might be liked by potters, trawlers cannot travel over that as it forms an obstruction and they would have to avoid it. The Applicant's response included reference to the embedded mitigation in

Table 4.1 of the Outline FLCP [\[APP-244\]](#) and that it welcomed a discussion with the HHFA on the Outline FLCP.

- 5.1.33. In response to HHFA's concerns [\[REP4-075\]](#) regarding post-lay and cable burial inspections, the Applicant confirmed [\[REP5-056\]](#) its commitment to undertake these as shown in Table 14.4, ES Chapter 14.

MITIGATION DEVELOPMENT

- 5.1.34. At ISH2 [\[EV6-009\]](#), the ExA asked the Applicant whether the mitigation proposals result from the Applicant having sufficiently detailed consultation with relevant representatives of the fishing industry, Inshore Fisheries and Conservation Authorities, the MMO and the relevant Defra policy team in England. The Applicant responded [\[REP4-034\]](#) that consultation had been undertaken with local, national and international fisheries bodies and groups, and that mitigations to address potential impacts were embedded. The Applicant further explained it was developing SoCG with the CFWG and NFFO and were in discussions with the Kent and Essex Inshore Fisheries Conservation Authority (KEIFCA) to ascertain whether it wished to progress a SoCG.
- 5.1.35. At ISH2 [\[EV6-009\]](#), the ExA enquired whether the mitigation has been designed sufficiently to enhance where reasonably possible any potential medium and long-term positive benefits to the fishing industry, commercial fish stocks and the marine environment. The Applicant confirmed [\[REP4-034\]](#) it had not identified any potential beneficial impacts of the Proposed Development to commercial fishing and referenced NPS-EN3, which it stated sets out that offshore wind farms can have both adverse and positive effects.
- 5.1.36. In ExQ2 16.0.1(i) [\[PD-012\]](#), the ExA posed the same question as above to the MMO and in ExQ2 16.0.1(ii) the ExA asked the MMO whether any additional mitigation measures and/or safeguards are necessary. The MMO's response [\[REP6-082\]](#) included that there is limited evidence to suggest that the proposed mitigation would deliver or enhance any medium- or long-term positive benefits to the fishing industry or commercial fish stocks, and consideration should be given to the potential introduction of further fisheries management measures within MPAs under Stages 3 and 4 of the assessment and management process for fishing in offshore MPAs.
- 5.1.37. Following on from the MMO's response above, the Applicant responded to ExQ3 16.01 [\[REP7-051\]](#), that whilst the Proposed Development does overlap with a Stage 4 site, as noted by the MMO, these sites have not received any further public updates following the call for evidence which closed in February 2024 and how potential management measures, if any, may be progressed, is currently unknown. The Applicant noted that the consultation with the fishing industry is on-going and would continue post-consent, including as part of the already established CFWG. Further, the Applicant stated where appropriate this may include discussion with regards to developments in relation to fisheries management measures in MPAs.
- 5.1.38. In response to ExQ3 15.011 [\[REP7-051\]](#), the Applicant confirmed that the Outline FLCP [\[REP7-021\]](#) had been updated to include the additional mitigation measure from the SoCG with the CFWG as follows: "in order to minimise disruption to vessels actively engaged in fishing, survey vessels engaged in North Falls activities will adhere to seafarers' etiquette to avoid being in the path of mobile fisher. Whilst vessels would seek to give way to mobile fishers operating in the area, it would not be possible for vessels engaged in activities such as operating a borehole, to move off".

FINAL SOCGS

5.1.39. NFFO's final SoCG [REP8-066] shows that:

- It is content that the majority of the embedded mitigation outlined in Table 14.4 Chapter 14 Commercial Fisheries [APP-028] are appropriate and that the measures outlined in the Outline Fisheries Liaison and Coexistence Plan [APP-244] are appropriate for liaison and consultation and would continue to be developed post-consent; and
- it is not content that a target minimum burial depth of 0.6m would be sufficient for minimising potential interactions between fishing gear and cables.

5.1.40. No common ground was agreed with HHFA [REP8-086].

5.1.41. The MMO agreed in its final SoCG [REP8-064] that the mitigation is appropriate and also confirmed it had no outstanding concerns following the update of the Outline FLCP [REP7-021] at Deadline 7.

EXA'S CONSIDERATIONS

5.1.42. The ExA acknowledges the NFFO's concerns: that a target minimum burial cable depth of 0.6m would be insufficient for minimising potential interactions between fishing gear and cables; and the potential safety risk of offshore buried cables becoming exposed, which was also raised by HHFA. With reference to Table 4.1, Outline FLCP [REP7-021], the ExA notes the Applicant would use a Cable Burial Risk Assessment to ensure that every cable would be sufficiently protected from any hazards that may occur above it. The ExA notes that regarding cable protection, rock placement designs that minimise potential gear snagging risk would be used, where practicable, which would minimise potential damage to and from fishing gear and the associated safety risk. Furthermore, the ExA acknowledges that in the event that cable exposures would be identified during the operational phase, processes would be in place to publish the location of these and that where appropriate, additional temporary measures would also be put in place. Having considered the specific mitigation measures above, the ExA is content that the Outline FLCP includes measures to satisfactorily mitigate both the risks of the cable being buried at insufficient depth and for safety issues arising from potential cable exposures. The ExA is satisfied that a FLCP, which accords with the principles of the Outline FLCP would be secured under dDML condition 21(1)k or 22(1)k for Schedules 8 and 10, or Schedule 9 respectively in the dDCO [REP8-005].

5.1.43. The ExA is satisfied that the mitigation proposals in Table 14.4 of ES Chapter 14 [APP-028], reflect detailed consultation with relevant representatives of the fishing industry and statutory bodies (NPS EN-3 2.8.154), which is evidenced in Table 14.1 of ES Chapter 14 [APP-028]. The mitigation proposals in Table 14.4 are generally included in the Outline FLCP, which is secured as noted above, except for the Wind Turbine Generator spacing (WTG) which is secured under R2(2) in the dDCO [REP8-005].

5.1.44. The ExA is satisfied that the adequacy of the mitigation has been explored during the Examination, including whether the mitigation has been designed to enhance, where reasonably possible, any potential medium and long-term positive benefits to the fishing industry, commercial fish stocks and the marine environment (NPS EN-3 2.8.251). The ExA notes that the Applicant responded [REP4-034] it had not identified any potential beneficial impacts of the Proposed Development to commercial fishing.

- 5.1.45. The ExA also notes the Applicant has explored MMO's request [\[REP6-082\]](#) to consider the potential introduction of further fisheries management measures within MPAs under Stages 3 and 4 of the assessment and management process for fishing in offshore MPAs. The ExA notes the Applicant's response [\[REP7-051\]](#) that whilst the Proposed Development does overlap with a Stage 4 site, as noted by the MMO, these sites have not received any further public updates following the call for evidence which closed in February 2024 and how potential management measures, if any, may be progressed, is currently unknown.
- 5.1.46. Furthermore, the ExA notes from the Applicant's response [\[REP7-051\]](#) that consultation with the fishing industry is on-going and would continue post-consent, and that where appropriate this may include discussion with regards to developments in relation to fisheries management measures in MPAs. The ExA notes, in the Outline FLCP [\[REP7-021\]](#), the Applicant's commitment to continue to engage with the local fishing industry throughout the lifetime of the Proposed Development and manage any concerns that are raised by fishers. The ExA is mindful from the Applicant's assessment findings of ES Chapter 14 [\[APP-028\]](#) that the residual effects for all stages of the Proposed Development would not be anticipated to exceed minor adverse significance (not significant) for the Proposed Development alone and cumulatively, with implementation of the proposed mitigation. Given the above findings and that the MMO [\[REP8-064\]](#) agree that the mitigation is appropriate, the ExA accepts that no reasonably possible measures have been identified at this stage to enhance any potential medium and long-term positive benefits to the fishing industry and therefore there is no conflict with NPS EN3 2.8.251.
- 5.1.47. The ExA notes that the NFFO [\[REP8-066\]](#) is content that the majority of the embedded mitigation are appropriate and that the measures in the Outline FLCP are appropriate for liaison and consultation, and would continue to be developed post-consent. The ExA notes the Outline FLCP [\[REP7-021\]](#) was updated to include an additional mitigation measure to minimise disruption to vessels actively engaged in fishing from survey vessels engaged in the Proposed Development. The ExA agrees with the MMO [\[REP8-064\]](#) that the mitigation is appropriate and has no outstanding concerns following the update of the Outline FLCP [\[REP7-021\]](#) at Deadline 7. The ExA is satisfied that a FLCP, which accords with the principles of the Outline FLCP would be secured under dDML condition 21(1)k or 22(1)k for Schedules 8 and 10, or Schedule 9 respectively in the dDCO [\[REP8-005\]](#).
- 5.1.48. Furthermore, the ExA is mindful that Applicant's assessment takes account of the implementation of the proposed mitigation. Having regard to the ExA's consideration above that the mitigation is appropriate and that MMO [\[REP8-064\]](#) agrees that the conclusions of the Applicant's assessment are appropriate, the ExA accept the findings of ES Chapter 14 [\[APP-028\]](#). The findings are that the residual effects for all stages of the Proposed Development on commercial fisheries receptors would not be anticipated to exceed minor adverse significance (not significant) for the Proposed Development alone and cumulatively, with implementation of the proposed mitigation.

SOCIO-ECONOMIC EFFECTS FROM DISRUPTION TO FISHING

- 5.1.49. In ExQ1 16.1.3, Parts (i) and (iv) [PD009], the ExA asked the Applicant how it had addressed concerns from the NFFO [\[RR-238\]](#) relating to the resulting economic harm from displacement of commercial fishing and its assessment. The Applicant's response [\[REP2-020\]](#) refers to the assessments in ES Chapter 14 Commercial Fisheries [\[APP-028\]](#) which identify the potential impacts as negligible to minor

dependent on the fleet under consideration. The Applicant explained these impacts take account of the embedded mitigation measures listed in Table 14.4 [APP-028] which includes the development of a FLCP in accordance with the Outline FLCP [APP-244]. The Applicant clarified that these assessments consider specific assessments for loss of access to fishing grounds and associated displacement of activity to other areas, as well as increased steaming times, amongst other aspects.

- 5.1.50. In ExQ1 16.1.4 [PD009], the ExA asked the Applicant to clarify the extent of any restrictions on fishing fleets within the array area once it would be operational. The Applicant clarified [REP2-020], with reference to the Outline FLCP, that its intention is not to apply for restrictions beyond the necessary safety zones. The Applicant further explained that restrictions during the operational phase would only occur as a result of the safety zones (limited to a 500m exclusion around major maintenance activities) and the physical footprint of the Proposed Development's offshore infrastructure. Furthermore, the Applicant confirmed that the long-term loss or restricted access to fishing grounds from the proposed safety zones is included in the assessment in ES Chapter 14 [APP-028]. According to the Applicant, the choice to fish within the array area would be at the discretion of the vessel's master or skipper. In addition, the Applicant responded that the proposed minimum turbine spacing would be comparable to other offshore wind farms and, to support its assessment in ES Chapter 14, provided evidence [APP-059] of other operational wind farms where vessels are operating static and mobile fishing gear.
- 5.1.51. The Netherlands Ministry of Infrastructure and Water Management [REP3-065] requested that the analysis in ES Chapter 14 also looks at the economic value of the fisheries and accounts for possible economic losses that may occur due to lack of or lesser access to important fishing grounds. It also requested what would be done to further mitigate potential losses and facilitate commercial fisheries in the area. The Applicant confirmed [REP4-027] that its assessment in ES Chapter 14 was informed by baseline information on landings by species and method as well as Vessel Monitoring System (VMS) data from Dutch fishing vessels that operate in the study area and the wider North Sea. The Applicant explained that its assessment in ES Chapter 14 did not identify impacts above minor significance on the Dutch fleet and that the mitigation measures identified in the FLCP will be applicable to the Dutch fisheries.
- 5.1.52. No submissions relating to commercial fisheries were received from the three other EEA states notified for potential transboundary impacts.
- 5.1.53. During ISH2, the ExA asked [EV6-009] the Applicant to clarify how the CFWG under 10m long vessels have been considered in the socio-economic assessment in Chapter 31 [APP-045]. The Applicant responded [REP4-034] that the commercial fisheries assessment in ES Chapter 14 [APP-028] had considered all sizes and types of vessels and the socio-economic chapter [APP-045] had utilised this information.
- 5.1.54. The NFFO's final SoCG [REP8-066] shows that it does not consider that the Proposed Development's assessment sufficiently assesses the socio-economic impacts on commercial fisheries.

EXA'S CONSIDERATIONS

- 5.1.55. The ExA acknowledges the concern from the CFWG about how under 10m long vessels have been considered in the socio-economic assessment in Chapter 31. The ExA notes that ES Chapter 14 [APP-028], Section 14.5 provides surveillance

sightings for UK vessel types and paras 37 - 41 considers UK fishing activity including vessels under 10m in length. The ExA notes that the Applicant confirmed [\[REP4-034\]](#) that its commercial fisheries assessment in ES Chapter 14 had considered all sizes and types of vessels and that its socio-economic assessment in ES Chapter 31 had utilised this information. The ExA is therefore satisfied that, and has no reason to conclude otherwise, the Applicant's socio-economic assessment has included all vessel types, including under 10m long vessels.

- 5.1.56. Regarding the socio-economic effects from disruption to fishing, the ExA acknowledges NFFO's [\[REP8-066\]](#) concern that it does not consider that the Proposed Development's assessment sufficiently assesses the socio-economic impacts on commercial fisheries. The ExA notes that the Applicant's assessment in ES Chapter 14 considers for loss of access to fishing grounds and associated displacement of activity to other areas, as well as increased steaming times, amongst other aspects [\[REP2-020\]](#).
- 5.1.57. Furthermore, the ExA notes that the Applicant's assessment identifies the residual effects as negligible to minor, when taking account of the embedded mitigation measures listed in the Outline FLCP. The ExA also notes that the Applicant's commercial fisheries assessment in ES Chapter 14 had considered all sizes and types of vessels and that its socio-economic assessment in ES Chapter 31 had utilised this information. The ExA therefore concludes that the socio-economic assessment is robust.
- 5.1.58. As noted in the ExA's consideration above, the ExA accepted the findings of ES Chapter 14 [\[APP-028\]](#) for residual effects with the implementation of the proposed mitigation. Given this and consideration of the above, the ExA therefore also accepts the findings of ES Chapter 31 [\[AS-010\]](#) which summarises that for socio-economics, the wider economic effects from disruption to fishing would be minor adverse (not significant) for the Proposed Development and for the cumulative case, with the implementation of the proposed mitigation.
- 5.1.59. The ExA is therefore satisfied that the Applicant has adequately assessed the socio-economic impacts of the Proposed Development, both on its own and cumulatively, for the wider economic effects from disruption to fishing as required by the relevant policy tests in Section 5.13 of NPS EN-1. Given the ExA agrees with the Applicant's assessment findings in ES Chapter 14, which includes both temporary or long-term loss or restricted access to fishing grounds, the ExA is satisfied that the Proposed Development would not significantly impede fishing activities, and therefore NPS EN-3 2.8.320 is not engaged.

CONCLUSIONS

- 5.1.60. The ExA considers the Applicant's assessment includes adequate information to understand the potential effects of the Proposed Development alone or cumulatively (and transboundary) and accords with relevant policies of NPS EN-1 and NPS EN-3.
- 5.1.61. The ExA is satisfied that the Applicant has demonstrated that the effects from the Proposed Development would be satisfactorily mitigated and managed through the FLCP, which would be secured under DML condition 21(1)k or 22(1)k for Schedules 8 and 10, or Schedule 9 respectively in the dDCO [\[REP8-005\]](#).
- 5.1.62. The ExA accepts the findings of ES Chapter 14 Commercial Fisheries [\[APP-028\]](#) that the effects for the construction, operation and decommissioning of the Proposed Development on commercial fisheries receptors would not be anticipated

to exceed minor adverse significance (not significant) for the Proposed Development alone and for the cumulative case, with implementation of the proposed mitigation.

- 5.1.63. Furthermore, in relation to the socio-economics assessment, the ExA accepts the findings of ES Chapter 31 [\[APP-045\]](#) which summarises that the wider economic effects from disruption to fishing would be minor adverse (not significant) for the Proposed Development and for the cumulative case, with the implementation of the proposed mitigation.
- 5.1.64. As a result of disruption to commercial fisheries during the construction and operation stages, the ExA attaches a little negative weight to this effect in the planning balance against the making of the Order. This finding is taken forward to the overall planning balance in Chapter 8 of this Report.

5.2. OFFSHORE ECOLOGY

OFFSHORE AND INTERTIDAL EFFECTS

BENTHIC SUBTIDAL AND INTERTIDAL ECOLOGY, INCORPORATING MARINE GEOLOGY/PHYSICAL PROCESSES AS WELL AS WATER AND SEDIMENT QUALITY INTERESTS

Introduction

- 5.2.1. This Chapter primarily deals with gauging the offshore benthic and intertidal matters relevant to EIA and the most pertinent matters to that. Consequently, the ExA has summarised the Applicant's submissions for marine geology/physical processes as well as water quality to the points most relevant to supporting overall benthic ecological assessment relative to the Examination main issues.
- 5.2.2. The Examination issues raised do have overlap with HRA considerations given the technical content of NE, the MMO, RSPB and other IP responses combined. In particular this extends to consideration of any relevant potential compensation measures directly linked to the scheme to satisfy HRA requirements.
- 5.2.3. The ExA's detailed analysis of all HRA issues is contained in Appendix C and a summary is provided in Chapter 7.
- 5.2.4. The Examination issues posed in this section also give commentary on whether Measures of Equivalent Environmental Benefit (MEEB) are required to compensate for any adverse impacts on a Marine Conservation Zone (MCZ) under the provisions of the Marine and Coastal Access Act 2009 (MCAA). That specific marine matter falls outside of the HRA regime and therefore is what this Chapter predominantly focuses on alongside the other findings reported within the ES.

THE APPLICATION

- 5.2.5. For benthic ecology Chapter 10 of the ES (Benthic, Subtidal and Intertidal Ecology) [\[APP-024\]](#) is most relevant along with the Chapter 10 Figures [\[APP-055\]](#). Nonetheless, ES Chapter 8 Marine Geology Oceanography and Physical Processes [\[APP-022\]](#); ES Chapter 9 Marine Water and Sediment Quality [\[APP-023\]](#) and ES Chapter 11 Fish and Shellfish Ecology [\[APP-025\]](#) all contain overlapping topic issues and should be read in conjunction. The following additional documentation was also submitted:

- Offshore Order Limits and Boundary Coordinates Plan [\[APP-203\]](#);
- ES Appendix 10.1 Benthic and Intertidal Ecology Survey Report [\[APP-094\]](#);
- RIAA Part 2 Benthic Ecology Annex I Habitat in Special areas of conservation (SACs) and Special protection areas (SPAs) Supporting Habitat [\[APP-175\]](#);
- Cable Statement [\[APP-262\]](#) updated to 7.27 Cable Statement (Rev 1) [\[REP4-015\]](#);
- Marine Conservation Zone Assessment Report [\[APP-237\]](#);
- Marine Conservation Zone MCZ Appendix 1 Screening [\[APP-238\]](#);
- Export Cable Crossing Zone Plan (Rev 0) [\[REP1-059\]](#);
- Further Information Regarding Seabed and Bedform Mobility, and Implications for Sand Wave Recovery after Levelling (Rev 0) [\[REP3-045\]](#);
- Outline Cable Specification and Installation Plan (Rev 0) [\[REP4-039\]](#) updated to (Rev 4) [\[REP8-047\]](#);
- Deep Water Route Cable Installation Areas (Future Dredging Depths) Plan (Rev 0) [\[REP4-043\]](#).

BASELINE OVERVIEW FOR BENTHIC AND INTERTIDAL ECOLOGY

- 5.2.6. The study area for benthic and intertidal ecology is based on the potential Zone of Influence (Zol) from North Falls Offshore Wind Farm (NFOWF) (ES Figure 10.2 [\[APP-055\]](#)) was analysed relative to an understanding of the tidal regime, discussed further in ES Chapter 8 Marine Geology and Physical Processes [\[APP-022\]](#).
- 5.2.7. The Cumulative Effects Assessment (CEA) was conducted over a range of 30km from the project area for the screening of plans and projects which have potential to interact with the impacts of NFOWF. The intertidal study area is the area between mean high-water springs (MHWS) and mean low-water springs (MLWS) at landfall.
- 5.2.8. Table 10.5 of ES Chapter 10 [\[APP-024\]](#) also provides details of background site investigations carried out in 2021.
- 5.2.9. The effects arising from the construction, operation and maintenance and decommissioning of NFOWF infrastructure are gauged by the Applicant as relatively localised and small in magnitude. It is assumed by the ES that changes to the tidal regime would have returned to background levels immediately outside the excursion of one spring tidal ellipse (approximately 15km from the NFOWF).
- 5.2.10. For benthic ecology, these activities include other OWFs, subsea cables and pipelines, oil and gas exploration and extraction and fisheries management areas. Other activities were only screened into the CEA where there is a spatial and/or temporal overlap in effects such that a cumulative effect would be possible, or where effects are on a defined receptor group (such as within the boundaries of a designated site).
- 5.2.11. The benthic characterisation report (ES Appendix 10.1 (Document Reference: 3.3.4)) [\[APP-094\]](#), uses surveys completed in 2021. It covers the Preliminary Environmental Information Report (PEIR) offshore project area, which was larger than, and fully encapsulates, the final project area.
- 5.2.12. After consultation feedback, the array area was reduced from 149.5km² down to 95km². This involved the removal of the northern array and interconnector and a reduction in the size of the southern array (referred to as the 'array area' by the ES).
- 5.2.13. In addition, the landfall location has been selected and the offshore cable corridor refined in the nearshore to align with the landfall area. The baseline presented in ES

Chapter 10 was updated to reflect the new offshore project area, and new study area (i.e. the array area and offshore cable corridor).

- 5.2.14. The environmental baseline covered sediment type, fauna and flora and for intertidal areas, a modified Phase I walkover habitat mapping survey, discussed further in ES Appendix 10.1 [\[APP-094\]](#). Occasional qualitative dig-overs of sediment were also retrieved.
- 5.2.15. Using the data each impact assessment identifies receptors sensitive to that impact and implements a systematic approach to understanding the impact pathways and the level of impacts on given receptors. It considers sensitivity, value and magnitude.
- 5.2.16. Table 10.13 of ES Chapter 10 provides a summary of biotopes and habitats present within the intertidal study area, with details of their characteristic species and features. Figure 4.31 in ES Appendix 10.1 [\[APP-094\]](#) presents the spatial distribution of biotopes using field maps of the intertidal survey area.
- 5.2.17. In terms of macrofaunal communities using the sediment within the Proposed Development survey area. The Applicant's survey recorded several taxa including annelids, arthropods, molluscs, echinoderms and other phyla. Molluscs and annelids had the highest abundance across the Proposed Development survey area. Information on macrofaunal communities recorded during the benthic characterisation surveys was provided in ES Appendix 10.1 [\[APP-094\]](#).
- 5.2.18. Table 10.14 of ES Chapter 10 [\[APP-024\]](#) provides a summary of the biotopes and their characteristic species and features. Specific details were reviewed for each of the following areas
- Kentish Knock East MCZ - ES Figure 10.3 [\[APP-055\]](#).
 - *Margate and Long Sands* SAC- ES Figure 10.3 [\[APP-055\]](#).
 - *Outer Thames Estuary* SPA - ES Figure 10.3 [\[APP-055\]](#). The SPA covers an area of around 3,924km² and is designated for the following Annex I bird species:
 - Red-throated diver (RTD);
 - Common tern; and
 - Little tern.
- 5.2.19. The Outer Thames Estuary SPA supports the largest aggregation of wintering Red-Throated Divers in Great Britain (some 38% of the population) and provides feeding and nesting areas for common terns and little terns.
- 5.2.20. In terms of long-term trends. The existing environment in the study area is already influenced by the physical processes which exist within the southern North Sea, such as waves and tidal currents driving sediment transport and seabed morphology. Long term analyses of the North Sea benthic life indicates it is under severe threat from climate change, fishing and temperature changes. Including *S. spinulosa*. The effect of such broadscale environmental changes is anticipated by the ES to occur with or without the Proposed Development.

ASSESSMENT OF EFFECTS – DURING CONSTRUCTION

- 5.2.21. A summary of the significance of effect assessment for benthic and intertidal ecology is provided in Table 10.29 [\[APP-094\]](#). The likely significant effects to benthic and intertidal ecology that may occur during construction, operation,

maintenance and decommissioning of NFOWF all were assessed. Table 10.2 of ES Chapter 10 identifies the worst-case scenarios for each impact.

Table 1: Worst-case scenario by impact (Source: Table 10.2 ES Chapter 10 [APP-024])

Impact Number and Title	Description	Magnitude of Impact	Sensitivity of Receptors	Significance of Effect
Impact 1: Temporary physical disturbance in the offshore cable corridor	Disturbance from construction activities including sand wave levelling, UXO clearance, cable laying, and foundation works.	Negligible	Medium to high recoverability ; habitats typical of disturbed environments	Minor adverse (Options 1, 2, and 3)
Impact 2: Increased suspended sediment concentrations	Potential smothering and feeding disruption due to sediment plume during construction.	Negligible	Medium sensitivity; fine sands and mud most prevalent	Minor adverse (Options 1 and 2); No intertidal impact for Option 3
Impact 3: Re-mobilisation of contaminated sediment	Possible release of dormant contaminants during seabed disturbance.	Negligible	No sensitivity identified	Negligible (all options)
Impact 4: Underwater noise and vibration	Noise from UXO clearance, pile driving, cable installation, and vessel activity.	Negligible	Negligible sensitivity of biotopes	Negligible (all options)
Impact 5: Indirect effects on the intertidal zone	No change expected from increased suspended sediment concentrations.	No change	Not applicable	No change

ASSESSMENT OF EFFECTS DURING OPERATION AND DECOMMISSIONING

5.2.52. In terms of likely significant effects during operation for: 1. Temporary physical disturbance; 2. Persistent habitat loss; 3. Increased suspended sediment

concentrations; 4. Re-mobilisation of contaminated sediments; 5. Underwater noise and vibration; 6. Interactions of electromagnetic field (EMF). 7. Colonisation of introduced substrate, including non-native species 8. Indirect effects on the intertidal zone during operation. The significance of effect from all impacts were assessed by the ES as either falling as negligible or minor adverse (not significant in EIA terms) for all three connection options.

- 5.2.53. For the likely significant effects expected during decommissioning. Impacts such as from: temporary physical disturbance; increased SSCs; underwater noise and vibration; and indirect effects on the intertidal zone during were all assessed by the ES as either falling as negligible or minor adverse (not significant in EIA terms) for all three connection options.

Assessment of cumulative and transboundary effects, interactions and interrelationships

- 5.2.54. Table 10.23 of ES Chapter 10 gives a summary of projects considered for the CEA in relation to benthic and intertidal ecology (project screening). Table 10.24 then lists cumulative physical disturbance and Table 10.25 Cumulative habitat loss. Collectively, the cumulative impacts from: 1. Temporary physical disturbance and increased suspended sediment concentrations; 2. Loss of habitat during construction, operation and decommissioning; 3. Colonisation of introduced substrate, including non-native species; 4. Interaction of EMF were assessed by the ES as either minor adverse or negligible.

- 5.2.55. Notably, in a study area of c. 3,000km², the cumulative habitat loss would represent a worst-case scenario of 0.3% of the study area. There would be a high sensitivity to habitat loss and potential cumulative effects from habitat loss would be minor adverse in scale. The benthic habitats in the study area are also of high sensitivity to habitat change. The overall potential cumulative effects from the colonisation of introduced substrate, including Invasive Non-Native Species (INNS) would be of minor adverse significance according to the ES.

- 5.2.56. The zone of influence distances (shown in ES Figure 10.2 [\[APP-055\]](#)) indicates there is no pathway for transboundary impacts on benthic and intertidal ecology. Moreover, transboundary effects were scoped out of further assessment in accordance with the Scoping Opinion from the Planning Inspectorate, 2021. And the ExA has no reason to disagree with that conclusion or that contained within the Regulation 32 screening document [\[OD-005\]](#).

- 5.2.57. Table 10.26 of ES Chapter 10 provides a summary of the principal interactions between receptors. The areas of potential inter-relationships between impacts are presented in Table 10.27 [\[APP-024\]](#).

- 5.2.58. Table 10.28 [\[APP-024\]](#) then provides an assessment for each receptor (or receptor group). None of the potential inter-relationships identified with respect to benthic and intertidal ecology are expected to result in a greater impact than the likely significant effects the ES identifies.

MITIGATION AND MONITORING

- 5.2.59. For benthic and intertidal aspects of mitigation supported by the ES. The Schedule of Mitigation (Rev 2) [\[REP5-006\]](#) updated to [\[REP7-004\]](#) Table 2.3 (Mitigation and monitoring in relation to benthic and intertidal ecology) sets out the following embedded mitigation measures during construction:

Table 2: Mitigation and monitoring in relation to benthic and intertidal ecology
(Source: Table 2.3 [\[REP7-004\]](#))

Mitigation Description	Control Reference
Avoidance of the Kentish Knock East Marine Conservation Zone (KKE MCZ), and reduction of the array area and infrastructure.	dDCO [REP8-085]
Offshore cable corridor selected to minimise impacts on designated sites, avoiding overlap with Margate and Long Sands SAC.	dDCO
Use of horizontal directional drilling (HDD) from onshore to subtidal zone to avoid intertidal impacts.	Schedule 1, Part 1 of the dDCO
Pre-construction surveys to identify Annex I habitats or HOCl; micro-siting and Sabellaria spinulosa reef mitigation plan if needed.	PEMP [REP6-027] , Schedule 8, 9, 10 of the dDCO
Biosecurity measures to prevent spread of INNS using MARPOL, BWM Convention, and Environmental Damage Regulations.	PEMP, Schedule 8, 9, 10 of the dDCO
Cables and cable protection to be 150m or more from Margate and Long Sands SAC.	Schedule 9, Part 2, Condition 36
Removal of Gravity Base Systems (GBS) to mitigate effects within array area and on KKE MCZ.	Draft DCO, Schedule 1, 8, 9 of the dDCO
Turbine foundations to be a minimum of 50m from order limits to prevent over-sail beyond limits.	Order limits of the dDCO
Burying cables during operation and maintenance to reduce effects of EMFs.	PEMP, Schedule 8, 9, 10 of the dDCO

- 5.2.80. Monitoring requirements for NFOWF are in the Offshore In-Principle Monitoring Plan (OIPMP) [\[APP-245\]](#) updated to Revision 3 [\[REP8-009\]](#).

MARINE GEOLOGY/PHYSICAL PROCESSES - APPLICATION

- 5.2.81. In terms of marine geology implications relative to this part of the Recommendation Report. The assessment of effects on marine geology, oceanography and physical processes highlighted in ES Chapter 8 [\[APP-022\]](#) informs other linked chapters within the ES namely: ES Chapter 9 Marine water and sediment quality [\[APP-023\]](#); Chapter 10 Benthic and intertidal ecology [\[APP-024\]](#); Chapter 11 Fish and shellfish ecology [\[APP-025\]](#); Chapter 14 Commercial fisheries [\[APP-028\]](#); and Chapter 16 Offshore and intertidal archaeology and cultural heritage [\[APP-030\]](#).

5.2.82. Information to support the marine geology, oceanography and physical processes assessment included:

- Interpretation of survey data including bathymetry, geophysical (shallow geology) and environmental (sediment particle size) data;
- The existing evidence base of the effects of offshore wind farm developments on the physical environment;
- Bespoke numerical modelling of wave heights and directions;
- Numerical modelling studies undertaken for Galloper Offshore Wind Farm (GWF) and Greater Gabbard Offshore Windfarm (GGOW) and their associated ES chapters; and
- Discussion and agreement with key stakeholders.

5.2.83. Table 8.1 [\[APP-022\]](#) provides a series of consultation responses which have influenced the Applicant's approaches.

BASELINE

5.2.84. ES Figure 8.1 and 8.2 [\[APP-053\]](#) depict the bedforms around the proposed development area. The array area covers approximately 95km². Far field impacts are based on the tidal regime. One tidal spring ellipse has been considered approximately 15km away.

5.2.85. For the CEA a range of 30km from NFOWF has been used. Such a buffer distance considers the potential for other projects cumulative effects far-field. And a buffer of two spring tidal ellipse excursions is considered for the CEA.

5.2.86. The worst-case scenarios were scoped into the EIA during construction, operation and decommissioning. The realistic worst-case scenarios for the likely significant effects scoped into the EIA for the marine geology, oceanography and physical processes assessment are summarised in Table 8.2 [\[APP-022\]](#).

5.2.87. Considering the grid connection options included in the proposed design envelope. As options 1 and 2 would be the same, they both represent the worst-case scenario described in Table 8.2 subject to assessment. For option 3, there would be no project export cables to shore.

5.2.88. Table 8.5 sets out the site-specific survey data used by the ES from May to August 2021. Table 8.6 [\[APP-022\]](#) summaries the available data linked to Greater Gabbard Offshore Winds Ltd., 2005, (GGOW) and Galloper Wind Farm Limited, 2011 (GWF) ESs. Section 8.4.2 of [\[APP-022\]](#) sets out a range of other data sources were also referenced including tidal and Met Office data.

5.2.89. In addition, a wave simulation model was used by the Applicant as a baseline of changes from NFOWF. Appendix 8.1 Wave Assessment [\[APP-093\]](#) shows the modelling simulations which were completed. The Applicant's wave model was calibrated against measured data recorded at wave rider buoys West Gabbard 2 and South Knock (data and locations are also provided in Appendix 8.1 [\[APP-093\]](#))

Individual or cumulative impacts on waves at sensitive receptors less than 5% were considered negligible by the ES. The definitions of sensitivity, value and magnitude for the purpose of the Marine Geology, Oceanography and Physical Processes assessment are provided in Tables 8.7, Table 8.8 and Table 8.9 [\[APP-022\]](#), respectively.

- 5.2.90. The physical basis for using the modelling for tidal currents and sediment transport has a similar basis to the GGOW, GWF and Five Estuaries. Notwithstanding NFOWF has a different to the landfall for GGOW and GWF, and so a bespoke desk-based assessment of the offshore cable corridor and the landfall area has been provided.
- 5.2.91. Numerical modelling was already undertaken specifically for the Greater Gabbard and Galloper offshore wind farms located adjacent to (and east to south-east of) North Falls and has been referred to. In addition, numerical modelling of tidal currents and spreadsheet based analytical assessments of SSCs have been completed at Five Estuaries.
- 5.2.92. The range of water depths at GGOW and GWF are comparable to those at North Falls (ES Figure 8.1 [\[APP-093\]](#)).
- 5.2.93. There are no sandbanks in the proposed array area. Tidal currents demonstrated similar directions and velocities on the flood tide and ebb tide. Moreover, other than the Inner Gabbard and Galloper sandbanks, the seabed sediments at all sites were considered broadly similar.
- 5.2.94. The modelling for GGOW and GWF assessed 140 wind turbines each with a diameter of 36m and 35m, respectively, for GBS (worst case scenario). The assessment of tidal currents at Five Estuaries was completed on 79 smaller WTGs on conical gravity bases, and two offshore platforms, multi-leg jacket foundations with suction buckets. NFOWF would comprise up to 57 turbines with GBS foundations of 65m diameter. This means the North Falls design is a more conservative design compared to the modelled GGOW, GWF and Five Estuaries designs.

Existing marine geological/tidal environment/seabed sediment distribution

- 5.2.95. Table 8.12 [\[APP-022\]](#) categorises the geological formations present at the array area and offshore cable corridor.
- 5.2.96. The dominant sediment type in the array area is sand (16-83% in all samples) with varied median particle sizes featuring medium to coarse sand. The mud content was zero in five of the eight samples and less than 15% in 100% of the samples.
- 5.2.97. The dominant sediment type in the offshore cable corridor is medium sand with variable particle sizes of silt/clay to pebble. The mud content was found to be less than 5% in 26% of the samples and less than 78% in 100% of the samples taken.
- 5.2.98. Sections 8.5.6 to 8.5.9 of [\[APP-022\]](#) give analysis of the sediment concentrations within the offshore array and cable areas as well as longshore sediment transport rates and coastal management along the Tendring peninsula.
- 5.2.99. The Essex coast, encompassing the landfall on the Tendring Peninsula, falls under Shoreline Management Plan (SMP) 8 Essex and South Suffolk. The intended management along this frontage up to 2055 is '*hold the line*' and '*sustain and support its viability of the seaside towns and their communities, tourism and commercial activities*'. From 2055 to 2105, the management policy is '*hold the line / managed realignment*' with low-lying ground around the landfall at flood risk.

MITIGATION AND MONITORING

- 5.2.100. Table 8.3 sets out embedded mitigation. This includes regard to turbine spacing, foundation design and seabed cabling.
- 5.2.101. Wind turbine spacing is described in general terms at application stage. A minimum separation distance of: 5 x the rotor diameter (i.e. 1180m for the smallest turbines with 236m rotor diameter or 1,685m for the largest turbines with 337m rotor diameter) in the downwind direction; and 4 x the rotor diameter (i.e. 944m for the smallest turbines with 236m rotor diameter or 1,348m for the largest turbines with 337m rotor diameter) in the cross wind direction. This is to minimise the potential for interaction between adjacent wind turbines with respect to marine physical processes in the area.
- 5.2.102. Micro-siting would be used where practicable by the Applicant to minimise the requirements for seabed preparation prior to foundation installation as well as cable installation having regard to sediment transport.
- 5.2.103. No monitoring of marine geology, oceanography and physical processes is proposed. This is because the outcomes of the assessment have concluded that all the potential impacts considered would result in either no change or negligible changes.

ASSESSMENT OF EFFECTS – DURING CONSTRUCTION, OPERATION/ DECOMMISSIONING

- 5.2.104. Table 8.13 [APP-022] lists the relevant marine geology, oceanography and physical processes receptors. These are defined as Suffolk Coast; Essex Coast (including landfall); Designated sites and features which include Annexe I Sandbank Reef (which is detailed in ES Chapter 10 Benthic and Intertidal Ecology [APP-024], Margate and Long Sands SAC; and the KKE MCZ.
- 5.2.105. Paragraphs 94 to 99 of [APP-022] gives further information about these sites alongside some strategic concerns and their conservation objectives where it is applicable. The types of construction impacts considered by the ES in Section 81 are summarised in Table 3.

Table 3: Summary of construction impacts

Impact Type	Examples
1a Changes in SSCs due to seabed preparation	Local and short-term increases in SSCs from dredging and discharge; negligible adverse significance for Suffolk coast, Essex coast, Margate and Long Sands SAC, Annex I sandbanks, and KKE MCZ
1b Changes in SSCs due to drill arisings	Short-term SSC increases at 10% of 34 turbine locations and one OSP/OCP; SSCs <10mg/l; no cumulative effect
2a Changes to seabed level due to foundation installation	Sediment deposition max 1mm; re-suspension reduces thickness to zero; negligible adverse significance
2b Changes in seabed level due to drill arisings	Sediment layer ~40mm within 300m of each foundation; re-suspension reduces thickness; negligible adverse significance
3 Changes in SSCs due to export cable installation	No change to marine geology, oceanography, and physical processes; potential effects from sediment deposition

4 Changes in seabed level due to offshore export cable installation	Negligible adverse significance for Essex coast, Margate and Long Sands SAC, Annex I sandbanks, KKE MCZ; Suffolk coast unaffected due to 11.1km distance
5 Changes in SSCs due to array and platform interconnector cable installation	No significant effect on identified receptor groups
6 Changes in seabed level due to array and platform interconnector cable installation	Negligible adverse significance for Essex coast, Suffolk coast, Margate and Long Sands SAC, Annex I sandbanks, KKE MCZ
7 Interruptions to bedload sediment transport due to sandwave levelling	Sediment re-established naturally; negligible adverse significance for Essex coast, Annex I sandbanks, Margate and Long Sands SAC
8 Indentations on the seabed	Footprint of jack-ups, mooring lines, UXO clearance; temporary indentations infill naturally; negligible adverse effect

- 5.2.106. Operation phase assessments concluded “no change” or “negligible adverse effects” for marine geology.
- 5.2.107. During decommissioning the types of effect would be comparable to those identified for the construction phase. Accordingly, given the construction phase assessments concluded “no change” or “negligible adverse effects” for marine geology, oceanography and physical processes receptors. The same would be valid for the decommissioning phase regardless of the final decommissioning methodologies.
- 5.2.108. The significance of effects on other receptors is addressed within relevant chapters of ES: Chapter 9 Marine Water and Sediment Quality; Chapter 10 Benthic and Intertidal Ecology; Chapter 11 Fish and Shellfish Ecology; Chapter 12 Marine Mammals; and Chapter 13 Offshore Ornithology.
- 5.2.109. No further monitoring is proposed by the Applicant in relation to marine geology, oceanography and physical processes as all the potential impacts considered would result in either no change or, at worse, negligible adverse effects (i.e. no significant effects). Plus, the accumulation of evidence from a range of studies and other existing wind farms (as per the details in Section 8.4.2 [\[APP-022\]](#)) is pointed out by the Applicant.

CUMULATIVE/ TRANSBOUNDARY AND INTER-RELATIONSHIPS

- 5.2.110. Table 8.52 [\[APP-022\]](#) sets out a summary of cumulative effects on marine geology, oceanography and physical processes. The overall cumulative effect significance of the Proposed Development over relevant receptors is predicted to remain negligible adverse (not significant in EIA terms).
- 5.2.111. Transboundary impacts were scoped out of further assessment in accordance with the scoping opinion (Planning Inspectorate, 2021). The impacts that have been assessed are mostly anticipated to result in no change to the identified receptors because they are located remotely from the zones of influence and no pathway has been identified that can link the source to the receptor. A summary of impacts to these receptors are listed in Table 8.51 [\[APP-022\]](#).

MARINE WATER AND SEDIMENT QUALITY - APPLICATION

BASELINE

- 5.2.112. ES Chapter 9 [\[APP-023\]](#) gives the Applicant's full analysis and Section 9.5 sets out the baseline conditions.

MITIGATION AND MONITORING

- 5.2.113. Table 9.3 of [\[APP-023\]](#) gives mitigations for accidental pollution secured in the PEMP and using micro-siting to minimise sediment release. No monitoring is proposed.

ASSESSMENT OF EFFECTS (INCLUDING CUMULATIVE / TRANSBOUNDARY / INTER-RELATIONSHIPS)

- ES Chapter 9 Table 9.19 [\[APP-023\]](#) shows the assessment of effects. In summary, the Applicant found that during construction, operation and decommissioning phases the impacts on marine water quality would be either minor adverse or negligible.
- No significant potential cumulative impacts were identified for marine water and sediments quality when considered alongside other plans and projects.
- Transboundary impacts were scoped out of the Applicant's assessment being in mind the scoping opinion provided by the Planning Inspectorate, 2021. This is due to the distance of North Falls from the Economic Exclusion Zone and there would be no significant effect on water quality.
- Inter-relationships were assessed as negligible. With the adoption of good practice methodologies, it was considered that there would be either no interactions or that these would not result in greater impacts when assessed individually.

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.2.114. The Examination issues for benthic subtidal and intertidal ecology, allowing for marine geology/physical processes, as well as sediment and water quality interests were:

- Clarification and assessment of Worst-Case Scenarios (WCS) toward overall benthic impacts within the Margate and Long Sands Special Area of Conservation (MLS SAC) (associated Annex I Habitat)/and Kentish Knock East Marine Conservation Zone (KKE MCZ) having regard to marine processes; cable installation; use of HDD; and any resultant sediment/particulate dispersal;
- Consideration of KKE MCZ impacts relative to Marine and Coastal Access Act provision; and
- The in-principle monitoring able to be secured by the DCO.

CLARIFICATION AND ASSESSMENT OF WCS'S TOWARD OVERALL BENTHIC IMPACTS WITHIN THE MLS SAC/ KKE MCZ HAVING REGARD TO MARINE PROCESSES; CABLE INSTALLATION; USE OF HDD; AND RESULTANT SEDIMENT PARTICULATE DISPERSAL

- 5.2.115. Although LIRs have been considered they do not directly refer to benthic related matters. The mainstay of commentary associated these issues relates to the culmination of NE updated responses at Deadline 8 in the Examination: [\[REP8-095\]](#) to [\[REP8-100\]](#) as well as MMO Deadline 8 responses: [\[REP8-066\]](#) and [\[REP8-103\]](#).

EXA'S CONSIDERATION

- 5.2.116. In assessing the overall impacts, the ExA acknowledges Section 2.8 of NPS EN-3 provides detail regarding potential impact of offshore wind infrastructure on the marine environment. It sets out how direct effects on the physical environment can have indirect impacts on other receptors. In determining applications for offshore wind, EN-3 directs that the Secretary of State must be satisfied that the design and methods of construction reasonably minimise impact on the physical environment.
- 5.2.117. Section 5.4 of NPS EN-1 sets out matters relevant to Biodiversity and geological conservation at national level. It recognises that *'Biodiversity is the variety of life in all its forms and encompasses all species of plants and animals and the complex ecosystems of which they are a part'*. Paragraph 5.4.44 advocates that if significant harm to biodiversity cannot be avoided then the Secretary of State will give significant weight to any residual harm.
- 5.2.118. NPS EN-1 also sets out that the benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests. The Secretary of State may take account of any such net benefit where it can be demonstrated. Paragraph 5.4.42 states that as a general principal development should, in line with the mitigation hierarchy, aim to avoid significant harm to biodiversity and geological conservation interests. Where significant harm cannot be avoided, impacts should be mitigated, and as last resort appropriate compensation measures should be sought.
- 5.2.119. Paragraph 2.8.33 of NPS EN-3 advises that whilst technical suitability of foundation design is not in itself a matter for the Secretary of State, they would need to be satisfied that the foundations will not have an unacceptable adverse effect on marine biodiversity, the marine environment or marine heritage assets.
- 5.2.120. Additionally, NPS EN-1 Paragraphs 5.6.16 to 5.6.23 state that, in decision making, the Secretary of State should also be satisfied that the proposed development would be resilient to coastal erosion and deposition, taking account of climate change and mitigation measures, during the proposed development's operational life and any decommissioning period.
- 5.2.121. Above the requirements within EN-1; EN-2 and EN-3 the ExA has considered the policy and guidance highlighted in Table 8.4 [\[APP-022\]](#) this includes:
- 5.2.122. Marine Policy Statement (HM Government, 2011) (MPS). A key principle of the MPS is to manage competing demands, reduce conflict and promote compatibility in the marine area. It requires marine plans to consider cumulative impacts (Paragraph 2.3.1.6). There is an expectation in the MPS to ensure that the collective pressure of human activities is kept within levels compatible with achievement of Good Environmental Status. Related to that the North Falls array area and offshore section of the offshore cable corridor are located within the remit of the East Inshore and East Offshore Marine Plans (HM Government, 2014). Objective 6 is material, in that it sets the overall aim *"To have a healthy, resilient and adaptable marine ecosystem in the East Marine Plan areas"* It covers policies and commitments on the wider ecosystem, including those related to the Marine Strategy Framework Directive and the Water Framework Directive. As well as other environmental, social and economic considerations. Elements of the ecosystem considered by this objective include: *"coastal processes and the hydrological and geomorphological processes in water bodies and how these support ecological features"*.

- 5.2.123. The nearshore section of the offshore cable corridor is in the area covered by the South East Inshore Marine Plan (MMO, 2021). Policies SE-CC-2 and SE-CC-3 are of relevance. SE-CC-2 states – “*Proposals in the south east marine plan area should demonstrate for the lifetime of the project that they are resilient to the impacts of climate change and coastal change.*” SE-CC-3 states– “*Proposals in the south east marine plan area, and adjacent marine plan areas, that are likely to have significant adverse impacts on coastal change, or on climate change adaptation measures inside and outside of the proposed project areas, should only be supported if they can demonstrate that they will, in order of preference: a) avoid b) minimise c) mitigate - adverse impacts so they are no longer significant.*” Policy ECO1 of the East Marine Plan sets out that cumulative impacts affecting the ecosystem of the East Marine Plans should be addressed in decision making. Policy SE-MPA- requires proposals take account of adverse impacts on individual sites and the overall network, protecting important habitats and geological features. It does not support proposals that cannot avoid, minimise or mitigate adverse. Policy BIO1 advises that appropriate weight should be attached to biodiversity reflecting the need to protect it, taking account of the best available evidence.
- 5.2.124. The ExA acknowledges the principal receptors with respect to benthic and intertidal ecology are those habitats or species identified to be present. Of particular note is the KKE MCZ which lies adjacent to the array area and the MLS SAC which lies adjacent to the offshore cable corridor.
- 5.2.125. Below is Figure 4.2 taken from ES Chapter 4 Figures [APP-050] showing the KKE MCZ and MLS SAC:

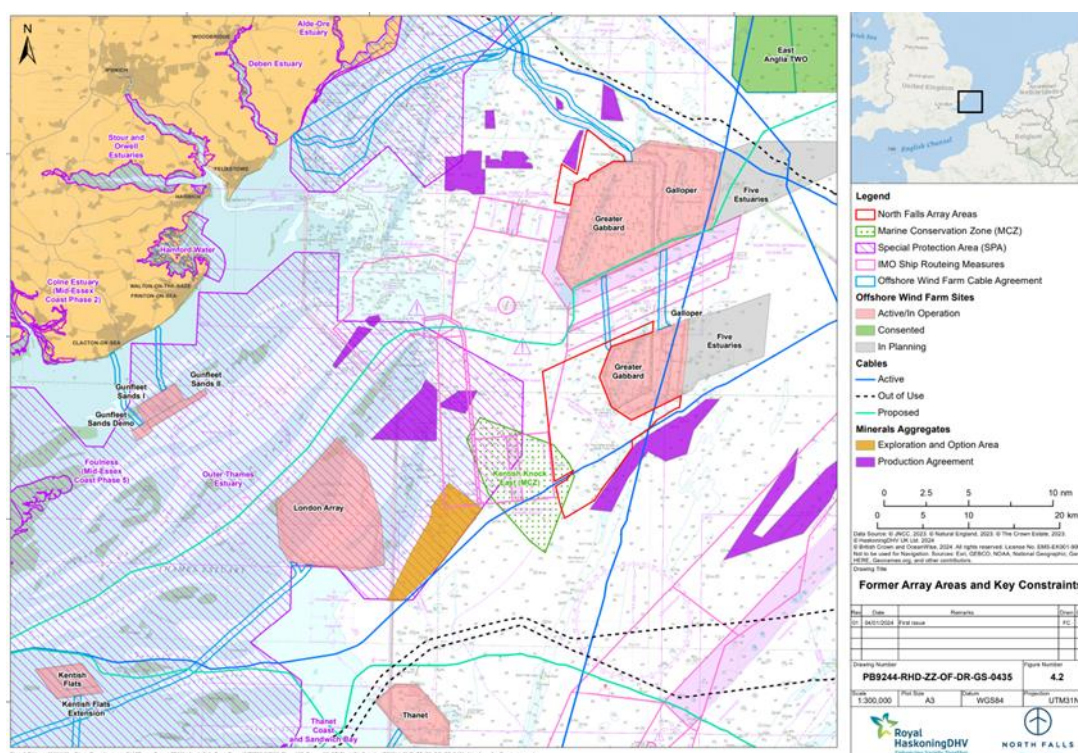
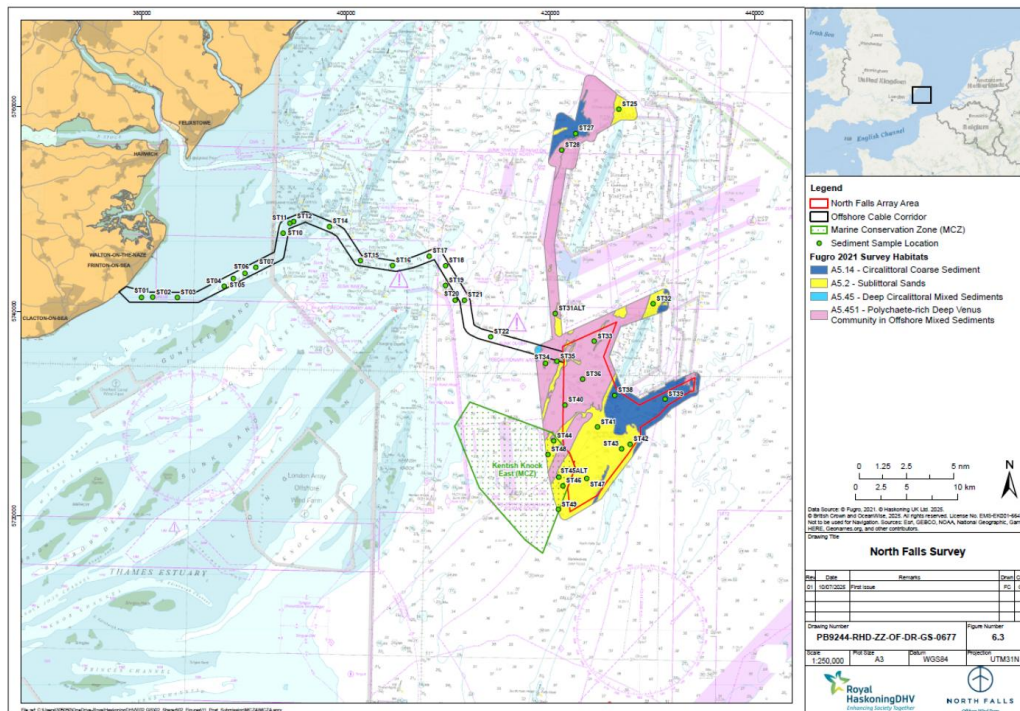


Figure 22: Former array areas and key constraints showing KKE MCZ and MLS SAC
(Source: ES Chapter 4 Figure 4.2 [APP-050])

5.2.126. Below is Figure 6.3 taken from [APP-094] (ES Appendix 10.1) further showing the KKE MCZ and its composition:



- 5.2.127. The ExA is mindful that a realistic WCS estimate based on available information should be considered and assessed. Similarly, suitable mitigation should also be considered to avoid impacts on the SAC and MCZ relative to the WCS case.
- 5.2.128. Importantly, NFOFW Order Limits do not overlap any Marine Protected Area (MPA). Benthic MPAs have been avoided by the Applicant through site selection and cable routing decisions, in line with NE advice.
- 5.2.129. The MMO [REP1-066] having regard to marine physical processes and geology sought clarification that the Applicant should inform them of the dredging methodology and source of the material. Initially the MMO did not consider the implementation of embedded mitigations to be robust and expected to see further consideration of mitigations. For benthic ecology the MMO also invited the Applicant to improve sampling provision as well as additional sediment assessment during the Examination period. But by Deadline 8 the MMO did not have any comments on the Schedule of Mitigation (Rev 3) [REP7-005] covering these issues, other than encouraging monitoring discussion proposed by NE.
- 5.2.130. The ExA notes that the content of the Applicant's Hydrodynamic and Dispersion Modelling Report (Rev 2) [REP7-042] was largely welcomed by NE as it addressed several key uncertainties identified in the mainstay of the Examination period.
- 5.2.131. The document demonstrates that the WCS deposition at MLS SAC due to construction related (including concurrent) activities would equate to 0.15m thickness over an area of 1.5km². This means that the construction of the project is likely to represent a negligible change to seabed level and seabed morphology in EIA terms.

- 5.2.132. That said, there were a couple of shortcomings identified by NE at D8. Firstly, the hydrodynamic model results are presented as differences in current speeds and bed shear stress between the Baseline, NFOWF, cumulative OWFs, and additional cable protection scenarios for different tidal conditions. Related to this the potential for mobilising different sediment grain sizes had not been fully evaluated.
- 5.2.133. However, the changes in current speeds and bed shear stress due to the presence of foundations and/or cable protection are predicted to be small and there is nothing more the Applicant can provide to help inform the determination. Thus, NE advised that monitoring should be secured to address the residual concerns. The ExA finds that this can be achieved via Deemed Marine Licence Conditions secured by the DCO.
- 5.2.134. Secondly, the updated hydrodynamic modelling included the WCS placement of cable protection offshore of the Essex coast in relatively shallow water. Whilst predicted changes in current speed and bed shear stress due to the WCS cable protection may be relatively small (+/- 5%), the long-term implications to nearshore sediment transport pathways and erosion/accretion potential around the cable protection had not been fully considered according to NE.
- 5.2.135. In line with NE advice the ExA notes that all efforts should therefore be made to minimise the amounts (and height) of external cable protection where it may affect nearshore sediment transport processes, seabed morphology (including offshore sandbanks in shallow water) and seabed level. The Applicant's information considered as a whole adequately demonstrates this from the ExA's perspective.
- 5.2.136. By Deadline 8, NE was satisfied the updated sediment deposition modelling confirmed the WCS deposition thickness within KKE MCZ.
- 5.2.137. Equally, NE was satisfied the updated modelling assessment was based on the WCS drilling locations for both large and small wind turbine generators near KKE MCZ. In both cases the sediment deposition due to drill arisings is predicted to be <0.5cm and would be contained within the array area near the structures that require drilling. In other words, there would be no deposition within the MCZ.
- 5.2.138. Added to that position, at Deadline 8 NE (via [\[REP8-095\]](#); [\[REP8-096\]](#); [\[REP8-097\]](#) [\[REP8-098\]](#); [\[REP8-099\]](#); [\[REP8-100\]](#)) maintained that in relation to plumes from cable installation sediment, that the Applicant should consider potential concurrent construction activities due to other nearby projects, and the potential for overlapping sediment plumes and associated deposition. On grounds of lack of quantification and evaluation, NE was unable to completely agree at Deadline 8 that sediment deposition/smothering in-combination would not result in the potential harm to the MLS SAC (Table 2 [\[RE8-098\]](#)).
- 5.2.139. Yet with all of these issues in mind, NE ultimately advised at Deadline 8 that the 'risk' of harm to the MLS SAC arising from construction is low. The ExA discusses and concludes on the MLS SAC implication in Chapter 7 and Appendix C.
- 5.2.140. Related matters that were resolved to the satisfaction of NE included:-
- The commitment of a minimum buffer of 150m between the MLS SAC and the installation of offshore cables and any associated cable protection. This distance is sufficient to ensure changes to supporting processes and biological communities would not occur within the MLS SAC from the WCS option for cable protection.

- The Evidence demonstrates that the WCS deposition at MLS SAC due to construction-related (including concurrent) activities is 0.15m thickness over an area of 1.5km². This is likely to represent a negligible change to seabed level and seabed morphology.
- The degree of WCS construction sediment thickness which would be apparent allowing for buffer distances are important decision-making components not contended by NE. These are compelling elements supporting the ExA's overall findings.

5.2.141. In the context of the above, the MMO responses [\[REP8-102\]](#) to NE EXQ3 responses – as well as NE's Appendix M7 [\[REP7-092\]](#) NE's comments on the ExA's 3rd Written Questions [\[PD-016\]](#) and [\[PD-017\]](#) are also relevant: ([\[REP7-085\]](#) to [\[REP7-092\]](#)).

5.2.142. In [\[REP8-102\]](#) MMO highlighted that NE welcomed the monitoring which has been included in the outline In Principle Monitoring Plan (IPMP). The MMO also acknowledged that NE advises that the monitoring proposed should be more specific to monitor changes to the seabed morphology, level and sediment composition if/where cable protection is placed adjacent to MLS SAC.

5.2.143. The MMO in [\[REP8-102\]](#) pointed out NE has provided responses to the ExQ3 questions posed in relation to protected sites, modelling and compensation. Otherwise, the MMO had no comment on the responses from NE.

5.2.144. Overall, The ExA finds that the Applicant from an EIA perspective has proactively implemented substantial mitigation to avoid direct impacts, as well as minimising temporary indirect impacts, on protected sites. These include:

- Avoiding any overlap, in response to initial NE feedback during export cable corridor route selection (secured by amendment to the Order Limits).
- Reducing the number of offshore export cables from four to two (secured by the maximum length of export cable in the dDCO).
- Committing to export cables and any associated cable protection being a minimum of 150m from the closest protected areas (secured by Schedule 9 DML, Condition 36).

KKE MCZ IMPACTS RELATIVE TO MARINE AND COASTAL ACCESS ACT PROVISION

5.2.145. Implications to the KKE MCZ have been considered throughout the Examination by the ExA. This includes via:- ExQ1 [\[PD-009\]](#); ExQ2 [\[PD-013\]](#); and ExQ3 [\[PD-016\]](#) & [\[PD-017\]](#). As well as ISH2 Tuesday 8 April [\[EV6-001\]](#) to [\[EV6-006\]](#).

EXA's CONSIDERATION

5.2.146. The ExA is aware that the KKE MCZ contains a range of sediment types, from fine sand through to coarse gravel and pebbles. The varied nature of the seabed means it potentially supports a wide range of species, both on and in the sediment. Within the sandy areas, burrowing molluscs, such as razor clams, can live within the sediment while small shrimp-like creatures scavenge within the sand grains. This habitat is also important for a range of fish species, including commercially important flatfish such as sole and plaice. The coarser sediments within the site also

support a wide range of species some living within the sediment such as anemones and clams, and others live on the surface, such as starfish and sea urchins.

- 5.2.147. The ExA is aware from Table 6.2 of [\[REP7-020\]](#) (as shown below) that the designation of KKE MCZ specifically protects the following features:

Table 4: Protected features of KKE MCZ (Source: Table 6.2 [\[REP7-020\]](#))

Protected feature	General management approach
Subtidal sand	Maintain in favourable condition
Subtidal coarse sediment	Recover to favourable condition
Subtidal mixed sediment	Recover to a favourable condition

- 5.2.151. It is also stated in the Applicant's Marine Conservation Zone Assessment (MCZA) Report (Rev 1) [\[REP7-020\]](#) changes in bed shear stress due to the presence of cable protection measures would occur immediately adjacent to the structures and there would be no effect within the KKE MCZ. Accordingly, the issue was considered to be resolved by NE at D8.
- 5.2.152. Even so, the ExA is mindful the assessment of seabed mobility and seabed erosion/deposition potential would still need to be reconsidered and assessed prior to construction and inform the cable burial assessment and design.
- 5.2.153. Other Examination points NE raised giving rise to unresolved matters included:-
- NE highlighted the proposed 50m buffer between array foundations and KKE MCZ. However, NE advocated a condition is added that secures 50m buffer extends from any hard substrate such as foundations or scour protection.
 - It is stated within [\[REP7-020\]](#) that deposition on the KKE MCZ would be of comparable sediment types to those of the MCZ and over a relatively small proportion of the MCZ. It is also predicted that this effect would be temporary as the sediment would naturally be re-distributed by the prevailing waves and tidal currents. Consequently, there would be a negligible impact magnitude on the physical attributes and targets of the KKE MCZ features. Furthermore, with regards to operational impacts, it is stated within [\[REP7-020\]](#) that changes to tidal current speeds and bedload transport would have only negligible effects along the eastern edge of the MCZ and there would be no significant changes to the physical environment (nor the benthic communities). Nonetheless, NE advised that owing to the residual uncertainties, and to support the assessment conclusions overall, substantial monitoring should be carried out to demonstrate that impacts on the physical attributes and targets of the MCZ are in fact negligible.
- 5.2.154. In line with NE advice the ExA finds owing to the residual uncertainties indicated above, substantial monitoring should be carried out to demonstrate that impacts on the physical attributes and targets of the MCZ would be negligible.

- 5.2.155. The ExA finds that, while some issues were deemed to be outstanding by NE and the MMO at close of the examination period, the ExA finds all the matters raised towards management of benthic ecological impacts within the KKE MCZ are resolvable considering the collective Deemed Marine Licence provisions available within the dDCO Rev 9 [\[REP8-005\]](#).
- 5.2.156. Similar to the MLS SAC collective mitigation controls are also apparent in the outline Offshore In-Principle Monitoring Plan (Rev 3) [\[REP8-009\]](#) and the Outline Horizontal Directional Drill Method Statement and Contingency Plan (Rev 4) [\[REP8-011\]](#); Outline Cable Specification and Installation Plan (Rev 4) [\[REP8-047\]](#) and Outline Sediment Disposal Plan (Rev 3) [\[REP8-045\]](#). Those documents give the ExA further reassurances the Applicant's EIA findings are credible.
- 5.2.157. A more detailed analysis of the adequacy of in principle monitoring secured by the rDCO is given by the ExA below.

IN-PRINCIPLE MONITORING

- 5.2.158. At Deadline 8 the MMO [\[REP8-102\]](#) noted there were still several issues outstanding in relation to monitoring related to Marine Protected Areas. The MMO largely defers to NE detailed advice in this regard.
- 5.2.159. Appendix C8.1 [\[REP8-097\]](#) to NE's Deadline 8 Submission regarding their Benthic Ecology Advice on the Applicant's Deadline 7 Documents provides some useful context. NE noted at D8 that important monitoring had not been secured through DML condition in the dDCO and should be.
- 5.2.160. Linked to NE's overall advice contained in Appendix B8 [\[REP8-096\]](#), received at Deadline 8 the ExA agrees that the Applicant's Offshore In-Principle Monitoring Plan (Rev 2) [\[REP7-024\]](#) the monitoring of indirect effects (Table 8-2) on KKE MCZ and MLS SAC should be aligned with the related monitoring proposed for marine processes in Table 8-1.

EXA'S CONSIDERATION

- 5.2.161. The Cable Specification and Installation Plan (Rev 3) [\[REP7-039\]](#) provided indicates *"the need for and scope of ongoing monitoring activities would be reviewed following installation (once as-built details are known) and during the operational lifetime of the project and will be in accordance with the In Principal Monitoring Plan, where applicable."*
- 5.2.162. Also when looking at the Offshore In-Principle Monitoring Plan (Rev 2) [\[REP7-024\]](#) In Table 5-2 for Benthic Ecology, construction and operation, it states that in *"the event monitoring discussed in Section 5.3, with regards to sandwave levelling, cable protection or scour within the order limits in proximity to the MLS SAC or KKE MCZ, shows significant changes to the physical processes..."* then monitoring of the benthic community would be undertaken. However, the related monitoring proposed in Table 5-1 Marine Geology, Oceanography and Physical Processes, is not aligned.
- 5.2.163. NE therefore advised that the monitoring proposal for indirect effects on MLS SAC and KKE MCZ in Table 5-1 should reflect the monitoring proposed in Table 5-2 [\[REP7-024\]](#). If monitoring related to sandwave levelling, cable protection or scour within the order limits in proximity to MLS SAC or KKE MCZ shows significant changes to the physical processes and physical environment then monitoring of the benthic community should be undertaken.

- 5.2.164. Furthermore, there remained some residual uncertainty regarding the extent and nature of sediment deposition within KKE MCZ, and potential changes to seabed morphology within the area of the MCZ adjacent to the array during operation of the windfarm.
- 5.2.165. Overall, the ExA concurs that the monitoring within marine protected areas should be substantial and its delivery robust. The Deadline 8 version of the Offshore In-Principle Monitoring Plan Rev 3 [\[REP8-009\]](#) is considered by the ExA to be sufficient to tackle NE/MMO concerns.
- 5.2.166. This is because Section 3 of [\[REP8-009\]](#) specifically states in the event that a review of the monitoring results shows a greater impact than that assessed in the ES, Report to Inform Appropriate Assessment [\[APP-173\]](#) to [\[APP-174\]](#) /[\[REP7-013\]](#) [\[REP7-014\]](#) and [\[APP-176\]](#) to [\[APP-182\]](#) or the Marine Conservation Zone Assessment Report [\[REP7-019/020\]](#), where applicable, the Applicant would review an adaptive management approach, in consultation with the MMO and SNCB.
- 5.2.167. The ExA finds that it clearly states the adaptive management would be limited to measures which are practicable and proportionate to the level of effect and could include:
- Publication of the results to inform future EIAs;
 - Further monitoring; and
 - Remedial action/ mitigation.
- 5.2.168. It also confirms that the Applicant is supportive of appropriate strategic monitoring studies. Where the Applicant is made aware of new strategic monitoring studies they would discuss with the relevant authorities if they are appropriate to discharging specific DML conditions. All of the above is in line with NE and MMO's comments.
- 5.2.169. Plus, the DML content of dDCO Rev 9 [\[REP8-005\]](#) is also relevant. This is because provisions of: Schedule 8 Article 36 Deemed Marine Licence Under the 2009 Act – Generation Assets (DML) Part 2 Conditions: 21 (f) and (j); 25, 26, 27 and 28; Schedule 9 (DML for Transmission Assets) Part 2 Conditions: 22, 25, 26, 27, 28 and 29; And Schedule 10 (offshore converter platform) Conditions 21, 25, 26, 27 and 28 collectively seek offshore pre and post construction monitoring plan agreements, adequately addressing monitoring needs.
- 5.2.170. Consequently, the ExA finds the overall draft in-principle monitoring needs mentioned by NE/MMO have been sufficiently addressed and a more refined final version can be properly secured. The ExA's specific HRA findings toward any potential compensatory provision linked to the MLS SAC are discussed in Report Chapter 7 and Appendix C.
- 5.2.171. In relation to the KKE MCZ the ExA's view is that benthic compensatory provision/ Measures of Equivalent Environmental Benefit (MEEB) are not required in this case as this would be for indirect temporary effects on benthic habitats involved. Moreover, there is no precedents for seeking such compensation the ExA is aware of.

CONCLUSIONS

- 5.2.172. The ExA recognises that the potential impacts assessed for the construction and decommissioning phases in the ES include: temporary physical disturbance;

increased suspended sediment concentrations; re-mobilisation of contaminated sediments; and underwater noise and vibration.

- 5.2.173. For the operation and maintenance phase, assessed impacts included: temporary physical disturbance from maintenance activities; long term habitat loss from infrastructure on the seabed; increased suspended sediment concentrations; re-mobilisation of contaminated sediments; underwater noise and vibration; Interactions of electromagnetic fields (EMF); colonisation of introduced substrate, including by non-native species; and indirect effects on the intertidal zone.
- 5.2.174. The ExA accepts that appropriate forms of mitigation have been incorporated into the scheme design to avoid harm to benthic receptors as far as possible. This includes provisions such as: the array area being reduced to avoid direct overlap with the KKE MCZ; the offshore cable corridor avoids overlap with the MLS SAC; the use of horizontal directional drilling at landfall to avoid impacts to the intertidal zone; committing to burying cables where practicable to reduce the effects of habitat loss and electromagnetic field; micro-siting where practicable around seabed obstacles such as reefs to minimise potential effects on receptors; and employing biosecurity measures to reduce the potential spread of invasive non-native species.
- 5.2.175. Bearing in mind the full summary of benthic and intertidal impacts indicated in Table 10.30 of ES Chapter 10 [\[APP-024\]](#) the ExA agrees that with the successful implementation of mitigation measures the proposed development would have no greater than minor adverse (not significant in EIA terms) effects on benthic and intertidal ecology during all project phases.
- 5.2.176. Tied to this conclusion the ExA concurs there are no significant overall cumulative effects with respect to benthic relevant receptors in line with the findings of the ES.
- 5.2.177. We have had regard to Table 8.51 of ES Chapter 8 [\[APP-022\]](#) of the potential marine geological and physical effects arising from the proposed development. Similar to the ES case made for benthic receptor impacts, the ExA concurs appropriate level of mitigation has been incorporated into the design. This is because the Applicant's approach incorporates sensitive turbine spacing (reducing interactions between the effects of individual turbines); using micro-siting where practicable to minimise the requirements for seabed preparation prior to installation; and burying cables where practicable to reduce the impact on sediment transportation processes.
- 5.2.178. The ExA agrees that with the implementation of mitigation measures, North Falls is to have no greater than negligible adverse (not significant in EIA terms) effects on marine geology and physical processes during all project phases. Likewise, even when considering the possibility of cumulative effects to occur with Five Estuaries Offshore Wind Farm and other projects the cumulative effects are unlikely to be significant in EIA terms.
- 5.2.179. With respect to marine water and sediment quality, the ExA has borne in mind the content of ES Chapter 9 [\[APP-023\]](#) which highlights further impacts closely related to the marine geology and physical processes assessment summaries in ES Chapter 8, Table 8.51. Alongside Table 9.19 [\[APP-023\]](#) of ES Chapter 9 listing the environmental effects.
- 5.2.180. The ExA is mindful that separate technical reports have been produced by the Applicant which specifically assess the effects on the MLS SAC in the Report to Inform Appropriate Assessment Part 2 Benthic Ecology (Annex I habitat in SACs

and SPA supporting habitat) (Rev1) [REP7-013] and the KKE MCZ via the Marine Conservation Zone Assessment Report (Rev 1) [REP7-019]. The documents conclude that there would be no AEoI to the SAC and no risk of hindering the conservation objectives of the MCZ. The ExA gives its full and complete analysis in Report Chapter 7/Appendix C toward all HRA findings.

- 5.2.181. Whilst the ExA concludes there would be no significant effect within the KKE MCZ, we acknowledge that the assessment of seabed mobility and seabed erosion/deposition potential would still need to be robustly re-considered and assessed on a precautionary basis and inform the cable burial assessment and project design. Such a step aligns with NE advice.
- 5.2.182. Collectively, the Outline Offshore In-Principle Monitoring Plan (Rev 3) [REP8-009]; Outline Horizontal Directional Drill Method Statement and Contingency Plan (Rev 4) [REP8-011]; Outline Cable Specification and Installation Plan (Rev 4) [REP8-047]; Outline Sediment Disposal Management Plan (Rev 3) [REP8-045] and Schedule of Mitigation (Rev 3) [REP7-004] (albeit the latter is not a certified document but incorporates other certified documents in its rationale) gives the ExA further confidence the Applicant's relevant protected site findings and assessment of risks are credible.
- 5.2.183. This is in tandem with the content of dDCO Rev 9 [REP8-009] under the provisions of: Schedule 8 Article 36 Deemed Marine Licence Under the 2009 Act – Generation Assets (DML) Part 2 Condition's 21, 25, 26, 27 and 28; Under Schedule 9 (DML for Transmission Assets) Part 2 Conditions 22, 25, 26, 27, 28 and 29; and Schedule 10 (offshore converter platform) Conditions 21, 25, 26, 27 and 28 collectively seeking offshore pre and post construction monitoring plan agreements. Which incorporates due process for overall design plans, Scour Protection Plan/Sediment Disposal Management Plan adaptation/revision if needed in consultation with the MMO/SNCB.
- 5.2.184. The ExA also highlights that amendments to approved details secured by the DCO can also be administered through Requirement 28 and there is adequate control over offshore decommissioning through Requirement 25.
- 5.2.185. The ExA accepts that previous decisions of the SoS in determining applications for development consent are not binding and each case must be determined on its own facts and circumstances. However, as the Applicant points out previous decisions can be relevant from a principle of consistency in decision making, to the extent of considering comparable factual scenarios. In that regard, NE does compare North Falls and the Sheringham and Dudgeon Extension Projects (SEP&DEP), for which development consent was granted in April 2024.
- 5.2.186. Even though SEP&DEP was subject to a derogation and requires MEEB in respect of impacts on the Cromer Shoal Chalk Beds MCZ. Export cabling in that case was within the MCZ and the WCS involved direct and long-lasting impacts over a 40-year period. The ExA agrees with the Applicant's case that there is no ecological equivalence between potential North Falls's impacts involving indirect, temporary deposition effect of sediment evidenced and SEP&DEP.
- 5.2.187. There is also no precedent for a derogation case being required for indirect, temporary effects on benthic habitats the ExA is aware of.

- 5.2.188. When applying the mitigation hierarchy, the ExA finds that the Applicant has taken extensive measures to avoid placing physical infrastructure within the MLS SAC and KKE MCZ. It has deliberately set back works from protected sites.
- 5.2.189. The totality of evidence submitted and the NE/MMO responses at Deadline 8 are important. In relation to the KKE MCZ the ExA's view is that benthic compensatory provision/ Measures of Equivalent Environmental Benefit (MEEB) are not required in this case owing to the short lived, temporary indirect effects to benthic habitats. If the SoS disagrees, particularly bearing in mind any VEOWF outcomes, 'Without prejudice HRA - MCZA DCO Schedules (Rev 3)' [\[REP8-049\]](#) have been provided by the Applicant. Thus, MCZ compensation is not formally secured unless further amendment to the rDCO is applied by the SoS.
- 5.2.190. Thus overall, in the ExA's view, it has been demonstrated that North Falls accords with requirements of NPS EN-1 and NPS EN-3; the UK Marine Planning Statement and East Marine Policies ECO1 and BIO1 for benthic and intertidal related impacts. It accords with the Marine and Coastal Access Act 2009 in respect of all benthic and protected site marine related impacts.
- 5.2.191. Bringing all points together for benthic and intertidal ecology; physical marine processes/marine water and sediment quality the level of harm attributed should be afforded little weight in the overall planning balance against making the Order.

OFFSHORE AND INTERTIDAL ORNITHOLOGY

INTRODUCTION

- 5.2.192. This section looks at the effects of the Proposed Development both alone and cumulatively, on offshore and intertidal ornithology.

THE APPLICATION

- 5.2.193. The Applicant's assessment of offshore ornithology is set out in the ES at 3.1.15, Chapter 13 [\[APP-027\]](#). ES Chapter 13 has the following appendices attributed to it:
- ES Appendix 13.1 Offshore Ornithology Consultation [\[APP-102\]](#)
 - ES Appendix 13.2 Offshore Ornithology Technical Report [\[APP-103\]](#)
- Plus, other further relevant information is contained within other sections of the ES at:
- ES Appendix 13.3 Supplementary Information for the Offshore Ornithology Cumulative Effects Assessment (Rev 0) [\[REP3-040\]](#)
 - Cumulative Effects Assessment Summary [\[REP3-042\]](#) updated to Rev 1 [\[REP6-047\]](#)
 - 7.1.4.1 RIAA Part 4 Offshore Ornithology Birds Directive Annex 1 and Migratory Species [\[APP-178\]](#).
- 5.2.194. The Applicant's assessments should also be read in conjunction with following linked chapters:
- ES Chapter 10 Benthic and Intertidal Ecology [\[APP-024\]](#).
 - ES Chapter 11 Fish and Shellfish Ecology [\[APP-025\]](#).
- 5.2.195. Broadly speaking, ES Chapter 13 contains the following core elements:
- Scope and geographical area of the study/assessment.

- Methodology and baseline data gathering.
- Baseline conditions – the existing environment.
- Basis for the ES assessment including maximum design scenarios (MDS) and embedded environmental measures.
- Methodology for the ES assessment.
- Monitoring.
- Assessment of effects including cumulative, inter-related and transboundary.
- Summary of residual effects.

BASELINE

- 5.2.196. The study area includes the proposed array, a 4km buffer, and the offshore cable corridor extending to mean low water springs (MLWS) at landfall, where it lies beyond the buffer. Figure 13.1 in ES Chapter 13 [\[APP-058\]](#) illustrates this area, representing the maximum zone of influence for the assessment.
- 5.2.197. Baseline surveys (March 2019–February 2021) provided abundance and density estimates for offshore ornithology receptors across the array and 2km/4km buffers. These comprised 24 monthly digital aerial surveys along 2.5km-spaced NW–SE transects. Full details are in ES Appendix 13.2 [\[APP-103\]](#).
- 5.2.198. Tables 2.5 and 2.6 in [\[APP-103\]](#) summarise survey timing and conditions; Table 2.7 presents raw bird counts. Species-specific data are detailed in further tables within the same appendix. All surveys achieved 15% coverage.
- 5.2.199. In January–February 2021, the survey area extended 12km south-west to include parts of the Outer Thames Estuary SPA, targeting peak red-throated diver presence. The 12km extension was informed by London Array OWF post-construction monitoring (APEM 2021), which found red-throated diver displacement up to 11.5km. These data were used in the RIAA but excluded from the EIA.
- 5.2.200. All data sources, including desk-based assessments, are listed in Table 13.4 and Paragraph 30 of [\[APP-027\]](#). The assessment also accounts for grid connection options 1–3 within the design envelope.

ASSESSMENT OF EFFECTS – CONSTRUCTION / OPERATION / DECOMMISSIONING

- 5.2.201. The realistic worst-case scenarios for the likely significant effects scoped into the EIA for the offshore ornithology assessment relate to Options 1 and 2. These are summarised in Table 13.1 [\[APP-027\]](#). The worst-case scenarios are summarised in Table 13.1 [\[APP-027\]](#).
- 5.2.202. Inter-relationships are summarised in Table 13.57 [\[APP-027\]](#). The table indicates where assessments carried out in other ES chapters have been used to inform the offshore ornithology assessment. This includes ES Chapter 11 Fish and Shellfish Ecology [\[APP-025\]](#) and ES Chapter 10 Benthic and Intertidal Ecology [\[APP-024\]](#).
- 5.2.203. With respect to transboundary effects. Due to the level of development in the southern North Sea by EU Member States (i.e. Belgium, the Netherlands, Germany and Denmark), and given that birds are highly mobile and migratory, the applicant's overall methodology accepts there is potential for transboundary impacts especially with regard to displacement, barrier effects and collision risk.
- 5.2.204. Transboundary effects are assessed in Section 13.9 of [\[APP-025\]](#). The potential for transboundary impacts in relation to potential linkages to non-UK protected sites

and sites with large concentrations of breeding, migratory or wintering birds (including the use of available information on tagged birds) is also assessed in the RIAA. No significant transboundary effects are predicted in the applicant's assessments.

MITIGATION AND MONITORING

- 5.2.205. Schedule of Mitigation (Rev 2) [REP5-006] Table 2.6 lists the mitigation and monitoring in relation to offshore ornithology. Mitigation is primarily embedded.

Table 5: Mitigation and monitoring in relation to offshore ornithology (Source: Table 2.6 [REP5-006])

Mitigation Measure	Control Reference
Offshore cable corridor site selection reduced overlap with Outer Thames Estuary SPA	Reflected in the Order limits; undertaken in consultation with Natural England
Construction protocol to reduce disturbance to red-throated divers during 1 Nov – 1 Mar	PEMP; Schedule 8, Part 2, Condition 21; Schedule 9, Part 2, Condition 22; Schedule 10, Part 2, Condition 21
Reduction of array area from 149.5km ² to 95km ² , removing northern array and refining southern array	Following initial consultation
Reduction in maximum turbine numbers (from 72 to 57 for smallest model; 40 to 34 for largest)	Schedule 1, Part 3, Requirement 2 of the dDCO
Minimum air gap of 27m above MHWS (26.6m above HAT) to reduce seabird collision risk	Schedule 1, Part 3, Requirement 2 of the dDCO

- 5.2.218. No mitigation is proposed for decommissioning prior to consent. A decommissioning plan is required by Article 3, Schedule 1, Part 3 Requirements 25 and 26 of the DCO.
- 5.2.219. Monitoring would follow the principles within the Project Environmental Management Plan, the outline being PEMP (Rev2) [REP6-027] and Offshore In-Principle Monitoring Plan [REP8-009].

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.2.220. The majority of offshore and intertidal ornithological main issues in the Examination were HRA related based on EIA findings within the submitted ES. This included:-
- Red-Throated Diver (RTD) at the Outer Thames Estuary (OTE) SPA impacts including regard to cable route and timing of cabling installation;

- Impacts to Lesser black-backed gull (LBBG) from the Alde Ore Estuary SPA; and impacts to Kittiwake, Guillemot, and Razorbill for the project alone or in combination with other plans or projects; and
- The scope and adequacy of ornithological compensation measures if accepting an AEoI for relevant seabird features of SPAs is not beyond reasonable scientific doubt.

5.2.221. The ExA has made detailed assessments on all of these matters in Appendix C of this Report. Therefore, the EIA issues considered here broadly equate to:

- Offshore ornithological impacts including regard to any mitigations possible overall.

BIRD IMPACTS INCLUDING REGARD TO ANY MITIGATIONS POSSIBLE OVERALL

5.2.222. Babergh District Council [[REP1-065](#)]; East Suffolk Council [[REP1-064](#)]; Essex County Council [[REP1-065](#)]; and Suffolk County Council's LIR's [[REP1-074](#)] combined raised some offshore ornithological related issues which the ExA has taken into account.

5.2.223. For offshore ecological impacts Suffolk County Council's (SCC) LIR focused on: (i) harm to migratory bats, such as Nathusius' pipistrelle, caused by wind turbine rotor blades. (ii) In combination impact on Alde-Ore Estuary SPA population of LBBG. SCC state they are open-minded as to whether this adjustment to cut-in speeds should be secured as a design parameter in the text of the DCO or by inclusion in a suitable control document. The ExA has considered offshore bat impacts in Chapter 4.3 of this Recommendation as it does not fall neatly into the other relevant topic splits.

5.2.224. It was the Examination submissions from NE and RSPB that generated the most commentary associated to this topic. For efficiency the ExA has focused on subsequent positions recorded towards the end the Examination mostly at Deadline 8. These include NE closing responses within [[REP8-095](#)]; their Risk and Issues Log [[REP8-099](#)]; and Comments on the RIES [[RE8-100](#)]. Alongside the RSPB submissions concerning: comments on any submissions received at the previous deadline and Parties closing statements of final position including outstanding matters not resolved by end of examination [[REP8-103](#)]; RSPB SoCG Rev 1 [[REP8-071](#)]; Responses to ExQ2 [[REP5-155](#)]; as well as other commentary within [[REP5-113](#)] and [[REP5-114](#)]; [[REP4-089](#)]; [[RR-294](#)].

EXA'S CONSIDERATION

5.2.225. The ExA has considered the effects of the Proposed Development on offshore and intertidal ornithology in the context of the policies and legislation set out in (Section 13.4.1, ES Chapter 13 [[APP-027](#)], as well as other relevant policies and legislation. This includes the policies of NPS EN-1 and NPS EN-3, UK Marine Planning Statement and relevant Marine Plans: East Inshore and the East Offshore Marine Plans; and the South East Marine Plan. These cover a range of objectives relating to biodiversity protection/conservation; supporting valued species (protected or otherwise); and for healthy and resilient marine ecosystems.

5.2.226. The ExA acknowledges that the EIA/ES have been carried out in accordance with the relevant requirements set out in NPS EN-1 and NPS EN-3. The ExA finds there is adequate information on abundance and density of seabirds in and around the North Sea.

- 5.2.227. Birds present in offshore waters and potentially affected by the construction, operation, maintenance and decommissioning of NFOWF are predominantly seabirds (auks, gulls, terns, gannets, skuas, shearwaters, petrels and divers). Seabird species may be present during the breeding season and non-breeding season (including the spring/autumn migration/passage periods).
- 5.2.228. Relative to the ES, the ExA accepts that potential impacts should include due regard to: direct disturbance and displacement during construction of the export cables; direct disturbance and displacement from construction activity on array area; and indirect effects on prey species and habitats.
- 5.2.229. For the operation and maintenance phase, potential impacts assessed the ExA is conscious of include: direct disturbance and displacement; collision risk; combined effects of collision risk and displacement; and indirect effects on prey species and habitats. As well as direct disturbance and displacement from decommissioning activities; and indirect effects on prey species and habitats during any decommissioning activity.
- 5.2.230. Bearing in mind potential those impacts, the Applicant's ES concluded effect significance for guillemot, razorbill, RTD, and gannet to be minor adverse (not significant in EIA terms). Both NE and RSPB submissions considered that there could be a greater impact which could be significant at the EIA level.
- 5.2.231. Notwithstanding the position of the ES, NE initially identified significant adverse impacts at the EIA scale to gannet, kittiwake, black backed gull, guillemot, razorbill, and RTD from OWF in the North Sea, irrespective of the contribution of North Falls to the cumulative impact totals. NE considered that the proposed development would make an additional contribution to those impacts. Thus, NE recommended every effort is made to mitigate these impacts. These issues have been subject to notable progression and Examination evaluations up to Deadline 8. The ExA has given substantial weight to the advice of NE and RSPB relative to all areas of dispute.
- 5.2.232. At the project level, NE advised that NFOWF should aim to reduce *the frequency, duration and / or intensity of disturbance affecting roosting, foraging, feeding, moulting and/or loafing birds so that they are not significantly disturbed* and to *"maintain the extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (moulting, roosting, loafing, feeding).*

Cumulative Impacts and Position at the Close of Examination

- 5.2.233. Impacts on kittiwake, guillemot, RTD and razorbill have remained in dispute at the end of the Examination. In contrast to the ES, NE could not conclude there is no harm arising from disturbance and displacement during construction, operation and maintenance phases. Additionally, the ES and RIAA Part 4 [\[APP-178\]](#) conclude adverse effects for LBBG from the Alde Ore Estuary (AOE) SPA. NE and the Applicant are both in agreement on this point and broad agreement on the level of harm. The ExA's highlights all HRA findings on these matters are found within Chapter 7 and Appendix C where we have also had regard to the Rampion 2 decision by the SoS.
- 5.2.234. NE's position in their closing assessment therefore remained that the cumulative impact of all the North Sea offshore wind farms would produce adverse impacts on all of the named species and would be significant at the EIA level. Notwithstanding

any benefits from mitigation and compensation measures arising from Habitats Regulations for NFOWF.

CONCLUSIONS

- 5.2.235. The ExA has considered all the issues raised during the Examination related to offshore and intertidal ornithology. This includes the summary of effects listed in Table 13.58 in ES Chapter 13 [\[APP-027\]](#), acknowledging there were some areas of dispute with respect to the level of harm to specific species including: razorbill, RTD, guillemot and kittiwake.
- 5.2.236. The Applicant's position was that with the embedded mitigation measures, the proposed development is predicted by the ES to have no greater than minor adverse (not significant in EIA terms) effects on ornithological receptors during all its phases. Moreover, following Examination updates, it was not anticipated by the ES that cumulative effects are likely to be significant in EIA terms, with the exception of collision risk for kittiwake, and gull which were all assessed to be potentially significant in EIA terms.
- 5.2.237. In terms of other relevant matters, NE through [\[RR-243\]](#) point F8, have stated that appropriate baseline data has been gathered for ornithological impact assessment. There were criticisms from RSPB in relation to digital survey methodology, but the Applicant has addressed these in [\[REP1-042\]](#). The ExA finds there is no strong reason to deviate from NE's findings or advice in this regard.
- 5.2.238. Moreover, RSPB raised additional concerns towards High Pathogenic Avian Influenza (HPAI) but these have been fully responded to by the Applicant collectively in: ES Chapter 13 [\[APP-027\]](#); RIAA [\[APP-178\]](#) and other updates in [\[REP1-056\]](#) and [\[REP1-045\]](#). While HPAI may cause some uncertainty, it is likely that any impacts from HPAI would result in fewer birds within the NFOWF area. Thus, it is unlikely impacts from the proposed development would significantly interact with the effects of HPAI. All in all, the ExA concludes the Applicant's assessments are sufficiently robust factoring such uncertainty.
- 5.2.239. The ExA has given considerable weight to the position of NE [\[REP8-099\]](#) within its risk and issues log received at the close of the Examination, that the cumulative impacts on all of the identified species from offshore wind farms in the North Sea would lead to significant adverse impacts. Overall, there would be demonstrable harm to various seabird species. Such harm even with mitigation would be unavoidable. Avoidance is demonstrated as not possible with the Proposed Development in place. Avoidance of harm through the embedded design mitigations have otherwise been appropriately dealt with by the Applicant in accordance with good practice, as demonstrated by the ES. However no new project specific mitigations were proposed by them.
- 5.2.240. Because of those considerations the ExA finds that the proposed development accords with the general requirements of NPS EN-1 and NPS EN-3 and Marine Plan Policies ECO1 and BIO1 with respect to offshore ornithological implications in process terms.
- 5.2.241. In conclusion the ExA attributes moderate weight to the overall level of harm arising from ornithological related impacts associated to a number of protected sites/features encompassing seabird populations, and relative to the size of the windfarm development consent is sought, due to the NFOWF contribution to cumulative impacts.

FISH AND SHELLFISH ECOLOGY

INTRODUCTION

- 5.2.242. The Applicant's assessment of fish and shellfish ecology is provided in ES Chapter 11 [\[APP-025\]](#) with associated Figures [\[APP-056\]](#). Additional information to support the fish and shellfish ecology assessment includes ES Appendix 11.1 Fish and Shellfish Ecology Technical Report [\[APP-095\]](#).

THE APPLICATION

- 5.2.243. The Applicant's assessment should be read in conjunction with following linked chapters: ES Chapter 8 Marine Geology, Oceanography and Physical Processes [\[APP-022\]](#); ES Chapter 9 Marine Water and Sediment Quality [\[APP-023\]](#); ES Chapter 10 Benthic and Intertidal Ecology [\[APP-024\]](#); ES Appendix 12.3 Underwater Noise Modelling [\[APP-098\]](#); and ES Chapter 14 Commercial Fisheries [\[APP-028\]](#). As well as the Outline Fisheries Liaison and Coexistence Plan [\[APP-244\]](#)
- 5.2.244. The study area for fish and shellfish ecology was defined with reference to the International Council for the Exploration of the Sea (ICES) rectangles as shown in ES Figure 11.1 [\[APP-056\]](#). The North Falls study area is the combined area of the following ICES rectangles: 1. ICES rectangle 32F1, where the majority of proposed offshore development is located (including the whole offshore cable corridor and practically the totality of the array area); and 2. ICES rectangle 32F2 – where a small section of the array area is located.
- 5.2.245. The final design of the arrays and cabling for the proposed development would be confirmed through dDCO Part 3 Requirement 2 post-consent.
- 5.2.246. The realistic worst-case scenarios for the fish and shellfish ecology assessment are summarised in Table 11.2 [\[APP-025\]](#). These are based on the parameters described in ES Chapter 5 Project Description [\[APP-052\]](#), which provides further details regarding specific activities and their durations. With regards to fish and shellfish ecology, Options 1 and 2 for electrical connection would be the same, and these represent the worst-case scenario assessed. For Option 3, there would be no export cables to shore. Within the array area, under Options 1 and 2 there would be two offshore substation platforms (OSPs), whereas for Option 3 there would be one offshore converter platform (OCP) and up to one OSP, but with no change to the worst-case foundation infrastructure.
- 5.2.247. The realistic worst-case scenarios for construction, operation/maintenance and decommissioning impacts include regard to:
- Temporary habitat loss/ physical disturbance
 - Increased suspended sediment concentrations and sediment re-deposition
 - Re-mobilisation of contaminated sediments
 - Underwater noise and vibration associated with piling for foundation installation
 - Underwater noise and vibration from other construction activities
 - Underwater noise from UXO clearance
 - Changes in fishing activity

BASELINE

- 5.2.248. The characterisation of the fish and shellfish ecology baseline has been informed via desktop review of available data and information. This has included information from fish surveys carried out at offshore wind farms in the proximity of NFOWF,

namely the Greater Gabbard Offshore Wind Farm (GGOW) and Galloper Wind Farm (GWF), available data from ICES on the results of fish surveys which cover the study area and analysis of fisheries landings statistics. The results of the sediment grab samples collected were also used. Table 11.6 [\[APP-025\]](#) lists the available data and information sources.

- 5.2.249. Fish and shellfish ecology receptors were identified taking account of: presence/abundance in the study area; location of spawning and nursery grounds; conservation importance; commercial importance; and role within the North Sea's food-web. In addition, due consideration was given to the feedback received in the Scoping Opinion of relevance to fish and shellfish ecology and the consultation undertaken with the Seabed Expert Topic Group on fish and shellfish ecology issues as part of the Evidence Plan Process.
- 5.2.250. Data from the IBTS (International Bottom Trawl Survey) (2017 - 2021) have been analysed by the Applicant to characterise the fish and shellfish community in the study area and are presented in ES Appendix 11.1 [\[APP-095\]](#).
- 5.2.251. Demersal bony fish species recorded in the study area by the IBTS in greatest numbers was whiting. Other species found in relatively high numbers included: dab, bib, poor cod, plaice and Dover sole. Species such as: lesser weever, grey gurnard, lemon sole and striped red mullet were also relatively abundant but for the most part their catches were concentrated in rectangle 32F2, with relatively low numbers found in 32F1, where most of NFOWF is located. The remaining species of demersal bony fish were all recorded in relatively low numbers. Small spotted catshark was the elasmobranch found in greatest numbers, followed by thornback ray and smooth hounds.
- 5.2.252. The Applicant makes the case that the principal species landed by weight by UK vessels from the study area are molluscs, predominantly cockle and whelk. However, cockles are not fished in the vicinity of the offshore cable corridor. Useful information is contained in ES Appendix 11.1 [\[APP-095\]](#) and ES Chapter 14 [\[APP-028\]](#) on fish species local to the area having regard to local vessels. Table 11.11 [\[APP-025\]](#) denotes the Surveys undertaken in the Galloper and Greater Gabbard Offshore Wind Farms. Further details on the results of these surveys are provided in ES Appendix 11.1 [\[APP-095\]](#).
- 5.2.253. Spawning or nursery grounds have been defined in areas that overlap with the array area and offshore cable corridor and are listed in Table 11.12 [\[APP-025\]](#) to complement the information in ES Appendix 11.1 [\[APP-095\]](#).
- 5.2.254. NFOWF overlaps with the Southern North Sea Special Area of Conservation (SAC) and the array area is adjacent to the Kentish Knock East Marine Conservation Zone (MCZ). The offshore cable corridor runs adjacent to the Margate and Long Sands SAC and the inshore section of the offshore cable corridor overlaps with the Outer Thames Estuary Special Protection Area (SPA). The inshore section of the offshore cable corridor is around 5.9km from the Blackwater, Crouch, Roach and Colne Estuaries MCZ. Fish and shellfish species of conservation importance which have the potential to be found in the study area are outlined in the following sections including: 'Diadromous' migratory species; 'Elasmobranchs'; and other species with designated conservation status.
- 5.2.255. Table 11.13 [\[APP-025\]](#) lists the principal elasmobranch species potentially present in the vicinity. This includes various types of sharks, skates and rays. Table 11.14

[APP-025] then summaries the assessment outcomes for species. Table 11.57 [APP-025] gives a complete overview.

- 5.2.256. The Marine Protected Areas (MPAs) nearby are stated by the Applicant as not being designated for the protection of fish or shellfish species. Except for the Blackwater, Crouch, Roach and Colne Estuaries MCZ, where shellfish species (native oyster/oyster beds) are protected features for designation. Nonetheless, it is accepted by the ES that MPAs, still provide habitat and support a wide range of crustaceans and fish and in some cases include foraging areas of importance for marine mammals and birds.
- 5.2.257. It is also anticipated by the ES that the baseline would continue to evolve relative to global trends which include the effects of climate change as well as trends at the European level such as changes in fisheries regulations and policies.

ASSESSMENT OF EFFECTS – DURING CONSTRUCTION

- 5.2.258. Impacts on fish and shellfish receptors during construction related to: 1. Physical disturbance and temporary habitat loss; 2. Increased SSCs and sediment re-deposition; 3. Re-mobilisation of contaminated sediments; 4. Underwater noise from piling for foundation installation; 5. Underwater noise from other construction activities; 6. Underwater noise from UXO clearance; and 7. Changes in fishing activity have all been assessed by the Applicant and are summarised here.

Table 6: Summary of assessment of effects during construction

Type of Impact	Species and Processes Affected	Significance of Impact using MarESA	Source References
1 Physical disturbance and temporary habitat loss	Herring, sandeels, thornback ray, crabs, lobster, cockles, oysters including spawning	Negligible to minor significance	[APP-025], [APP-056], [APP-105], [APP-095].
2 Increased SSCs and sediment re-deposition	Sandeels, herring, crabs, spiny lobster, welk, cockles, oysters including eggs, larvae and spawning grounds	Negligible to minor significance	[APP-022], [APP-024]
3 Re-mobilisation of contaminated sediments	Fish and shellfish receptors	Negligible significance	[APP-024]
4 Underwater noise and vibration from piling for foundation installation	Sandeels, gobies, herring, fish eggs and larvae, shellfish	Minor to moderate significance (Downs herring only)	[APP-025] Table 11.37
5 Underwater noise and vibration from other	Fish and shellfish species including spawning and nursery	Negligible to minor significance	[APP-025] Table 11.41

construction activities			
6 Underwater noise and vibration from UXO clearance	Fish and shellfish species including spawning and nursery	Negligible to minor significance	[APP-025]
7 Changes in fishing activity	Fish and shellfish	Negligible significance	[APP-095] Appendix 11.1

ASSESSMENT OF EFFECTS – DURING OPERATION/ MAINTENANCE /DECOMMISSIONING

- 5.2.259. The potential impacts on fish and shellfish receptors during operation and maintenance as outlined in Table 11.2 [\[APP-025\]](#) were assessed. These included the following:
- Temporary habitat loss/ physical disturbance;
 - Long term habitat loss;
 - Increased suspended sediment concentrations and re-deposition;
 - Re-mobilisation of contaminated sediments;
 - Underwater noise and vibration;
 - Electromagnetic Fields (EMFs);
 - Introduction of hard substrate; and
 - Changes in fishing activity.
- 5.2.260. Summary tables to some of the above impacts are provided at: Table 11.45 [\[APP-025\]](#); Table 11.49 [\[APP-025\]](#).
- 5.2.261. Overall, the individual impacts were found to be either fall within the categories of negligible or minor significance. In other words, all were deemed to be not significant in EIA terms.
- 5.2.262. During the decommissioning phase, there is potential for wind turbine foundation and cable removal activities to cause effects that would be comparable to those identified for the construction phase and the operational phase, specifically: temporary habitat loss / physical disturbance; re-mobilisation of contaminated sediments; underwater noise and vibration; and changes in fishing activity.
- 5.2.263. The magnitude of decommissioning effects identified by the Applicant would be comparable to or less than the construction phase. Accordingly, given that comparable impacts were assessed to be of negligible or minor significance for the identified fish and shellfish ecology receptors during the construction phase, it is anticipated that the same would be true for the decommissioning phase.

CUMULATIVE EFFECTS / TRANSBOUNDARY ASSESSMENT / INTERACTIONS AND INTER-RELATIONSHIPS

- 5.2.264. For the CEA process the effects which have the potential for a cumulative effect with other plans, projects and activities is set out in Table 11.50 [\[APP-025\]](#). Tables 11.51 and 11.52 [\[APP-025\]](#) then give a summary of offshore and coastal projects considered for the CEA in relation to fish and shellfish receptors (project screening).

- 5.2.265. Overall, for the impacts considered at construction and operation phases the cumulative effects on fish and shellfish were assessed to be of negligible to minor significance, which is not significant in EIA terms. Moreover, it is anticipated by the ES that any cumulative decommissioning impacts would not be greater, and probably less than those assessed for the construction phase.
- 5.2.266. Transboundary effects over fish and shellfish ecology were scoped out of further assessment by the Applicant as per Table 11.1 Consultation responses [\[APP-025\]](#). The Applicant's fish and shellfish impact assessment has also taken account of the distribution of fish stocks and populations irrespective of national jurisdictions. But assessment of transboundary effects in relation to fish and shellfish ecology was deemed unnecessary.
- 5.2.267. Table 11.54 [\[APP-025\]](#) provides a summary of the principal interactions, related ES Chapters and signposts to where those issues have been addressed.
- 5.2.268. Within Table 11.56 [\[APP-025\]](#), the impacts are assessed relative to each development phase. A lifetime assessment was then undertaken by the Applicant which considers the potential for impacts to affect receptors across all development phases. None of the potential inter-relationships identified with respect to fish and shellfish ecology are expected to result in a synergistic or greater impact than those assessed and concluded upon individually or cumulatively elsewhere in the ES Chapter.

MITIGATION AND MONITORING

- 5.2.269. A summary of embedded mitigation is within Table 12.2 [\[APP-026\]](#). Monitoring would follow the principles within the Project Environmental Management Plan, the outline being PEMP (Rev2) [\[REP6-027\]](#) and outline Offshore In-Principle Monitoring Plan [\[REP8-009\]](#). No additional fish/shellfish monitoring was proposed by the Applicant.
- 5.2.270. Mitigation proposed within the ES includes burying cables and the use of cable protection methods where cables cannot be buried to reduce electromagnetic fields; the adoption of a soft-start and ramp-up protocol whereby underwater noise from piling starts low and gradually increases to allow mobile animals such as fish to move away; a restriction in piling activity during November to January which is spawning season for Downs Herring; and lastly pollution protection measures to ensure that sediment and water quality are not impacted throughout construction.

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.2.271. The main examination issues related to:-
- The impact to Downs Herring and sandeel spawning areas including any potential habitat loss and sediment dispersal implication.
- 5.2.272. The LIRs received into the examination did not mention fish and shellfish impacts. Although statutory parties have contributed throughout the Examination Deadlines the ExA has largely focused on NE responses received at Deadline 8: [\[REP8-095\]](#) to [\[REP8-100\]](#) as well as MMO Deadline 8 responses: [\[REP8-066\]](#) and [\[REP8-103\]](#) in reporting its findings. This is because the areas of dispute are clearest at this point.
- 5.2.273. The ExA has taken into account the range of relevant policies and legislation highlighted in the Applicant's ES Chapter 11 [\[APP-025\]](#), Section 11.4.1, and the

preceding Chapters within this Recommendation report including the UK Marine Policy Statement.

- 5.2.274. The ExA recognises that specific considerations set out in paragraphs 2.8.148 and 2.8.149 NPS EN-3 apply to proposals potentially impacting on fish and shellfish. The policy highlights there is potential for the construction and decommissioning phases, including activities occurring both above and below the seabed, to interact with seabed sediments and therefore have the potential to impact fish communities, migration routes, spawning activities, and nursery areas of particular species.
- 5.2.275. Alongside that, the South East Inshore Marine Plan Policy SE-FISH-3 encourages and supports proposals that deliver biodiversity gain for essential fish habitats. It refers to sustainable use of marine resources within environmental limits, alongside productive fisheries, by requiring proposals to avoid impacts on essential fish habitats or, if avoidance of impacts is not possible, to manage impacts on essential fish habitats.
- 5.2.276. In making our assessment the ExA recognises that spawning and nursery grounds for herring, lemon sole, plaice, sandeel, Dover sole, sprat, whiting and cod have all been defined. Additionally, nursery grounds for mackerel, thornback ray, and tope have also been defined by the ES. However, the Examination issues relevant to this Chapter mostly relate to herring and sandeel impacts.

THE IMPACT TO NEARBY DOWNS HERRING AND SANDEEL SPAWNING AREAS INCLUDING ANY POTENTIAL HABITAT LOSS AND SEDIMENT DISPERSAL IMPLICATION

- 5.2.277. The MMO via [\[REP1-066\]](#) for fish ecology impacts requested clarifications in relation to Herring spawning habitat as the main aspects of their initial submissions.
- 5.2.278. NE have noted that there is overlap with spawning grounds and nursery grounds for herring Figure 11.2 [\[APP-056\]](#), and sandeel Figure 11.4 [\[APP-056\]](#). The ExA highlights there is a marginal intrusion into the herring spawning ground depicted in Figure 11.2. And a more substantial encroachment in Figure 11.4 for sandeel.

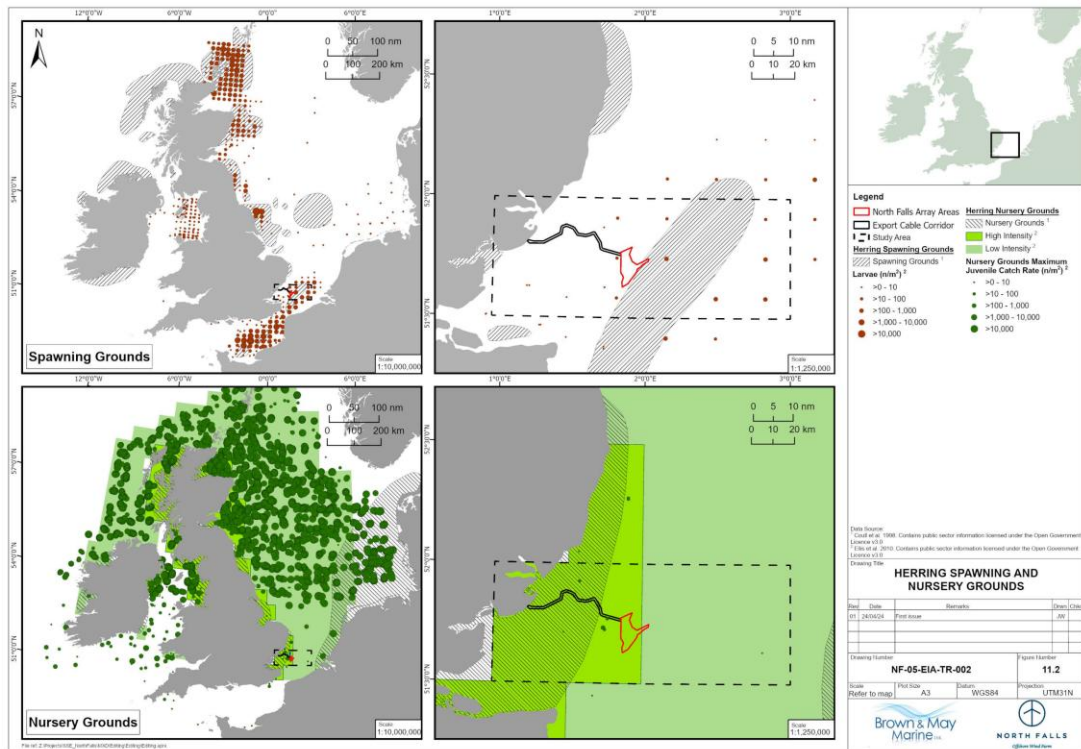


Figure 24: Herring spawning and nursery grounds (Source: ES Figure 11.2 [APP-056])

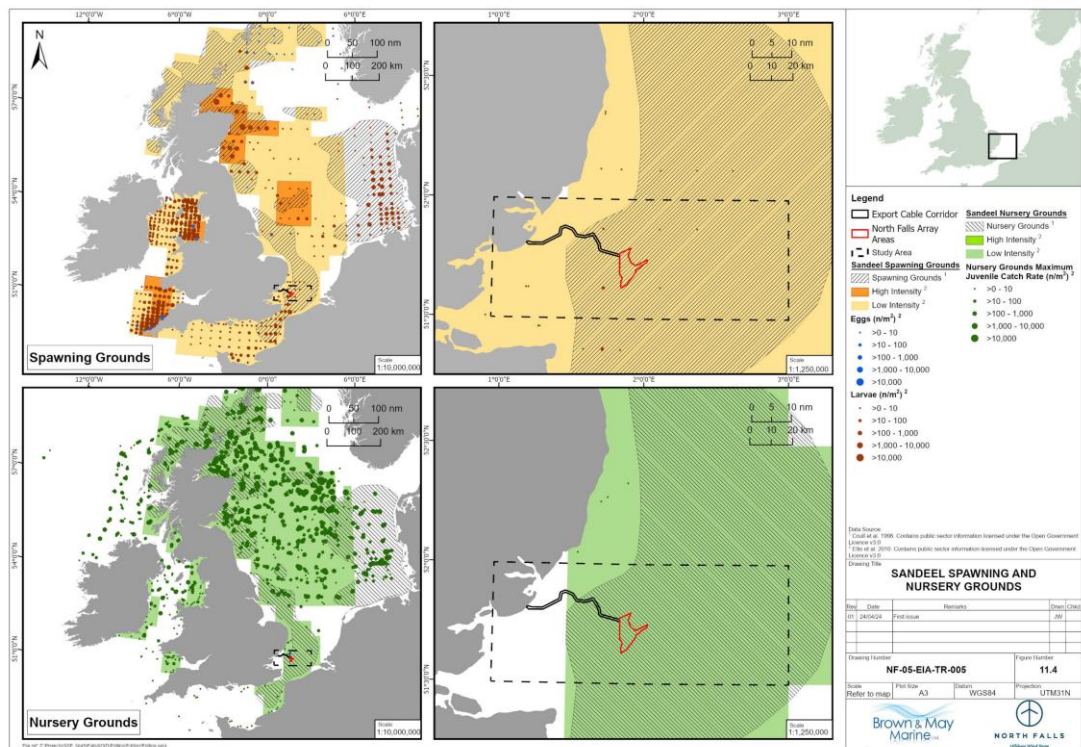


Figure 25: Sandeel spawning and nursery grounds (Source: ES Figure 11.4 [APP-056])

5.2.279. NE also initially alleged that ES Table 11.14 [APP-025] incorrectly suggested “spawning grounds of Downs Herring located in areas adjacent to the southern array area”, as opposed to directly overlapping with it. Even if that was the case, ES

Table 11.12 [APP-025] correctly identified species with spawning and/or nursery grounds in the vicinity. Furthermore, as described in Table 11.3 [APP-025], the Applicant is committed to apply a suitable piling restriction to minimise potential overlap between piling and Downs herring spawning activity.

- 5.2.280. NE have not cited the encroachment into the sandeel spawning area as a concern at Deadline 8 in their risk and issues log [REP8-099]. Neither does the MMO in [REP8-102]. The ExA finds the likely impacts for this species to be acceptable.

EXA'S CONSIDERATION

- 5.2.281. The ExA highlights that in addition to impacts on early life stages, increased suspended sediments and sediment redeposition associated with the development could result in an impact on herring spawning grounds by means of changes in the characteristics of the substrate. Even so the actual substrate is most likely to remain similar in composition even if such change did occur.
- 5.2.282. Indeed, the ES finds that there is little potential for significant changes in the characteristics of the seabed sediment type to occur because of construction activities.
- 5.2.283. Whilst the substrate dependence/demersal nature of herring spawning activity is recognised, herring and sandeels are considered receptors of medium sensitivity to construction sediment. Albeit herring and sandeel are highlighted in the ES as having high sensitivity to any potential habitat loss. Habitat loss is described in detail in ES Chapter 11 [APP-025] Section 11.6.1.1.2, with regards to the construction phase, appreciating fish are highly mobile organisms and rely on the seabed substrate to lay eggs. Herring prefers coarse substrate to lay eggs and sandeels seek sandy substrate which enables burrowing.
- 5.2.284. The ExA notes Downs Herring or lesser sandeel as a species are not linked to any designated sites in proximity of the offshore works. Nonetheless, it should be recognised they are both Section 41 species under the Natural Environment Rural Communities Act 2006, and both provide prey resources for other receptors such as RTD designated within the OTE SPA.
- 5.2.285. At D8 NE still sought clarification from the Applicant on the worst-case scenario sediment deposition within or adjacent to the array area. NE questioned whether concurrent construction-related activities would result in overlapping sediment plumes and deposition into the Downs Herring spawning area. NE also maintained that Cefas and the MMO are the bodies responsible for advising on this matter.
- 5.2.286. The ExA agrees that suspended sediments/ wider deposition of sediment should be carefully considered. Where there is overlap with the Downs Herring spawning area, NE did not agree that habitat loss would be temporary. In relation to long-term habitat loss implication, NE advised this would be permanent rather than long-term.
- 5.2.287. Moreover, NE advocated that the Applicant seeks the advice of Cefas on the sensitivity of particular species, and the appropriateness of the sensitivity assigned in the assessment for fish and other ecology.
- 5.2.288. Overall, the ExA appreciates potential damage or permanent loss of a spawning area for Downs Herring is a valid concern. Nevertheless, the overall encroachment would be small scale. And the list of mitigation produced by the Applicant which includes avoiding spawning times of the year should feasibly reduce risks of harm arising within the parameters predicted by the ES. This is also in the context of there

likely being similar seabed substrate during and post construction evident even if there is some deposition of sediment particulate into the spawning area; and the subsequent natural seabed redistribution over time. The view taken by the ExA is that potential post construction impacts would be short lived in such a scenario. The ExA accepts the Applicant's characterisation of potential effects.

Other considerations

- 5.2.289. For shellfish ecology the MMO did not have any outstanding issues to be addressed.

CONCLUSIONS

- 5.2.290. The ExA finds that potential fish and shellfish ecology receptors have been appropriately identified within ES Chapter 11 [APP-025] taking account of the presence/abundance in the study area; the location of spawning and nursery grounds relative to NFOWF; conservation importance; commercial importance; and their role within the North Sea's food-web.
- 5.2.291. The ExA has had full regard to the potential likely effects toward fish and shellfish recorded in the ES and other examination evidence. A summary is provided in Tables 11.57 of ES Chapter 11 [APP-025]. ExQ3 [PD-016] Q10.0.1 response from the Applicant [REP7-060] confirms that Table 11.37 [APP-025] correctly categorises the significance of effect correctly for Downs Herring. This is categorised as 'Minor' (which is not significant in EIA terms).
- 5.2.292. The ExA concurs with the findings of the ES. With the implementation of all mitigation measures, the proposed development would have no greater than minor adverse (not significant in EIA terms) effects on the fish and shellfish receptors alone or cumulatively with other projects.
- 5.2.293. The ExA finds that NE's main concern of risks of potential damage to or permanent loss of a spawning area for Downs Herring has been adequately addressed through the information within the ES and level of mitigation combined.
- 5.2.294. Noting NE take the view Cefas and the MMO are the bodies responsible for advising on this matter, the SoS may wish to consider further post examination consultation on this point. However, those issues in the view of the ExA are otherwise able to be adequately addressed through the Deemed Marine Licence Schedules 8, 9 and 10 within the dDCO [REP8-085] which include further prescribed consultation with the relevant SNCB and the MMO.
- 5.2.295. Accordingly, it is demonstrated that the proposed development aligns with the requirements of NPS EN-1 and NPS EN-3; the UK Marine Planning Statement and Marine Plan Policies ECO1 and BIO1 and South East Inshore Marine Plan Policy SE-FISH-3 which aim to protect fish and shellfish.
- 5.2.296. In the above circumstances factoring all relevant legislation, policy and accepting that all relevant impacts would not be significant in EIA terms the ExA therefore attributes little weight to the overall harm to fish (including having regard to Downs Herring spawning area habitat referred to by NE and the MMO).
- 5.2.297. Even if a significant adverse impact on Downs Herring spawning area from construction sediment movements, and smothering was accepted by the ExA contrary to the position of the ES, the overall effect is most likely to be short lived owing to natural seabed distribution processes and sensitive spawning times can be

avoided. Moreover, if there was spawning habitat loss from encroachment the area is likely to be small or marginal relative to the overall spawning area identified in the evidence. Therefore, even in those alternative scenarios the ExA would still give little negative weight to such overall potential harm.

MARINE MAMMALS

INTRODUCTION

5.2.298. This section looks at the effects of the Proposed Development both alone and cumulatively, on marine mammals based on EIA. The potential impact on marine mammal features of European Sites for HRA purposes are considered in detail in Chapter 7 and Appendix C of this Report where the ExA makes recommendation about those aspects.

5.2.299. THE APPLICATION

5.2.300. The Applicant's assessment of marine mammals is set out in:

- ES Chapter 12 Marine Mammals [[APP-026](#)]

5.2.301. Other relevant application documents include:

- 2.6 Schedule of Mitigation (Rev 3) [[REP7-004](#)]
- 3.3.6 ES 12.1 Marine Mammal Consultation [[APP-096](#)]
- 3.3.6 ES 12.1 Marine Mammal Consultation [[APP-096](#)]
- 3.3.7 ES Appendix 12.2 Marine Mammal Baseline Information [[APP-097](#)]
- 3.3.8 ES Appendix 12.3 Underwater Noise Modelling Report [[APP-098](#)]
- 3.3.9 ES Appendix 12.4 Underwater Noise Technical Assessment [[APP-099](#)]
- 3.3.10 ES Appendix 12.5 Unexploded Ordnance Clearance Information and Assessment [[APP-100](#)]
- 3.3.11 ES Appendix 12.6 Marine Mammal Cumulative Effect Assessment Screening [[APP-101](#)]
- 7.1.3 RIAA Part 3 Marine Mammals Annex II Species [[APP-176](#)]
- 7.1.3.1 RIAA Appendix 3.1 Marine Mammal Unexploded Ordnance [[APP-177](#)]
- 7.5 Marine Plan Assessment [[APP-240](#)]
- 7.6 Outline Project Environmental Management Plan (outline PEMP) [[APP-241](#)] updated to outline PEMP Rev1 [[REP3-011](#)] then to Rev2 [[REP6-028](#)]
- 7.7 Draft Marine Mammal Mitigation Protocol [[APP-242](#)] updated to: Rev 1 [[REP3-013](#)]/ Rev 2 [[REP5-012](#)]/ Rev 3 [[REP6-029](#)]/ Rev 4 [[REP8-030](#)]
- 7.15 Outline Horizontal Directional Drill Method Statement and Contingency Plan [[APP-250](#)] updated to Revision 4 [[REP8-011](#)]
- 7.20 Outline Offshore Operations and Maintenance Plan [[APP-255](#)] updated to Revision 3 [[REP8-023](#)]
- 9.14 Further Information Regarding Marine Mammals (Rev 0) [[REP1-057](#)] updated to 9.35 Further Information Regarding Marine Mammals (Rev 0) [[REP3-046](#)]
- 9.55 Supporting Information on Offshore Additional Mitigation (Rev 0) [[REP4-041](#)]
- 9.81 Marine Mammal Assessment Clarifications [[REP5-069](#)]

BASELINE

5.2.302. Given marine mammals are highly mobile the ES study areas were based on Management Units (MUs), current knowledge and understanding of the biology of each species. This equates to use of the North Sea MU; the Celtic and Greater

North Seas MU; the South-east England and North-east England MUs; and the SE England MU. The marine mammal species considered by the Applicant's ES/EIA are:

- Harbour porpoise;
- Minke whale;
- Grey seal; and
- Harbour seal.

- 5.2.303. ES Appendix 12.2 [\[APP-097\]](#) provides detailed information for each of the species, including details from the site-specific surveys, density estimates, abundance estimates, distribution, diet and seal haul-out sites, that are relevant for the assessments.
- 5.2.304. Site-specific aerial surveys were conducted for both marine mammals and seabirds using collected high resolution aerial digital still imagery for marine megafauna (combined with ornithology surveys) over the array area, including a 4km buffer.
- 5.2.305. Further detail of the survey method is provided in Appendix 12.2 [\[APP-097\]](#). The surveys were conducted monthly; in total 24 months of data has been collected for the array area. Other sources that have been used to inform the Applicant's assessment are listed in Table 12.6 of ES Chapter 12 [\[APP-026\]](#).
- 5.2.306. Harbour porpoise was the most commonly sighted marine mammal species during the surveys, with a total of 702 individuals recorded through the 24 survey dates.
- 5.2.307. The baseline characterisation for marine mammals is presented in section 12.5 of [\[APP-026\]](#) and details the occurrence of marine mammal species present in the study area, compiled through a combination of literature reviews and data obtained from site-specific surveys.
- 5.2.308. The ES [\[APP-026\]](#) states the marine mammals identified for assessment were any within the study area which included harbour porpoise, common dolphin, bottlenose dolphin, minke whale, harbour seal and grey seal.
- 5.2.309. Table 12.17 [\[APP-026\]](#) provides a summary of marine mammal density estimates (those shown in bold have been used to inform the effect assessments within this chapter, all other density estimates have been used within assessments provided in Appendix 12.4 [\[APP-099\]](#)).
- 5.2.310. There are acknowledged limitations in the detectability of marine mammals from aerial surveys, such as not being able to detect those individuals that are submerged. Appendix 12.2 [\[APP-097\]](#) seeks to address these limitations by estimating a correction factor in order to determine estimated absolute density estimates from the site-specific aerial surveys. As a precautionary approach, density estimates for each marine mammal species used in the assessments are based on the highest for the area.
- 5.2.311. Harbour porpoise are the most common marine mammal species in the vicinity of NFOWF, with both grey seal and harbour present in lower numbers in the array area, with relatively higher presence along the coast. Minke whale are also present, albeit in lower number.
- 5.2.312. Overall, the Applicant's confidence in the assessment is high as it is deemed precautionary, to comfortably encompass the likely uncertainty and variability.

Throughout the assessment it is made clear where multiple and compounding precautionary assumptions have been made.

- 5.2.313. The existing baseline conditions identified in the ES for marine mammals are considered to be relatively stable, for most species.
- 5.2.314. That said, the UK marine environment is acknowledged as being subject to: climatic influences, nutrient inputs and anthropogenic factors, such as fishing. Influences also include rising sea temperatures, biogeographical shifts in many zooplankton assemblages, with a northward extension of warm-water species, changes in the distribution and abundance of fish species, with southern species becoming more prominent.
- 5.2.315. A shift southward of harbour porpoise has been noted within the North Sea, and it is possibly due to a loss of sandeel resources in the northern parts of the North Sea.
- 5.2.316. For minke whale population trend analysis since 1989 shows no evidence of a significant change in abundance in the North Sea.
- 5.2.317. For grey seal colonies in the southern North Sea are still increasing in population size, but the rate has been much lower in the last three years, giving indication that they may be reaching carrying capacity.
- 5.2.318. Harbour seal counts between 2019-2022 indicated a 20-30% decline.
- 5.2.319. Overall, for the marine mammals assessed it is reasonable position for the ExA to expect further shifts in the future and over the lifetime of the Proposed Development. However, the latest changes in population distribution and abundance have been considered in the assessments that have been undertaken.

MITIGATION AND MONITORING

- 5.2.320. A summary of embedded mitigation is within Table 12.2 [APP-026]. While no mitigation was deemed to be required for the potential for Temporary Threshold Shifts (TTS) in marine mammals, the mitigation in the Draft Marine Mammal Mitigation Protocol (MMMP) (Rev 2) [REP5-012] updated to (Rev2) [REP8-030] to reduce the risk of Permanent Threshold Shift (PTS) could also reduce the number of marine mammals at risk of TTS.
- 5.2.321. The Schedule of Mitigation (Rev 3) [REP7-004] (Table 2.5) / Marine Mammal Mitigation Protocol (MMMP) (Rev 3) [REP8-030] give a fuller set of design measures during construction building on the initial content of [APP-026]:
- Mortality, injury including PTS or TTS or disturbance to marine mammal species from construction noise would be reduced insofar as each piling event would commence with a soft-start at a lower hammer energy followed by a gradual ramp-up to the maximum hammer energy. Secured through the draft and final MMMP, in accordance with Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 Schedule 10, Part 2, Condition 21 of the dDCO.
- 5.2.322. Before unexploded ordnance (UXO) clearance takes place the following options would be considered, in order of preference: 1. Left in-situ 2. Micro-siting of infrastructure to avoid; 3. Relocation to a less sensitive area for clearance. If clearance is required, the following methods would be used, in order of preference: 4. Low order (with three attempts for each device); 5. High-order clearance (only if low-order is unsuccessful or deemed not possible/unsafe by qualified specialists); 6.

Potential use of bubble curtain depending on environmental variables with a maximum of three high-order clearances across the campaign. Secured as part of the Marine Licensing process for unexploded ordnance (UXO) clearance in accordance with the draft MMMP. A separate Marine Licence would be required for UXO clearance it is not covered by way of DML.

5.2.323. Additional mitigation during the construction phase is proposed in the form of:

- To reduce risk of collisions impacting on marine mammals. Vessel movements, where practicable, would follow set vessel routes and hence areas where marine mammals are accustomed to vessels, in order to reduce any increased collision risk. All vessel movements would be kept to the minimum number that is required to reduce any potential collision risk. Additionally, vessel operators would use best practice to reduce any risk of collisions with marine mammals. Secured through the Project Environmental Management Plan, in accordance: Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 Schedule 10, Part 2, Condition 21 of the dDCO.
- To reduce risk of accidental pollution events during construction which may result in the release of contaminants with potential effects on marine mammals or prey species. Commitments to the use of industry good practice techniques and due diligence regarding the potential for pollution throughout all construction, operation and maintenance, and decommissioning activities. Secured through the PEMP, and Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 and Schedule 10, Part 2 Condition 21 of the dDCO.
- A MMMP for piling would be developed in the pre-construction period and based upon relevant available information, methodologies, industry good practice, latest scientific understanding, current guidance and detailed project design. The MMMP for piling would be developed in consultation with the relevant Statutory Nature Conservation Bodies (SNCBs) and the MMO, detailing the proposed mitigation to reduce the risk of any physical or permanent auditory injury to marine mammals during all piling operations. This is secured through Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 Schedule 10, Part 2, Condition 21 of the dDCO.
- A detailed MMMP would be prepared for UXO Secured as part of the separate Marine Licensing process for UXO clearance in accordance with the draft MMMP.
- A Southern North Sea SAC Site Integrity Plan (SIP) would be developed to deliver any project mitigation or management measures to reduce the potential for any significant disturbance of harbour porpoise in relation to the Southern North Sea SAC conservation objectives. The Site Integrity Plan would be an adaptive management tool, which can be used to ensure that the most adequate, effective and appropriate measures, if required, are put in place to reduce the significant disturbance of harbour porpoise in the Southern North Sea SAC. The Site Integrity Plan would be developed in the pre-construction period and would be based upon best available information and methodologies at that time, in consultation with the relevant SNCBs and MMO. Via Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 Schedule 10, Part 2, Condition 21 of the dDCO.

5.2.324. For operations, maintenance and decommissioning phases:

- A repeat of the measures to reduce vessel collision and accidental pollution risks implemented during construction is relied upon.
- Monitoring requirements are in the outline In-Principle Monitoring Plan (IPMP) [\[APP-245\]](#) updated to Revision 3 [\[REP8-009\]](#).

ASSESSMENT OF EFFECTS

- 5.2.325. In terms of gauging impacts that may or may not lead to significant effects. During the construction phase the impacts identified were:
- Impact 1 Piling construction noise impacts including: a) Permanent auditory injury (PTS); b) Temporary Auditory injury (TTS); c) disturbance due to piling; d) disturbance due to impact piling; disturbance due to Acoustic Deterrent Device (ADD) activation prior to piling.
 - Impact 2: Auditory injury and disturbance or behavioural effects resulting from underwater noise during other construction activities, including seabed preparations, rock placement and cable installation.
 - Impact 3: Underwater noise and disturbance from construction vessels; accounting for a) PTS b) TTS as well as c) disturbance.
 - Impact 4: Barrier effects from underwater noise during construction;
 - Impact 5: Increased risk of collision with vessels during construction;
 - Impact 6: Disturbance at seal haul-out sites;
 - Impact 7: Changes to water quality; and
 - Impact 8: Changes to prey resource.
- 5.2.326. A separate Marine Licence (ML) application for UXO clearance would be submitted post-consent, once detailed information on the locations and extent of UXO required to be cleared is known. An assessment of the potential impacts from UXO clearance is provided in Appendix 12.5 [\[APP-100\]](#) for information purposes only.
- 5.2.327. The ExA appreciates that based on the ES potential impacts likely to be triggered in the construction phase include: auditory injury and disturbance or behavioural impacts; impacts resulting from underwater noise during other construction activities, including seabed preparations, rock placement and cable installation; underwater noise and disturbance from construction vessels; vessel interaction (collision risk); barrier effects as a result of underwater noise; disturbance at seal haul-out sites; changes to water quality; and changes to prey resource.
- 5.2.328. Equally during operation and maintenance there would be potential impacts arising from: auditory injury and disturbance or behavioural impacts resulting from operational WTGs; auditory injury and disturbance or behavioural impacts resulting from underwater noise during maintenance activities, including cable protection and cable reburial; underwater noise and disturbance from maintenance vessels; vessel interaction (collision risk); barrier effects as a result of underwater noise; disturbance at seal haul-out sites; and changes to water quality; and changes to prey resource.
- 5.2.329. During the decommissioning phase the impacts identified by the ES were:
- Decommissioning noise impacts including Permanent Threshold Shift (PTS), TTS and disturbance.
 - Underwater noise from other construction activities.
 - Vessel collision.
 - Vessel disturbance.
 - Changes to prey availability.
 - Disturbance to seal haul out site at landfall.
- 5.2.330. The potential impacts on marine mammals during the construction, operation, maintenance and decommissioning phases, including the potential for cumulative effects are summarised in Table 12.127 [\[APP-026\]](#).

- 5.2.331. In summary, for the proposed development alone, while there is the potential for a significant effect due to underwater noise effects of piling (for harbour porpoise and minke whale), from vessels (for harbour porpoise), these effects can be managed with mitigation, and therefore the residual effects for all species would be negligible to minor adverse.
- 5.2.332. The ES expects that mitigation would be required for UXO clearance and piling following JNCC guidelines which would be adapted to cover PTS ranges. ADDs would also be used as part of mitigation for piling and UXO clearance. All mitigation and monitoring requirements would be secured through the MMMP, SIP and PEMP combined.

Cumulative /transboundary effects/ interactions/inter-relationships

- 5.2.333. The approach to the Cumulative Effects Assessment (CEA) is outlined in ES Chapter 12 [\[APP-026\]](#) at Section 12.4.4 and summarised in [\[REP3-042\]](#). The CEA considers other plans, projects and activities that may result in effects to marine mammal populations in cumulation. ES Chapter 6 EIA Methodology [\[APP-020\]](#) provides further details of the general framework and approach to the CEA.
- 5.2.334. The development projects considered within the CEA is shown in Table 12.12 [\[APP-026\]](#).
- 5.2.335. Cumulatively with other projects, an initial assessment found the potential for a significant effect due to multiple OWFs piling at the same time for both harbour porpoise and grey seal, however population modelling for these species shows that this would not cause a population level impact, with less than a 1% reduction in the harbour porpoise population, and no change to the grey seal population over the next 25 years as a result of these OWFs.
- 5.2.336. All other cumulative effects were assessed as negligible to minor adverse.
- 5.2.337. Transboundary interactions between marine mammals with other topics included those within: ES Chapter 9 Marine Water and Sediment Quality [\[APP-023\]](#); ES Chapter 11 Fish and Shellfish Ecology [\[APP-025\]](#); and ES Chapter 15 Shipping and Navigation [\[APP-029\]](#). Table 12.124 sets out Marine mammal interactions [\[APP-026\]](#) subject to ES assessment. The Planning Inspectorates Regulation 32 screening did identify transboundary likely significant effects for marine mammals.
- 5.2.338. Table 12.126 [\[APP-026\]](#) then sets out the inter-relationships between impacts – phase and lifetime assessment. None of the potential inter-relationships identified with respect to Marine Mammals are expected to result in a synergistic or greater impact than those assessed and summarised in Table 12.127 [\[APP-026\]](#).

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.2.339. The main Examination issues towards marine mammals related to:
- Marine Mammal Assessment clarifications having regard to the suitability of the Applicant's modelling methods and locations for worst case scenario (WCS) noise impacts alongside the scope to use noise abatement systems and other forms of mitigation; and
 - Compliance with 2025 Defra noise policy.
- 5.2.340. The LIRs received into the examination did not comment on marine mammal considerations. Although parties have contributed throughout the Examination

Deadlines the vast majority of commentary associated to the main Examination issues centres on NE responses received at Deadline 8: [\[REP8-095\]](#) to [\[REP8-100\]](#) as well as MMO Deadline 8 responses: [\[REP8-066\]](#) and [\[REP8-103\]](#).

- 5.2.341. The ExA asked a series of questions about various technical matters within ExQ1 [\[PD-009\]](#); ExQ2 [\[PD-012\]](#) and ExQ3 [\[PD-016\]](#) alongside the use of an Issue Specific Hearing.
- 5.2.342. Additionally, the MMO did in [\[REP1-066\]](#) present their initial concerns relating to the Applicant's Draft Marine Mammal Mitigation Protocol (MMMP). Several iterations of the MMMP transpired the most up to date being Revision 4 at Deadline 8 [\[REP8-030\]](#). There were several points in relation to underwater noise that needed to be resolved throughout examination in accordance with MMO submissions, as further context.
- 5.2.343. The potential effects of the Proposed Development on marine mammals featured in the IAPI ecology, set out by the ExA at the start of the Examination through the Rule 6 Letter [\[PD-006\]](#), within Appendix C.
- 5.2.344. The ExA has considered the effects of the Proposed Development on marine mammals in the context of the policy framework set by NPS EN-1 2024, EN-3 2024, the UK Marine Planning Statement and the East Inshore and East Offshore Marine Plan, alongside the full suite of policy and legislation background identified in Section 12.4.1 of ES Chapter 12 [\[APP-024\]](#) as well as the Applicant's Marine Plan Assessment [\[APP-240\]](#) related to that.
- 5.2.345. Importantly, the ExA acknowledges that all cetaceans in Northern European waters are listed under Annex IV of the EU Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) as EPS of Community Interest and in need of strict protection. The harbour porpoise, bottlenose dolphin, harbour seal and grey seal have protection under Annex II as species of Community Interest whose conservation requires the designation of SACs.
- 5.2.346. Below is Figure 1.1 taken from [\[REP5-014\]](#) which shows the SNS SAC relative to the offshore Order area.

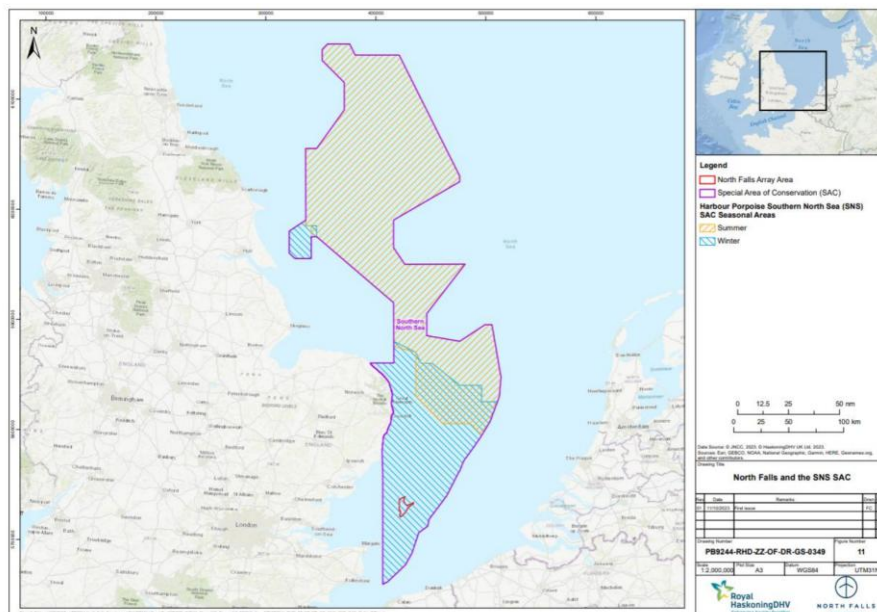


Figure 26: SNS SAC relative to the offshore Order area (Source: Figure 1.1 [REP5-014])

- 5.2.347. It is also noted by the ExA that the South East Inshore Marine Plan Policy SE-UWN-2 supports management of underwater noise, requiring proposals take appropriate noise reduction actions. It enables clear and proportionate regulation to make sure marine activity respects environmental limits and protects biodiversity.

For marine mammals in particular, NPS EN-3 requires the Applicant, the assessment and the SoS to follow the steps set out in:

2.8.127–2.8.135: Assessment requirements for marine mammals

2.8.237–2.8.239: Mitigation measures for marine mammals

2.8.312–2.8.314: Secretary of State decision making on marine mammal impacts

Including undertaking an assessment for all stages of the lifespan of the Proposed Development in accordance with the appropriate policy for EIAs, HRAs and MCZ assessments (as per Sections 4.3 and 5.4 of EN-1).

This will include consulting on the assessment methodologies, baseline data collection, and potential avoidance, mitigation and compensation options which should be undertaken in the early stages and will inform an ecological monitoring programme to monitor impacts during the pre-construction, construction and operational phases to identify the actual impacts and compare them to what was predicted in the EIA/HRA.

The Applicant should discuss any proposed noisy activities such as piling activities with the relevant body and must reference the joint JNCC and SNCCB underwater noise guidance (and any successor of that guidance). Where the assessment identifies that noise from construction and UXO clearance may reach noise levels likely to lead to noise thresholds being exceeded (as detailed in the JNCC guidance) or an offence, the applicant must look at possible alternatives or appropriate mitigation such as identified in the Offshore Wind Enabling Action Programme and advice from the MMO.

- 5.2.348. Unless suitable noise mitigation measures can be imposed by requirements to any development consent the SoS may refuse the application. The conservation status of cetaceans and seals are of relevance, and the SoS should be satisfied that cumulative and in-combination impacts on marine mammals have been considered.

MARINE MAMMAL ASSESSMENT CLARIFICATIONS HAVING REGARD TO THE SUITABILITY OF THE APPLICANT'S UNDERWATER MODELLING METHODS AND LOCATIONS FOR WORST CASE SCENARIO (WCS) NOISE IMPACTS; ALONGSIDE SCOPE TO USE NOISE ABATEMENT SYSTEMS (NAS) AND OTHER FORMS OF MITIGATION

- 5.2.349. From the opening of the Examination onwards further information was required from the Applicant to satisfy NE/ExA questions and requests owing to perceived shortfalls in the ES assessment. In response to questions and requests the Applicant submitted: -

- Further Information Regarding Marine Mammals [REP1-057];

- Further Information Regarding Marine Mammals Disturbance due to Vessel Presence [\[REP3-046\]](#); and
- Marine Mammal Assessment Clarifications [\[REP5-069\]](#).

5.2.350. At Deadline 8 NE's Risk and Issues Log [\[REP8-099\]](#) continued to identify outstanding issues regarding marine mammals. The MMO under [\[REP8-102\]](#) also gives relevant commentary context.

5.2.351. Despite that position, the Applicant maintained that a robust assessment has been undertaken, and mitigation is appropriately identified and secured, to ensure an acceptable impact to marine mammals in accordance with overarching findings of the ES, as supplemented by updated environmental information.

EXA'S CONSIDERATION

Modelling

5.2.352. With respect to the use of Interim Population Consequence of Disturbance (iPCoD) modelling: the Applicant argues that this method has been used alongside, and not in substitute for, the various methods requested by NE.

5.2.353. From the Applicant's perspective the results of the iPCoD are not relied on in dictating their own final conclusion of no significant effects for the project alone assessment they have undertaken (as per Section 2.2.1 of Marine Mammal Assessment Clarifications note [\[REP5-069\]](#)).

5.2.354. For the Cumulative Effects Assessment, different assessment approaches were undertaken and results presented within Section 2.2.2.1 of Marine Mammal Assessment Clarifications note [\[REP5-069\]](#). The Applicant maintains at closing, the population modelling they have provided provides the most realistic understanding for cumulative disturbance. Even though that is the case they have still provided an assessment using the dose response method for further information as requested by NE.

5.2.355. The ExA appreciates the conclusions of dose response methodology and the other approaches taken by the Applicant do differ. But regardless of such differences, the Applicant maintains the residual effect would be reduced to a non-significant level of effect due to the mitigation proposed by the Proposed Development, as described in the draft Marine Mammal Mitigation Protocol (MMMP) Revision 4 [\[REP8-040\]](#) and the Outline Site Integrity Plan (SIP) for the Southern North Sea Special Area of Conservation (Rev 1) [\[REP5-014\]](#).

5.2.356. MMMP Rev4 [\[REP8-030\]](#) aims to reduce impacts of physical injury or hearing damage bearing in mind all consultation responses. Yet, NE's outstanding concerns on the ES remained unresolved at Deadline 8 [\[REP8-099\]](#).

5.2.357. Overall, it is NE's view that iPCoD modelling does not carry much value when assessing the impacts of a single development. In such circumstances, the dose response curve assessment should be the primary assessment method. Furthermore, given the limitations of accounting for all pressures within a model, NE considers any population decline, as a result of cumulative impacts of multiple development warrants further investigation.

5.2.358. Considering the limitations of the iPCoD modelling outlined by NE, the outcomes of the Applicant's assessment suggest significant effects for harbour porpoises and seals in the Marine Mammal Assessment Classification: Table 2.3 and Table 2.4)

[\[REP5-069\]](#), cannot be overlooked for cumulative and in-combination disturbance effects.

5.2.359. NE have advised that the Applicant's assessment should be based solely on the EDR approach to assess disturbance of piling.

5.2.360. Whilst the Applicant did not fully follow NE's advice, the Applicant did provide additional modelling and explanations within the Examination period. Overall, the ExA finds that there is enough modelling information provided in the application material to inform a recommendation and there is no strong evidence to suggest the Applicant's approach is fundamentally flawed.

Underwater noise modelling locations

5.2.361. The ExA appreciates that the Applicant has explained throughout the Examination that the 'north option' originally modelled is no longer applicable since the Applicant reduced the array area following PEIR and removed the 'northern array'.

5.2.362. Thus, the modelling applicable shows the 'east' and 'south' locations are the worst-case locations and have the largest impact ranges due to deeper water depths, as shown in the ES Appendix 12.3 Underwater Noise Modelling Report [\[APP-098\]](#). Consequently, the ExA agrees with the Applicant that the calculations used for assessments are based on the WCS.

5.2.363. Furthermore, it was agreed between the Applicant and NE the In-Principle Monitoring Plan (IPMP) includes at least one of the four monitored piles would be at a location anticipated to generate the greatest underwater noise emissions.

5.2.364. As context, the submitted Southern North Sea Outline SIP contains commitments towards delivering mitigation to protect harbour porpoise. The ExA discusses this matter in detail within Appendix C of this Report. In doing so the ExA appreciates there is significant precedent supporting SIP approaches in the majority of consented offshore wind farms on the east of England. The ExA agrees a SIP approach if deemed acceptable from a HRA perspective would enable the final mitigation to be based on industry practice, latest guidance, available knowledge and technology at detailed design stages.

5.2.365. Also, the MMO policy papers shared at Deadline 1 [\[REP1-067\]](#) which "*set out the direction of travel into reducing the noise at source for piling*" and the NE/JNCC/Cefas joint position on Noise Abatement, itself refers to "*evolving policies*".

5.2.366. Accordingly, the Applicant's overall closing position is convincing to the ExA in that the SIP and MMMP approach allowing technical detail to be developed in consultation with the relevant SNCB and MMO post consent would be a feasible mechanism to support the overarching conclusions of the ES.

The scope available to use Noise Abatement Systems (NAS)

5.2.367. The Applicant included a clarification statement at Deadline 5 on the use of NAS in the Outline Site Integrity Plan (SIP) [\[REP5-015\]](#) and draft Marine Mammal Mitigation Protocol (MMMP) [\[REP5-013\]](#) (the latter being updated to [\[REP8-030\]](#)). Both of which are secured in the DMLs within the dDCO. From the Applicant's perspective these revisions to the Draft MMMP and Outline SIP regarding NAS were agreed between the Applicant and the MMO, and it is noted that the MMO welcomed the updated documents at Deadline 6 [\[REP6-082\]](#).

- 5.2.368. Nonetheless, the ExA acknowledges that NAS use/adoption should be considered in the background of the need to manage competing demands, reduce conflict and promote compatibility in the marine area as overarching aims of the UK Marine Planning Statement (MPS). In that context and relative to the main issues, some of the following points also featured in Examination correspondence:
- The Applicant also provided the updated assessment [\[REP5-069\]](#) assigning medium sensitivity to all receptors. NE still sought revision to Harbor Seal densities using the most precautionary density, as defined in the PEIR. The Applicant submitted [\[REP1-057\]](#) justification in response, but the issue remained on NE's risk register.
- 5.2.369. NE did not agree that Permanent Threshold Shift (PTS) should be screened out of the Cumulative Effects Assessment (CEA) or that the Applicant has fully committed to sufficient mitigation to reduce the risk of a residual PTS impact. According to NE the Applicant did not address the issue in the CEA Summary [\[REP3-042\]](#) thus it remains unresolved from NE's perspective at Deadline 8.
- 5.2.370. The Applicant predicts that both the 20% spatial daily threshold and the 10% seasonal threshold could be exceeded in almost all scenarios. But it is suggested by the Applicant that this scenario is unlikely because of other OWF SIPs, concluding that the harmful impacts could be avoided with appropriate SIPs.
- 5.2.371. At Deadline 8 NE wanted an unequivocal commitment to the use of NAS. The Applicant would need to fully commit to the use of NAS and incorporate this into the draft MMMP and SIP. NE strongly advised that the Applicant commit to the use of specific mitigation measures at this stage, which may be removed at a later date if the revised SIP demonstrates they are not required. During the later stages of the Examination, this issue was partly resolved in that the Applicant included a statement on the use of NAS in the SIP [\[REP5-015\]](#).
- 5.2.372. However, [\[REP5-015\]](#) highlights a tentative approach whereby the Applicant states that the NAS can be used 'if deemed necessary'. NE advise this is not fully in line with Defra's Noise Policy (2025) which requires that the noise reduction methods are considered as the default in all English waters and should be factored in to planning of all piling activities and related ESs.
- 5.2.373. NE highlighted that the multiple piling scenario should include the combination of locations that produces the greatest estimates of impacted animals in order to constitute an accurate WCS. Thus, NE advised that the Applicant should re-calculate the simultaneous piling assessment based on the two locations that produce the WCS. The issue remained unresolved as per NE's risk register [\[REP8-099\]](#).
- 5.2.374. Essex Wildlife Trust also raised the issue of NAS during the Examination. And the Statement of Common Ground [\[REP6-070\]](#) indicates NAS should be committed to in the draft MMMP.
- 5.2.375. The ExA have fully considered scope for NAS in our overall conclusions. We agree NAS should be secured by the rDCO by amendment in line with NE/MMO advice owing to the likelihood NAS would be needed should the Proposed Development go ahead. This is because of the proximity of protected sites, and the overall evidence provided suggests there are significant numbers of marine mammals which are extremely mobile in the vicinity and therefore the prospect of potential conflict with mammals is greater than the Applicant suggests.

COMPLIANCE WITH DEFRA POLICY ON MARINE NOISE

- 5.2.376. The 'Policy Paper Reducing Marine Noise (January 2025)' is an important and relevant consideration. The paper has alignment with the UK Marine Strategy and the Marine Strategy Regulations 2010, which aim to achieve or maintain Good Environmental Status for underwater noise. The ExA highlights that 'natural sound' is a vital cue within the marine environment. It is used by marine mammals to: navigate; communicate; find food; locate mates; and avoid predators.

EXA'S CONSIDERATION

- 5.2.377. Within Defra policy it is acknowledged sounds made by human activities or 'marine noise', can interfere with or obscure the ability of marine animals to hear natural sounds. The ExA also recognises that marine mammals are facing a range of pressures that are predicted to increase over time as defined by the ES. A key concern with respect to the application made is the level of noise generated from a range of human activities including:
- pile driving for offshore wind farm foundations;
 - the detonation of unexploded ordnance (UXO) from the seabed; and
 - shipping movements
- 5.2.378. The ExA considers that in developing its approach to noise mitigation methods as detailed in the outline SIP and draft MMMP, the Applicant has had regard to recent policy and guidance produced by Defra, JNCC, NE and Cefas regarding marine noise. Defra's 21 January 2025 policy paper on Reducing Marine Noise states that *'given the expected increase in noise levels over the coming years, and the above outlined policy commitments, we expect that all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance.'*
- 5.2.379. The policy also states that *'Applicants can propose the use of any noise reduction method (primary, secondary, or a combination of methods) in their marine licence application and/or their post-consent requirement discharge request'*. The details of the necessary noise reduction methods to meet the legal and policy requirements in the factual context of NFOWF then need to be worked through with the MMO and the relevant SNCB.
- 5.2.380. The policy cites that technologies with more robust evidence regarding their efficacy and noise reduction capabilities are likely to face smoother consenting journeys with regard to noise related matters.
- 5.2.381. Furthermore, given the current evidence gaps regarding harbour porpoise disturbance, developers can propose alternative EDR values in their licence applications and/or post-consent requirement discharge requests, provided they are supported by robust evidence appropriate to the case in question. This would be considered by the relevant regulator during application determination in consultation with the relevant SNCBs.
- 5.2.382. In accordance with the Defra policy paper, the greater the level of evidence provided to support justification of a lower EDR, the more likely this would be accepted by the regulator. Early engagement with the relevant regulator is strongly encouraged. It remains the case that any and all applications for marine licences would be determined on a case-by-case basis, on the basis of the application that has been made and the individual circumstances.

- 5.2.383. Because of the above, the ExA notes that thorough consideration of noise reduction methods should therefore be undertaken by the Applicant. Including justification as to why applying noise reduction methods to relevant activity may not be considered a satisfactory alternative.
- 5.2.384. Whilst securing NAS at this stage under the rDCO may preclude the exploration of avoidance and reduction of impacts prior to seeking to apply mitigation, the view of the ExA is that there is strong likelihood NAS would be required. Given the likelihood the ExA concludes that on a precautionary basis a marine licence condition stipulation as per the ExA's rDCO should therefore be introduced as sole reliance on the dMMMP would not be sufficient. The rDCO uses the wording proposed by the MMO in paragraph 6.1.4 of [\[REP7-080\]](#) which had been agreed with NE and is in line with other offshore wind farms.
- 5.2.385. The ExA is also aware that developers who have secured the greatest possible noise reductions are less likely to face requests to further explore satisfactory alternatives and therefore delays in consenting, as they have demonstrated they have utilised best endeavours to secure a satisfactory alternative. Contrary to the Applicant's submissions our finding is that NAS use should be secured via a Condition in the Marine Licence in the context of the Defra paper.
- 5.2.386. The revised DML Condition wording the ExA deems is required is the following:-

Condition 22(1)(g) in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol (in accordance with the outline marine mammal mitigation protocol), the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant SNCB and which must include details of noise reduction methods through project design (primary measures) and/or, deployment of noise mitigation systems or noise abatement systems (secondary measures) that will be utilised to manage sounds from those piling activities and such protocol must include full details and justification for the mitigation chosen or excluded for deployment.

Other considerations

- 5.2.387. Additionally, issues that were settled/agreed on by NE and following ExA questions in the Examination period included:
- UXO mitigation could be secured via the SIP once final details are known plus the MMMP confirms: The Applicant would ensure that the mitigation measures are adequate to reduce the risk of physical or permanent auditory injury (PTS) and disturbance during all UXO clearance.
 - The MMMP caters for procedure when unexpected mammal detections scenarios arise.

CONCLUSIONS

- 5.2.388. The ES assessment has considered the impacts to: Harbour porpoise; Minke whale; Grey seal; and Harbour seal. In gauging all impacts, the ExA is mindful that the Schedule of Mitigation (Rev 3) [\[REP7-004\]](#) / MMMP Revision 4 [\[REP8-030\]](#) offer a more complete set of design measures during construction building on the initial ES content of [\[APP-026\]](#).
- 5.2.389. Mortality, injury (including permanent threshold shift (PTS) or temporary threshold shift (TTS) or disturbance to marine mammal species from construction noise would be reduced insofar as each piling event would commence with a soft-start

procedure. This is secured through the draft and eventually 'final MMMP', in accordance with Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 Schedule 10, Part 2, Condition 22 of the dDCO Revision 5, [\[REP8-005\]](#).

- 5.2.390. Before any potential UXO clearance takes place, appropriate options would be able to be considered secured as part of the Marine Licencing process for UXO clearance in accordance with the draft MMMP.
- 5.2.391. All vessel movements would be kept to a minimum number –to reduce any potential collision risk. Additionally, vessel operators would be managed in a way to ensure the use of best practice. Secured through a Project Environmental Management Plan (PEMP), in accordance: Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 Schedule 10, Part 2, Condition 21 of the dDCO.
- 5.2.392. A final MMMP specifically for piling would be developed in the pre-construction period and based upon relevant available information, methodologies, industry good practice, latest scientific understanding, current guidance and detailed design. The MMMP for piling would be developed in consultation with the relevant SNCBs and the MMO, detailing the proposed mitigation to reduce the risk of any physical or permanent auditory injury to marine mammals during all piling operations. This is secured through Schedule 8, Part 2, Condition 21 Schedule 9, Part 2, Condition 22 Schedule 10, Part 2, Condition 21 of the dDCO. However, the MMO's wording within paragraph 6.1.4 of [\[REP7-080\]](#) is preferred by the ExA to formally secure NAS and is a change applied by the ExA to the rDCO as the dMMMP only makes commitment to exploring the use of NAS rather than securing it unequivocally.
- 5.2.393. For operations, maintenance and decommissioning phases a repeat of the measures to reduce vessel collision and accidental pollution risks during implemented construction would be able to take place. And the basis of the monitoring measures within the IPMP Revision 3 [\[REP8-009\]](#) is otherwise appropriate.
- 5.2.394. A final MMMP would be developed in consultation with relevant stakeholders with consideration of relevant guidance, in accordance with the outline submitted alongside the DCO application. Therefore, where there are any existing gaps there remains appropriate latitude to ensure NE/MMO agreement on the final versions.
- 5.2.395. The ExA notes that the additional mitigation secured through the MMMP includes use of trained personnel to watch for marine mammals and delay the start of piling if marine mammals are present within a specified area. This would also be supplemented with passive acoustic monitoring to detect marine mammals underwater. Other additional mitigation could include the use of acoustic deterrent devices to encourage marine mammals to move away from piling activities.
- 5.2.396. That said, there are still some important technical deficits as to SNCB agreement on the application material as a whole. Because of those deficits the risk of potential harms occurring does increase.
- 5.2.397. Despite such risks, having regard to the potential environmental effects arising as summarised in Table 12.127 of ES Chapter 12 [\[APP-026\]](#). With the implementation of mitigation measures able to be secured in the MMMP and SIP combined, it is predicted by the ES the scheme would have no greater than minor adverse (not significant in EIA terms) effects on marine mammals during all its phases. Furthermore, it states that cumulative effects are not likely to be significant in EIA terms when including Five Estuaries and other projects.

- 5.2.398. The ExA has examined all of the Applicant's submitted assessments and considered all the issues raised during the Examination related to marine mammals.
- 5.2.399. The ExA considers that whilst some initial examination issues have been successfully resolved and the Applicant has committed to reasonable embedded mitigation measures throughout construction activities, they have not fully followed advice from the SNCBs in particular regarding:
- At Deadline 8 NE wanted the Applicant to fully commit to the use of noise abatement systems and incorporate this into the draft MMMP and SIP and incorporate this into the ES assessment.
 - Multiple piling scenario should include the combination of locations that produces the greatest estimates of impacted animals in order to constitute the most realistic WCS.
- 5.2.400. The ExA finds that the Applicant has properly gauged risks and that MMMP and SIP use alongside other stated mitigations would be a suitable technical means able to avoid significant harmful effects from an ES perspective. Moreover, adaptive management if required would be possible and is secured via Conditions in the DMLs within the rDCO.
- 5.2.401. Moreover, the ExA has no reason to conclude that the marine licensing regime would not function effectively given the overlap in the rDCO for dealing with marine mammal ecological protection matters via applicable Condition(s).
- 5.2.402. The ExA has consequently considered the scope of all mitigations in the context of NE'S Deadline 8 advice particularly shown in their Risk and Issues Log RAG assessment [[REP8-099](#)]. Mitigation scope is pivotal to the ExA's overall findings. In broad terms, we find that in-principle reliance on mitigations in the manner proposed by the Applicant aligns with NPS criteria seeking to avoid and limit harms.
- 5.2.403. The ExA finds that whilst adequate collective mitigations are secured by the dDCO. However, some minor modification would be required to the DMLs and the list of certified documents in line with NE/MMO advice in the ExA's rDCO. The specific changes are summarised in Chapter 10 of this Report.
- 5.2.404. Therefore, the ExA concludes that the Proposed Development accords with the relevant sections of NPS EN-1 and NPS EN-3; the UK Marine Policy Statement; and Policies BIO1 and ECO1 of the East Marine Plans and Policy SE-UWN-2 of the South East Inshore Marine Plan which collectively aim to protect marine biodiversity, taking account of the best available evidence.
- 5.2.405. The ExA is satisfied that subject to the changes applied in the rDCO: relevant national policies and local policies are complied with; that adequate mitigation can be secured regarding the protection of marine mammals; and there are no other important or relevant considerations to conclude differently.
- 5.2.406. Thus, bringing all points together including regard to the full scope of mitigation possible via the DCO the ExA attributes little negative weight to the overall harms potentially impacting on marine mammals.

5.3. NAVIGATION AND SHIPPING

INTRODUCTION

5.3.1. This section considers the effects of the Proposed Development on navigation and shipping, to include the socio-economic effects. In its consideration of navigation and shipping below, the Examining Authority (ExA) has had regard to:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Section 4;
- the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8;
- international obligations relevant to marine navigation;
- the relevant policies of the UK Marine Policy Statement, the East Inshore and East Offshore Marine Plans and the South East Marine Plan;
- the Local Impact Reports (LIRs), to the extent they are relevant to the topic;
- any matters prescribed in relation to the development; and
- any other important and relevant matters, including Marine Guidance Note (MGN) 654.

THE APPLICATION

5.3.2. The Applicant's assessment of the potential effects on navigation and shipping is presented in Environmental Statement (ES) Chapter 15 Shipping and Navigation [\[APP-029\]](#). The chapter:

- Presents the existing baseline and identifies any assumptions and limitations encountered in compiling the baseline information;
- presents the potential effects of the Proposed Development on navigation and shipping during the construction, operation and decommissioning phases; and
- highlights any necessary monitoring and/or mitigation measures which could avoid, reduce, or mitigate the possible effects of the Proposed Development on navigation and shipping.

5.3.3. Other application documents that are relevant include the associated figures [\[APP-060\]](#), Navigational Risk Assessment (NRA) [\[APP-106\]](#) [\[APP-107\]](#) [\[APP-108\]](#), Outline Fisheries Liaison and Coexistence Plan [\[REP7-021\]](#), Offshore In-Principle Monitoring Plan [\[REP8-009\]](#), Outline Offshore Operations and Maintenance Plan [\[REP8-023\]](#), Outline Vessel Traffic Monitoring Plan (OVTMP) [\[APP-256\]](#) and Outline Navigation and Installation Plan [\[REP8-027\]](#). The latest versions of these documents are listed as documents to be certified in Schedule 12 of the Applicant's draft Development Consent Order (dDCO) [\[REP8-005\]](#).

ARRAY AREA BACKGROUND

5.3.4. ES Chapter 4 [\[APP-018\]](#) Section 4.4 sets out the identification of the Proposed Development array area. Prior to submission of the application, the array area was significantly reduced from 150km² to 95km², following stakeholder feedback received through the evidence plan process and shipping stakeholder engagement. Changes specifically related to navigation and shipping included:

- The former northern array area was removed to reduce impacts on shipping and seascape, particularly the Suffolk and Essex Coast and Heaths National Landscape; and
- the southern array area (now known as the 'array area') was reduced in size to facilitate:

- An increased buffer from the International Maritime Organisation (IMO) Traffic Separation Scheme (TSS) lanes (discussed further in ES Chapter 15 Shipping and Navigation); and
- No overlap with the IMO Precautionary area (discussed further in ES Chapter 15 Shipping and Navigation).

BASELINE

- 5.3.5. The Applicant's assessment of the baseline environment for navigation and shipping is presented in Section 15.5 of ES Chapter 15 [APP-029]. The navigation and shipping study area is shown in Figure 27 below. The study area has been defined as that within a 10 nautical miles (nm) buffer of the offshore array area and a 2nm buffer of the offshore export cable corridor, with the intention to capture all relevant passing traffic in the assessment.

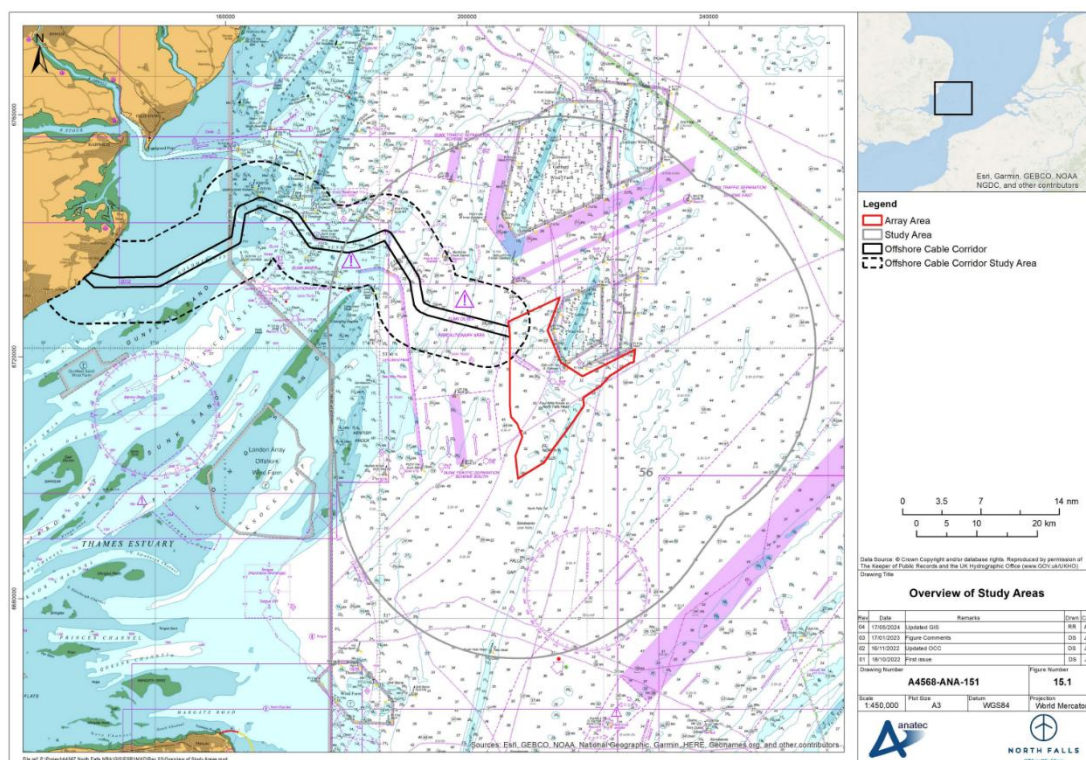


Figure 27: Overview of study areas, extracted from Figure 15.1 [APP-060]

- 5.3.6. The Applicant has presented the key navigational features identified in the NRA in ES Figure 15.2 [APP-060], an extract from which is shown in Figure 28 below. The Applicant identifies that the majority of commercial vessel routing in the study area is observed to be dictated by the local IMO adopted routing measures. This includes:

- The Sunk North, East and South TSSs;
- the Sunk Outer Precautionary Area (upon which the three TSSs converge); the Sunk Inner Precautionary Area (adjacent to the Sunk Outer Precautionary Area);
- Long Sand Head Two Way Route; and
- area to be Avoided (the central part of the Sunk Outer Precautionary Area).

- 5.3.7. The Applicant identifies that the array area intersects the Galloper recommended route, an IMO adopted routing measure, introduced in 2007 as a component of the wider Sunk routing measures scheme to provide a shortcut for use by ferries to or

from Ostend. The Applicant's view is that data analysis and consultation [REP2-025] indicates that the Galloper recommended route is no longer used for this original purpose, and therefore the Applicant proposes that the route would be removed to facilitate the Proposed Development.

- 5.3.8. The Applicant further identifies there are three deep water routes (DWR) (Trinity, Sunk and Black Deep) located converging within the Sunk Inner Precautionary Area, within the vicinity of the Sunk pilot boarding station, one of the three pilot boarding locations in the vicinity of the array area. The Sunk pilot station, which is located within the export cable corridor, is a focal point for shipping and navigation.

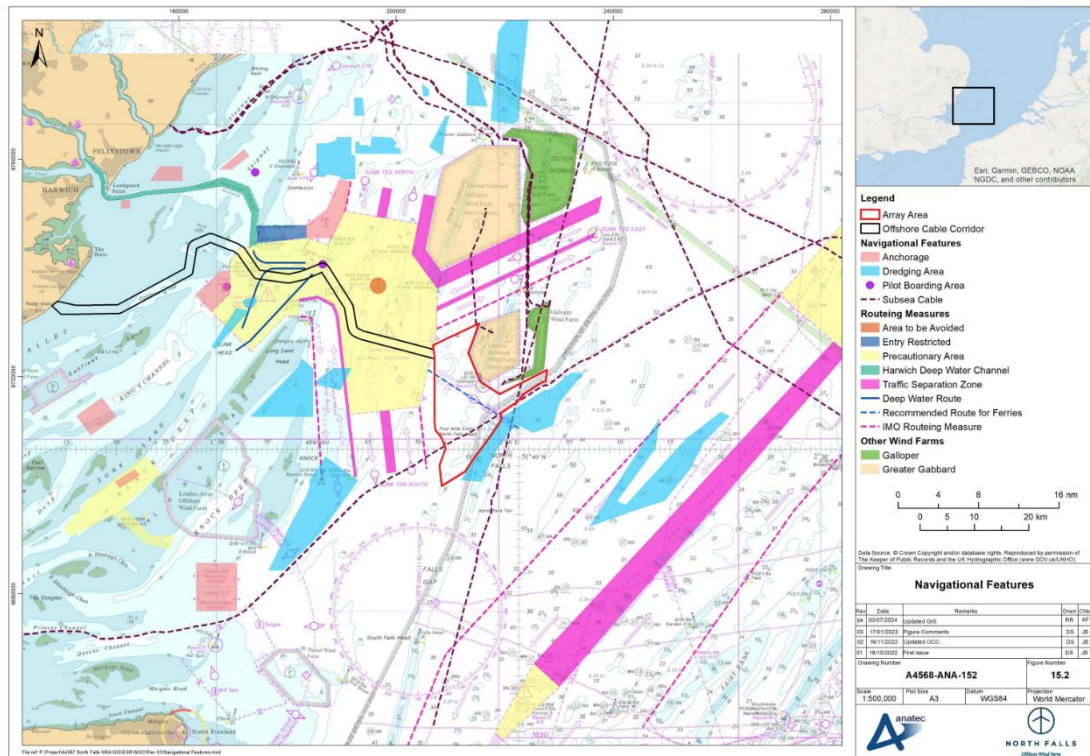


Figure 28: Navigational features, extracted from Figure 15.2 [APP-060]

- 5.3.9. The NRA describes the meteorological ocean data, used as an input to the collision and allision risk modelling, in terms of wind directions, significant wave height, visibility, and tidal speed and direction. A summary of the data sources which includes vessel traffic and maritime incidents is presented in Table 5.1 [APP-106]. Section 15.5.2 [APP-060] provides a summary of the vessel traffic baseline that has primarily been established based on the 56 days of vessel traffic survey data, with the long-term automatic identification system also used on a supplementary basis. The marine incident baseline in section 5.5.3 [APP-060] was established via assessment of Department for Transport (DfT) Helicopter taskings, Marine Accident Investigation Branch (MAIB), and Royal National Lifeboat Institution (RNLI) data.
- 5.3.10. The Maritime and Coastguard Agency (MCA) confirmed [RR-217] that it is content that the traffic data collection is suitable for the assessment and that the recommended NRA methodology has been followed in the NRA.
- 5.3.11. The Applicant considered future trends in baseline conditions and states that the current accepted trend is that vessel size will increase. The Applicant notes consultation input has indicated that larger vessels are likely to use the Sunk routing measures, including for access to local ports within the operational lifespan

of the Proposed Development, with a value of 20 metres (m) draught suggested by various stakeholders as a suitable assumption. The NRA [\[APP-107\]](#) considers future case traffic growth scenarios both with and without the Proposed Development of 10%, 20% and 30%.

MITIGATION

5.3.12.

The Applicant's proposed embedded mitigation is summarised in Table 15.3 of ES Chapter 15 [\[APP-029\]](#). In ES Chapter 15, Tables 15.15 and 15.16, identify additional mitigation of a structures exclusion zone [\[APP-029\]](#) and this would be secured in the dDCO as noted below as the obstacle free zone. The following measures would be secured in the dDCO and draft Deemed Marine Licence (dDML) [\[REP8-005\]](#):

- An obstacle free zone for navigational safety to maintain a distance of 1nm from all surface piercing infrastructure to the local routing measures unless otherwise agreed with the MCA (dDCO Schedule 1, Requirement (R) 29);
- for vessels under the undertaker's control operating within the order limits, issuing a code of conduct to operators and ensuring appropriate coordination of vessels so as to reduce collision risk to other vessels (dDML Schedules 8 and 10, Part 2, Condition 13, and Schedule 9, Part 2, Condition 14);
- a commitment to provide notifications to mariners, the Marine Management Organisation (MMO), the MCA, the UK Hydrographic Office (UKHO) and Kingfisher Information service (dDML Schedules 8 and 10, Part 2, Condition 15, and Schedule 9 Part 2, Condition 16);
- aids to navigation and colouring of structures to be agreed with Trinity House (dDML Schedules 8 and 10, Part 2, Conditions 16 and 17, and Schedule 9 Part 2, Conditions 17 and 18);
- pre-construction plans to be agreed with MMO, MCA, Trinity House and UKHO as Condition 21 for dDML Schedules 8 and 10, Part 2, and Condition 22 for dDML Schedule 9, Part 2) to include:
 - details of the development, for example, location of all turbines (21(a) and 22(a));
 - project environmental management plan (marine coordination) (21(d) and 22(d));
 - details of proposed pre-construction monitoring surveys, construction monitoring, post construction monitoring and related reporting (21(f) and 22(f));
 - a cable specification and installation plan (CSIP) (21(h) and 22(h));
 - an aids to navigation plan (this was introduced in Development Consent Order (DCO) Revision 3 as a replacement to the lighting and marking plan) (21(i) and 22(i));
 - an offshore monitoring plan (21(j) and 22(j));
 - a fisheries liaison and co-existence plan (FLCP) (21(k) and 22(k));
 - a vessel traffic monitoring plan (21(l) and 22(l));
 - a navigation and installation plan (NIP) (Schedule 9 only, 22(n)) relating to a portion of the export cable corridor and the sea areas surrounding it, for the area covered by the Sunk Inner and Sunk Outer Precautionary Areas;
 - a sediment disposal management plan (SDMP)(21(n) and 22(o));
- offshore safety management requires all the MCA's recommendations from MGN654 to have been adequately addressed and agreed with the MMO and the MCA, and that the MMO has confirmed an emergency response coordination plan has been prepared (dDML Schedules 8 and 10, Part 2, Condition 23, and Schedule 9 Part 2, Condition 24);

- reporting of engaged agents, contractors and vessels to the MMO (dDML Schedules 8 and 10, Part 2, Condition 24, and Schedule 9 Part 2, Condition 25); and
- pre-construction monitoring and surveys, construction monitoring and post construction monitoring, and timing of monitoring reporting (dDML Schedules 8 and 10, Part 2, Conditions 25-28, and Schedule 9, Part 2, Condition 26 to 29).

5.3.13. The application for safety zones would involve applications under the Electricity (Offshore Generating Stations) (Safety Zones) (Applications Procedures and Control of Access) Regulations 2007. International maritime law is enforced via regulations such as the International Convention for the Safety of Life at Sea (SOLAS) (IMO, 1974).

5.3.14. For monitoring of shipping and navigation topics, the Offshore In-Principle Monitoring Plan (IPMP) [APP-245], defers to the Outline Vessel Traffic Monitoring Plan [APP-256], the purpose of which is to monitor that the NRA is accurate for the construction, operation and maintenance phases, and that mitigation measures are effective and remain fit for purpose.

ASSESSMENT OF EFFECTS

CONSTRUCTION, OPERATION AND DECOMMISSIONING

5.3.15. The Applicant's assessment of navigation and shipping effects in ES Chapter 15 [APP-029] is underpinned by an NRA. In respect of navigation and shipping receptors, the assessment considered potential impacts during all phases (except as noted below) of the Proposed Development on:

- An assessment of increased collision and allision risks;
- vessel displacement;
- impacts on vessels involved in marine aggregate operations;
- reduced port access;
- reduction of emergency response capability; and
- interaction with subsea cables including cable protection (operational stage only).

5.3.16. These were assessed against what is considered the worst-case scenarios, based on the potential scenarios for the Proposed Development. As set out by the Applicant, in the case of the shipping and navigation assessment, grid connection options 1 and 2, included in the project design envelope, would be the same and represent the worst-case project scenario for all impacts, paragraph 16, ES Chapter 15. This assessment was made for each of the relevant impacts for the construction, operational and decommissioning phases of the Proposed Development for the project alone and also for the cumulative effects assessment.

5.3.17. A cumulative effects assessment has been undertaken in ES Chapter 15 which considers other plans, projects and activities that may impact cumulatively with the Proposed Development.

5.3.18. Projects, plans and activities within the following distances of the Proposed Development have been screened and assessed for potential to contribute to cumulative effects:

- Offshore Wind Farms (OWF) within 50nm of the array area (noting wind farm developments typically have the greatest potential for causing vessel deviation);
- Oil and gas developments within 10nm of the array area (noting oil and gas

- platforms are less likely to cause large scale deviations than OWF); and
- Subsea cables within 2nm of the export cable corridor (impacts from subsea cables tend to be localised).

5.3.19. The Applicant's assessment in ES Chapter 15, Section 15.12 concludes that all impacts from the Proposed Development in isolation and on a cumulative basis would be no greater than tolerable and as low as reasonably practicable (ALARP) (not significant in Environmental Impact Assessment (EIA) terms) with embedded and additional mitigation.

ISSUES CONSIDERED DURING THE EXAMINATION

5.3.20. Issues emerging during the Examination that the ExA has examined, considered and concluded on are:

- Feasibility and timing of the formal removal of the Galloper recommended route;
- protective provisions;
- adequacy of mitigation plans;
- effects on shipping movements;
- effects from disruption to navigation and shipping in the assessment of socio-economics; and
- effects on navigational safety.

LOCAL IMPACT REPORTS

5.3.21. There are no substantive comments relating to navigation and shipping in any of the submitted LIRs.

FEASIBILITY AND TIMING OF THE FORMAL REMOVAL OF THE GALLOPER RECOMMENDED ROUTE

BACKGROUND

5.3.22. The Proposed Development's array area would intersect the Galloper recommended route, an IMO adopted routeing measure, introduced in 2007 as a component of the wider Sunk routeing measures scheme to provide a shortcut for use by ferries to or from Ostend. The Galloper recommended route allows traffic routeing to/from the Port of Ostend in Belgium to both enter and leave the Sunk Outer Precautionary Area without having to utilise the Sunk TSS South or Sunk TSS East as shown in Figure 29 below. The Applicant's view is that data analysis and consultation [REP2-025] indicates that the Galloper recommended route has low usage and is no longer used for this original purpose, and therefore the Applicant proposes that the measure would be removed to facilitate the Proposed Development. In addition, the Applicant identifies [REP2-025] that based on its assessment, the alternate routeing leads to changes in distance of between 3 and 15% of the original routeing.

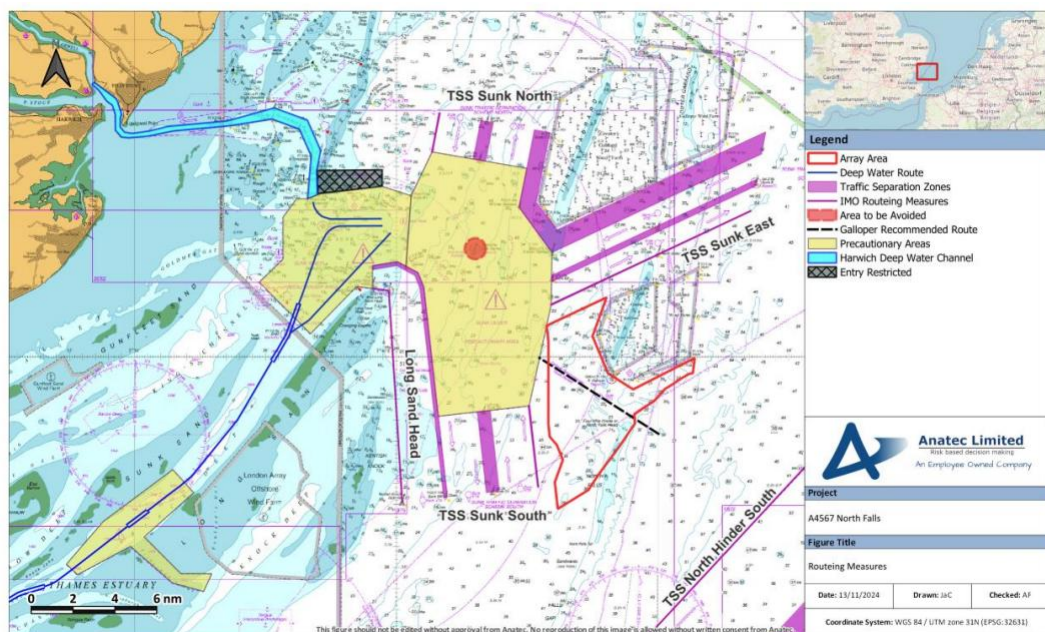


Figure 29: Sunk routing measures showing Galloper recommended route (extracted from Figure 4.2 [REP2-025])

PROCESS TO REQUEST THE REMOVAL OF THE GALLOPER RECOMMENDED ROUTE

- 5.3.23. The MCA notes [REP2-046] that the Applicant has conducted an additional navigation and environmental risk assessment on alternative routes that vessels could take to Belgian ports. The MCA states that this assessment has been accepted and the Belgian maritime administration has indicated it could support the removal of the Galloper recommended route. However, the MCA explains, there is a formal multi-step process that would be necessary in order to request from the IMO that the Galloper recommended route would be removed. The MCA estimates that the earliest the removal could be in force would be Quarter (Q) 4 2028, based on the next step starting, if the Proposed Development received ministerial consent in Q1 2026, in March/April 2026 with the presentation of a proposal to remove the route to the UK Safety of Navigation (UKSON) committee. The MCA had previously clarified [RR-217] that it would support a proposal to remove the Galloper recommended route to UKSON only if the SoS grants consent for the Proposed Development. The MCA highlights [REP2-046] that if agreement was not reached firstly at the UKSON committee and subsequently by IMO members, it would not be able to support the Proposed Development because approval to remove the Galloper recommended route from the IMO must be received before any construction can commence.
- 5.3.24. The Applicant set out its view at ISH2 [EV6-009], that no navigational safety concerns remain with the proposed removal of the Galloper recommended route and discussions are now only administrative, related to timing and process of removal. Furthermore, the Applicant explained its position that the process of removing the route could begin now, rather than waiting for consent to be granted. The Applicant reasoned that this was due to confirmation from Belgian Authorities that there was no issue with removal of the route and that the route no longer meets the intended purposes as set out by the IMO within its ratification process in 2006 (as the Ostend route has not been active since 2009). The Applicant's view was that it had demonstrated that if the route were to temporarily remain open, there are safe deviations that vessels could take. Further, the Applicant stated data analysis shows

that the Galloper recommended route was only being used on an infrequent basis by commercial vessels (cargo, tankers, passenger vessels).

- 5.3.25. The MCA stated that its position remained unchanged [\[EV6-009\]](#) and pointed to the timing constraints for submitting a proposal for removing the route and the IMO timetable. The Applicant clarified [\[EV6-009\]](#) that for its submission the route comes under the scope of NPS-EN3 paragraph 2.8.330, being a less strategically important route, as the route is no longer in active use, and therefore the Applicant's view was that this is a circumstance where the SoS should take a pragmatic approach to the potential impacts of the Proposed Development.
- 5.3.26. The MCA's response to ExQ2 Q15.02 [\[REP5-100\]](#) confirms that whilst the Galloper Recommended route is no longer used by ferries operating to Ostend, it remains in use by other vessels as evidenced in Figure 10-53 of Appendix 15.1 Navigational Risk Assessment Part 2 of 3 [\[APP-107\]](#). Therefore, MCA considers the Galloper Recommended Route to be a recognised sea lane currently in use for international navigation. As long as the route is IMO adopted, is in use, and is depicted on relevant navigational charts, MCA will consider any obstruction or impediment to this route as a hard constraint in line with Annex 2 of MGN 654 - Offshore Renewable Energy Installations (OREIs) - Guidance on United Kingdom (UK) Navigational Practice, Safety and Emergency Response.
- 5.3.27. The MCA explained [\[REP5-100\]](#) that although the route may be considered of reduced strategic importance, it nonetheless retains its status as a recognised sea lane adopted by the IMO and currently in use for international navigation. The MCA considers that a condition (requirement) requiring removal of the route should be included in the dDCO to ensure minimum interaction and interference with a recognised sea lane still in use for navigation. The MCA proposed [\[REP4-080\]](#) a requirement to ensure that no offshore construction that directly interacts with the Galloper recommended route would commence before the removal would be in force. The dDCO requirement is discussed in more detail further below.
- 5.3.28. With reference to the Formal Safety Assessment – Removal of Galloper Recommended Ferry Route [\[REP2-025\]](#) and the Applicant's response to written questions [\[REP2-020\]](#), the ExA asked [\[EV6-011\]](#) the MCA, what would be the level of interference with the use of recognised sea lanes essential to international navigation likely to be caused by the proposal to remove the Galloper recommended route. The MCA responded [\[EV6-011\]](#) that it did not believe that it would interfere with the TSS that surround that area, subject to the implementation of the removal of the Galloper route and the structures exclusion zone.
- 5.3.29. Further, the ExA enquired whether the MCA [\[EV6-011\]](#) had any outstanding concerns regarding the feasibility and timing of the formal removal of the Galloper recommended route. The MCA [\[EV6-011\]](#) highlighted the risk that there was no guarantee the proposal would be approved by IMO members and in the case where any member objects or does not agree to removal of the route, then the route would not be removed. The Applicant responded [\[EV6-011\]](#) that the possibility of objection was another reason why it was in the Applicant's best interest to progress the removal as soon as possible.
- 5.3.30. The MCA [\[REP4-080\]](#) explored the Applicant's suggestion to submit proposals to the IMO in advance of December 2026 but concluded it would not change the expected timeframe for removal of the route because for the MCA to submit the proposal to the IMO it would need to have the guarantee of Ministerial consent. The Applicant's view [\[REP5-056\]](#) is that the proposal could be submitted to the UKSON

in Autumn 2025 and that an application to remove the Galloper recommended route should be submitted prior to the DCO decision date for the Proposed Development. The Applicant's position statement [REP5-071] shows a potential 1 year time saving from Q4 2028 to Q4 2027 for the earliest the removal of the Galloper recommended route could be in force, if it is proposed to raise the removal in the 2025 Autumn UKSON session and assuming a development consent decision would have been received prior to the Navigation, Communications and Search and Rescue (NCSR) committee in June 2026. The Applicant's Closing Statement [REP8-036] confirms that the MCA has now agreed to propose removal of the Galloper recommended route at the 2025 Autumn UKSON session.

DCO REQUIREMENT

- 5.3.31. The MCA's position is that a condition of consent (requirement) must be included within the DCO/DML to ensure that no offshore construction that directly interacts with the Galloper recommended route would commence before the removal would be in force [REP2-046] [REP4-080]. The Applicant provided a position statement [REP5-071] setting out the reasons why, in its view, imposing the MCA's requirement would not be pragmatic, considering the nature and infrequent use of the Galloper recommended route when set against the urgent need for Critical National Priority (CNP) Infrastructure such as the Proposed Development. The Applicant provided [REP6-068][AS-054] on a without prejudice basis, an alternate wording for a requirement in the event that the SoS concludes that the Galloper recommended route is a 'recognised sea lane essential to international navigation' and that a requirement is necessary in order to grant development consent in terms that would avoid any risk of breach of any international obligations.
- 5.3.32. In response to ExQ3 15.0.2 [REP7-081] which referred to the Applicant's above submission [REP6-068], the MCA proposed amended wording for paragraphs 1 and 2 of the above requirement. The MCA also provided [REP7-081] separate comments on paragraphs 3 to 6 which the Applicant had corrected [AS-054]. The MCA's proposed amended wording was subsequently accepted by the Applicant [REP8-044] and incorporated into Schedule 1, Part 3 of the dDCO [REP7-007] as shown below as Requirement (R) 30. Note MSC is IMO's Maritime Safety Committee.

Galloper recommended route

30.—(1) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not commence any part of Work No. 1 or Work No. 2 until the MSC has ratified the proposal to remove the Galloper recommended route.

(2) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not install any surface-piercing infrastructure forming part of Work No. 1 or Work No. 2 until the MSC resolution to remove the Galloper recommended route has come into force.

(3) Sub-paragraphs (1) and (2) are subject to sub-paragraphs (4) and (5).

(4) If at any time the Secretary of State, in consultation with the MCA, approves a layout for Work Nos. 1 and 2 which safeguards sufficient sea space to allow vessels to continue to safely navigate via the Galloper recommended route, the restrictions in sub-paragraphs (1) and (2) do not apply.

(5) If the Secretary of State's agreement or approval is obtained pursuant to sub-paragraphs (1), (2) or (4) above, the undertaker must install any infrastructure in accordance with the terms and conditions of any such agreement or approval.

The MCA also added [\[REP7-081\]](#) its position that as an IMO-adopted routing measure the Galloper Recommended Route is a 'strategic route essential to regional, national and international trade' under paragraph 2.8.318 [sic] of NPS EN-3.

SCENARIO - IF THE REMOVAL OF THE GALLOPER RECOMMENDED ROUTE WAS REFUSED

- 5.3.33. The ExA asked [\[EV6-011\]](#) the Applicant to confirm in the event that approval for removal of the Galloper recommended route was refused at any stage in the process, was there a revised and more limited form of development that could proceed that retains the Galloper recommended route. The Applicant answered [\[EV6-011\]](#) that no alternative layout had been contemplated in the event the Galloper recommended route was refused and this would be considered further by the Applicant. The MCA added [\[EV6-011\]](#) that if the Galloper recommended route was not removed, then the MCA would be left in a position where it objects to the Proposed Development. The MCA had explained earlier in the ISH2 [\[EV6-011\]](#) that it was largely content with navigational safety, subject to the implementation of the proposed mitigation measures and the removal of the Galloper recommended route, and this is discussed later in this section.
- 5.3.34. The ExA requested [\[PD-015\]](#) details and a plan showing, in the event that the removal of the Galloper recommended route was refused, how the revised and more limited form of development could be achieved and set out. The Applicant's response [\[REP6-063\]](#) confirmed that in the event that it was necessary to retain a corridor for the Galloper recommended route, the business case indicates that the Proposed Development would likely not be viable from a commercial perspective. The Applicant explained that it would not be feasible to use a phased approach to enable offshore construction activity, which would not directly interact with the Galloper recommended route, to commence prior to written confirmation from the MCA that the removal of recommended route has been approved by the IMO. The ExA notes, nonetheless, R30 above includes an option for approval of an alternative array layout which safeguards the Galloper recommended route.

LEGAL CONSEQUENCES OF NOT FORMALLY REMOVING THE GALLOPER RECOMMENDED ROUTE PRIOR TO COMMENCEMENT OF DEVELOPMENT

- 5.3.35. The MCA's response to ExQ2 9.1.12 [\[REP5-100\]](#) sets out the detailed background of the IMO's adoption of the Galloper recommended route and confirms that it is a recognised sea lane under Article 22 of the United Nations Convention on the Law of the Sea (UNCLOS) and that until any formal removal or amendment is in place, any vessel operating in the area may continue to use this route as it remains an IMO adopted recommended route. The MCA also asserts that if the DCO was granted without MCA's proposed requirement [\[REP4-080\]](#) and structures were built impeding the routing measure, there would be a breach of UNCLOS Article 60(7) and Safety of Life at Sea (SOLAS) CH V Reg 10. Furthermore, the MCA's opinion was that failing to include its proposed requirement would be inconsistent with NPS EN-3 Section 2.8.326 and subsequently s104(4) and (5) PA2008.
- 5.3.36. In response, the Applicant's notes [\[REP6-061\]](#) that the MCA has not explicitly stated anywhere within its responses to this question that it views the Galloper Recommended Ferry Route as "essential to international navigation" and rather refer to it being "used for international navigation". The Applicant assumes the MCA chose its wording with care and considers this an important distinction. On the basis that the Galloper Recommended Ferry Route is not essential to international navigation and is not mandatory, the Applicant submits that there can be no breach

of UNCLOS Article 60(7) or SOLAS CH V Reg 10. Notwithstanding the above, as discussed earlier, R30 was included by the Applicant in the dDCO [[REP8-005](#)].

- 5.3.37. The Applicant's Closing Statement [[REP8-036](#)], indicates that the Applicant and the MCA have reached agreement on all material matters pertaining to the Galloper recommended route. In addition, there is consensus that the Galloper recommended route is not a 'recognised sea lane essential to international navigation' within NPS EN-3 paragraph 2.8.326. However, regardless of the status of the Galloper recommended route in legal or policy terms, the Applicant submits that the inclusion of the dDCO requirement, as agreed with the MCA, would ensure there can be no interference with Galloper recommended route and secures compliance with all relevant policy including NPS EN-3 and the East Marine Plan (Policy PS1). Accordingly, the Applicant's position is that no issue arises in terms of s104(4) or (5) PA 2008.
- 5.3.38. The MCA's final signed SoCG [[REP8-058](#)] shows that generally all matters relating to the Galloper recommended route were agreed, except for the earliest timing for a submission to propose the formal removal of the route to the NCSR.

EXA'S CONSIDERATIONS

- 5.3.39. The ExA notes that the MCA estimated that the earliest the removal of the Galloper recommended route could be in force would be Q4 2028, which was based on the Proposed Development receiving ministerial consent in Q1 2026 and proposing removal of the route at the March / April 2026 UKSON session. However, the ExA acknowledges that because the MCA [[REP8-058](#)] has now agreed that the removal of the route will now be raised at the Autumn 2025 UKSON session, there is a potential 1 year time saving from Q4 2028 to Q4 2027 for the earliest the removal of the route could be in force, as set out by the Applicant [[REP5-071](#)]. This assumes that a development consent decision would have been received prior to the NCSR committee in June 2026. Nonetheless, there is an inconsistency between the Applicant's closing statement [[REP8-036](#)] and the MCA's final SoCG [[REP8-058](#)], whereby the Applicant states it has reached agreement on all material matters pertaining to the Galloper recommended route while the MCA's SoCG states that item 16 regarding the NCSR date has not been agreed (although item 14 states it is agreed that removal of the route will be raised at the 2025 Autumn UKSON session). However, this inconsistency does not affect the ExA's conclusions on this matter.
- 5.3.40. The ExA is mindful that the MCA [[EV6-011](#)] highlighted that there is no guarantee that a proposal to formally remove the route (IMO adopted routeing measure) would be approved by IMO members in which case the route would remain in situ. However, the ExA notes that the Applicant's navigation and environmental risk assessment on alternative routes vessels could take to Belgian ports has been accepted and the Belgian maritime administration has indicated they could support the removal of the Galloper recommended route. The ExA considers that the Applicant's confidence that the removal of the Galloper recommended route will be endorsed in due course by the IMO to be fully justified. Given the position of the Belgian maritime administration, the ExA agrees that this should be an administrative exercise. The ExA finds that the Applicant has to date properly managed this potential risk and has taken appropriate steps with a view to obtaining the IMO approval.
- 5.3.41. The ExA acknowledges the Applicant's position that the Galloper recommended route is appropriately considered in the context of NPS EN-3 paragraph 2.8.330, as

a 'less strategically important shipping route'. The ExA is also mindful of the MCA's position that:

- Although the route may be considered of reduced strategic importance, it nonetheless retains its status as a recognised sea lane adopted by the IMO and currently in use for international navigation [REP5-100]; and
- it is a 'strategic route essential to regional, national and international trade' under para 2.8.318 [sic] of NPS EN-3 [REP7-081].

- 5.3.42. The ExA agrees with the MCA [REP8-058] that data analysis and consultation undertaken for the Galloper recommended route shows that the usage is low and that there are safe and viable alternative routing options. Taking account of the above, the ExA agrees with the Applicant that NPS EN-3 2.8.330 would apply because the Proposed Development affects a less strategically important shipping route. It is therefore appropriate to take a pragmatic approach to considering proposals to minimise negative impacts.
- 5.3.43. Nevertheless, the ExA accepts the MCA's position [EV6-009] that the removal of the route is necessary for navigational safety risks to be ALARP and this is discussed further in the ExA's consideration of effects on navigational safety. Given those circumstances it is necessary to consider the need for the inclusion of R30 – Galloper recommended route in the dDCO [REP8-005]. The MCA originally raised concerns that if the DCO was granted without MCA's proposed requirement [REP4-080] and structures were built impeding the routing measure, there would be a breach of UNCLOS Article 60(7) and Safety of Life at Sea (SOLAS) CH V Reg 10. In the MCA's opinion failing to include its proposed requirement would be inconsistent with NPS EN-3 Section 2.8.326 and subsequently s104(4) and (5) PA2008.
- 5.3.44. Regarding the removal of the route, the Applicant's view [REP8-058] was that it did not consider it necessary for a specific condition to be put in place given there is already provision within the DCO for layout approval through the MMO in consultation with the MCA. However, the Applicant stated [REP8-058] that it would reluctantly accept the inclusion of a condition (R30) to allow for the IMO application process to progress and that R30 has been added to the dDCO [REP7-008] on this basis. In that respect, the ExA disagrees with the Applicant [REP8-058] that the provision within the DCO for layout approval from the MMO, in consultation with the MCA, would be sufficient to overcome the MCA's concerns that a requirement is necessary for removal of the Galloper recommended route. The ExA considers that a requirement is necessary given the MCA's view [REP5-100] that the Galloper recommended route's status is a recognised sea lane adopted by the IMO and currently in use for international navigation, and there would be implications for navigational safety from the installation of surface piercing infrastructure associated with the Proposed Development. The ExA finds R30 which would preclude the commencement of the construction of the array area before the IMO has ratified the proposal to remove the Galloper recommended route to be necessary and reasonable.
- 5.3.45. The ExA recognises with the consensus achieved by the parties by the close of the Examination in the Applicant's closing statement [REP8-036] that the Galloper recommended route is not a 'recognised sea lane essential to international navigation' within NPS EN-3 paragraph 2.8.326. The ExA notes the Applicant's position [REP8-036] that the inclusion of the dDCO requirement, as agreed with the MCA, would ensure there could be no interference with Galloper recommended route and would secure compliance with all relevant policy including NPS EN-3 and

the East Marine Plan (Policy PS1). Given the above, the ExA is satisfied that Article 60(7) of UNCLOS 1982, the relevant provisions of NPS EN-3 (most notably, paragraphs 2.8.326 to 2.8.327) and s104(4) or (5) PA2008 would not be engaged in this case.

5.3.46. R30 in the dDCO [\[REP8-005\]](#) also includes provision for the SoS, in consultation with the MCA, to approve a layout for the array area which safeguards sufficient sea space to allow vessels to continue to safely navigate via the Galloper recommended route. The ExA requested the Applicant to consider such a layout during ISH2 [\[EV6-011\]](#) and in a Rule 17 request [\[PD-015\]](#). However, no such layout was provided during the Examination. As a result, the ExA has no information regarding the overall width of a corridor that would need to be retained through the array area to safeguard the existing Galloper recommended route. Therefore, the implications of such a layout were not explored and hence the ExA has the following concerns:

- How a safeguarded route through the array area could affect the risk to navigational safety;
- whether any additional mitigation would be required for navigational safety. In particular, whether further obstacle free zones for navigational safety would be required under R30 in the DCO; and
- how the reduction in the 95km² array area would affect the Proposed Development's generating capacity, and in turn its need case and the overall planning balance.

5.3.47. If the provision for a safeguarded route is removed from R30, the consequence would be that in the event that the removal of the route is not approved by the IMO, the Proposed Development would be unable to proceed, unless otherwise agreed by the SoS in consultation with the MCA. However, the ExA is mindful of the Applicant's position [\[REP6-063\]](#) that in those circumstances, the Proposed Development's business case indicates it would likely not be viable from a commercial perspective, because of the reduction in generating capacity resulting from the need to retain a corridor for the Galloper recommended route. Whilst the Applicant has subsequently agreed to such a requirement it has not explained how this would be accommodated, and the Proposed Development remain feasible and viable.

5.3.48. The ExA acknowledges that R30 in the dDCO [\[REP8-005\]](#) has been agreed by the MCA and the Applicant. Nonetheless, given that the provision for a safeguarded route in R30 introduces a high degree of uncertainty regarding the implications for navigational safety and generating capacity, which could ultimately affect the planning balance, the ExA considers that the R30 wording previously agreed by the MCA [\[REP7-081\]](#) as shown below should be applied and this is included in the rDCO. The SoS may wish to seek the views of the MCA and the Applicant as to the full implications of a requirement that includes provision for a safeguarded route as agreed by them in the SoCG.

Galloper recommended route

30.—(1) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not commence any part of Work No. 1 or Work No. 2 until the MSC has ratified the proposal to remove the Galloper recommended route.

(2) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not install any surface-piercing infrastructure forming part of Work No. 1 or Work No. 2 until the MSC resolution to remove the Galloper recommended route has come into force.

~~(3) Sub-paragraphs (1) and (2) are subject to sub-paragraphs (4) and (5).~~

~~(4) If at any time the Secretary of State, in consultation with the MCA, approves a layout for Work Nos. 1 and 2 which safeguards sufficient sea space to allow vessels to continue to safely navigate via the Galloper recommended route, the restrictions in sub-paragraphs (1) and (2) do not apply.~~

~~(5) If the secretary of state's agreement or approval is obtained pursuant to sub-paragraphs (1), (2) or (4) above, the undertaker must install any infrastructure in accordance with the terms and conditions of any such agreement or approval.~~

PROTECTIVE PROVISIONS

- 5.3.49. At Issue Specific Hearing 2 (ISH2), the Port of London Authority (PLA) [\[EV6-011\]](#) highlighted the importance of having a remediation clause in the Protective Provisions (PPs) and also the design parameter requirement to ensure the 22 metres (m) depth would be protected. Furthermore, the PLA raised concern regarding the Sunk pilot diamond area as well as the DWRs as pilotage is compulsory for larger vessels within the PLA.
- 5.3.50. The London Gateway Port Ltd (LGPL) [\[EV6-011\]](#) emphasised the need for certainty of the implementation of the mitigation measures and expressed concern that there would be no controls or inputs by any of the Ports before the CSIP goes to the MMO for approval. Further concerns from the LGPL included that in the dDCO [\[REP4-005\]](#) the Applicant had removed the PPs from Schedule 14 for the protection of the LGPL which had been included in previous versions of the dDCO. Significant concerns stated from the LGPL related to NPS EN-3 and that the site selection has to be done with regard to approaches to ports and strategic routes.
- 5.3.51. In the Applicant's response to Ports' request for PPs [\[REP4-044\]](#), the Applicant gives the following four reasons why it considers PPs are not necessary or appropriate:
- No detriment to any statutory undertaking;
 - the MMO is the appropriate regulator;
 - unnecessary duplication of control; and
 - PPs would be unprecedented.
- 5.3.52. In addition, in relation to the Harwich Haven Authority (the HHA), the Applicant acknowledged in paragraph 3.1.4 [\[REP4-044\]](#), that a short section of the Proposed Development's export cable corridor does lie within the harbour limits of the HHA. The Applicant notes that however, in that respect, the dDCO does not amend, limit or alter any statutory powers or provision applicable to the HHA. Further the Applicant noted the works by the Applicant within the HHA's harbour limits would require a works licence granted by the HHA. The Applicant explained that the interests of the HHA would therefore be protected and no detriment to the HHA's undertaking would arise from any powers sought in the dDCO for North Falls. The ExA notes that the works license does not appear to be listed in the Applicant's Consents and Licences Statement [\[AS-030\]](#) although it is agreed that a licence would be required in the HHA's final signed Statement of Common Ground (SoCG) [\[REP8-054\]](#).
- 5.3.53. The LGPL's response [\[REP5-096\]](#) to the Applicant's response to Ports' request for PPs [\[REP4-044\]](#) included:

- The LGPL's statutory undertaking is the operation and maintenance of the harbour of London Gateway Port. That harbour relies upon the DWRs – if the DWR are impeded, London Gateway Port does not function;
- the LGPL's powers to dredge under the HEO (Harbour Empowerment Order), including in the area of the Sunk, can be exercised by the LGPL at any moment and without any requirement for a marine licence. As such the powers proposed to be granted to the Applicant under the dDCO would interfere with the exercise by the LGPL of its statutory powers;
- plans would be swiftly agreed between the LGPL and the Applicant ahead of submission to the MMO and the LGPL's agreement can be signified to the MMO on submission to the MMO;
- recognising the Applicant's apparent difficulty in providing details of methodologies etc at this stage, the LGPL has reasonably proposed that its interests would be safeguarded by an approvals mechanism as was set out in the PPs; and
- the principle of approval of plans before its submission to the appropriate regulatory authority is well established (The PLA provided examples in [\[REP5-096\]](#)).

- 5.3.54. In the PLA's responses, it explained [\[REP5-111\]](#) and [\[REP5-112\]](#) that the Proposed Development order limits include the DWRs through which the deeper draught vessels must pass through to get to the Port of London; the PLA further explained that whilst outside the jurisdiction of the Port of London Act 1968 the DWRs form part of the seaward approaches within which the PLA have to discharge its general and specific statutory duties as noted by the Port Marine Safety Code and the Guide to Good Practice on Port Marine Operations. The PLA also explained that the Order Limits also include the Sunk Pilot Diamond and that pilotage is compulsory for large vessels within the London Pilotage District and the PLA is responsible for the piloting of vessels entering the Port of London, utilising the Sunk Pilot Diamond to discharge this function.
- 5.3.55. The Applicant's response to ExQ2 9.4.2 (i) [\[REP5-054\]](#) included that regarding the LGPL's power to dredge under the HEO, the areas where the Proposed Development crosses the HEO are already deeper than the limits in the HEO, including any tolerance allowed for and that the LGPL has no existing power to dredge to the depth at which the export cables would now be required to be installed and maintained pursuant to dDCO R2(3).
- 5.3.56. The ExA notes that MMO [\[REP6-083\]](#) welcomed the approach for the LGPL's request for the right to approve plans such as the final CSIP and final NSIP before they are submitted to the MMO for approval.
- 5.3.57. The ExA requested in its schedule of changes to the dDCO [\[PD-019\]](#), amongst other changes, that the Applicant include PPs for both the LGPL and the PLA. The ExA considered these changes to be reasonable and necessary to ensure that Work No. 3 would not give rise to any unacceptable permanent or temporary impacts on navigation for both the LGPL and the PLA, and to ensure consistency with the Five Estuaries Offshore Wind Farm (VEOWF) Ltd dDCO [\[REP8A-004\]](#).
- 5.3.58. In response, the Applicant [\[REP7-056\]](#) stated its position remains that PPs are not necessary nor reasonable and if PPs are to be imposed, that should only be as an alternative (and not in addition to) the suite of other control measures already committed to and contained in the dDCO and dDML and associated control plans. Further, the Applicant provided [\[REP7-059\]](#) PPs on a without prejudice basis for the PLA and the LGPL.

- 5.3.59. In the PLA's closing statement [REP8-090], it states that the Applicant's without prejudice PPs [REP7-059] are not acceptable to the PLA and are not aligned with those for VEOWF. Further, the PLA requested that the dDCO should at least include the PPs included by VEOWF in the dDCO with the necessary updates which were included in the PLA's response to ExQ3 9.3.3 Appendix [REP7-093].
- 5.3.60. In the LGPL's closing statement [REP8-088] it states that the form of the PPs [REP7-059] submitted by the Applicant are not agreed with the LGPL. Further the LGPL require the PPs in the form set out in its Deadline (D) 7 comments [REP7-079] but with the provisions for the notification of the transfer of the benefit of the Order and the provisions of the as-built details to be added from the Applicant's without prejudice PPs [REP7-059].
- 5.3.61. In the HHA's SoCG [REP6-072] it requested PPs and these were marked as in discussion and remained in discussion in the final signed SoCG [REP8-054]. No PPs were provided for the HHA during the Examination.

EXA'S CONSIDERATIONS

- 5.3.62. Concerning the disagreement between the ports and the Applicant regarding the port's request for PPs and over the port's desire to have an approval/veto rights over the mitigation plans, the ExA's proposed schedule of changes to the dDCO [PD-019], included PPs for both the LGPL and the PLA which included its rights for approval of the plans.
- 5.3.63. The ExA has considered the cases from the Applicant, the LGPL and the PLA, regarding the need for PPs below and this is also discussed in Chapter 8 of this Report. Furthermore, the ExA considers that both the LGPL's and the PLA's needs case to protect their statutory undertakings of operating and maintaining their ports, including their reliance on the DWRs, is robust and is more persuasive than the Applicant's case against the use of PPs which includes relying on the Proposed Development being entirely outside the statutory harbour / jurisdictional limits of the PLA and the LGPL. The ExA also acknowledges that MMO [REP6-083] welcomed the approach for the LGPL's request for the right to approve mitigation plans such as the final CSIP and final NIP before they would be submitted to the MMO for approval.
- 5.3.64. The ExA acknowledges that R2(3) in the dDCO [REP8-005] set out the parameters for dredging levels, however the ExA is persuaded by the LGPL's and the PLA's needs to safeguard their interests through approval of the mitigation plans before submission to the MMO and that this principle has been established on other projects. The ExA considers that this approval of the mitigation plans would accord with the principles of minimising disruption or economic loss to the approaches to the Ports (NPS EN-3 2.8.328). In addition, the ExA is satisfied that arbitration would be appropriate to resolve disputes between the Applicant and the LGPL or the PLA, and this is referred to in both the LGPL's PPs [REP7-079] and the PLA's PPs [REP7-093]. On the basis of the above, the ExA has concluded that the PPs are included in the recommended Development Consent Order (rDCO) for the LGPL and the PLA.
- 5.3.65. The ExA has also considered whether the Applicant's without prejudice PPs [REP7-059] could be substituted for the PLA's and LGPL's PPs, however, the ExA considers that it would not address the above points, particularly as the Ports' right of approval of the mitigation plans has been excluded.

- 5.3.66. The PPs for the HHA are discussed further below in relation to mitigation plans.

ADEQUACY OF MITIGATION PLANS

- 5.3.67. In this section the ExA focuses on the adequacy of the following mitigation plans: CSIP, SDMP and NIP.
- 5.3.68. The LGPL's closing statement [\[REP8-088\]](#) states that aside from minor drafting comments in respect of the outline CSIP (oCSIP) and outline SDMP (oSDMP) at D7 [\[REP7-079\]](#), the LGPL is otherwise content with its provisions recognising its outline nature at this stage but requires a right of approval of the final forms of those plans. Further, the LGPL is concerned that the outline NIP (oNIP) [\[REP7-079\]](#) lacks content and that as the LGPL hadn't seen a revised version its concerns remained. The LGPL proposed its right of approval of the final form of those plans is included in its proposed PPs.
- 5.3.69. The PLA's closing statement [\[REP8-090\]](#) includes that the oCSIP [\[REP7-040\]](#) has been agreed, an outstanding comment on the oNIP [\[REP7-053\]](#) requires closing out which was expected from the Applicant, and that minor amendments are required to the wording of the oSDMP as described in the PLA's response [\[REP7-094\]](#).
- 5.3.70. The ExA notes from the Applicant's closing statement [\[REP8-036\]](#) that the oCSIP, oNIP and oSDMP have been the subject of extensive discussion with the port Interested Parties (IPs) and progressively updated through deadlines 4 to 8 of Examination in response to feedback from the port IPs and the content is largely agreed.
- 5.3.71. The MCA's response to ExQ3 15.0.7 [\[REP7-081\]](#) noted that the MCA has no comments on the oNIP [\[REP5-028\]](#), oSDMP [\[REP5-042\]](#) and CSIP [\[REP5-044\]](#) subject to the Applicant maintaining its commitment to continued consultation with relevant navigation stakeholders during the post-consent stage for the oNIP and subject to consultation during the post-consent stage for the CSIP.
- 5.3.72. The Applicant's response [\[REP7-051\]](#) to ExQ3 15.0.08 regarding the seven control measures proposed by the HHA [\[REP5-094\]](#) included that the 'control measures' are all already secured and/or addressed. Further the Applicant explained that the relevant plans (CSIP and NIP) are part of the DCO, and thus compliance with the items within plans is inherent to the DCO. In particular, the HHA [\[REP5-094\]](#) was concerned that an unacceptable level of navigational risk would be caused by the Proposed Development working concurrently with Restricted Ability to Manoeuvre (RAM) works already planned by the VEOWF, Sea Link and Tarchon project developers (or other development projects) in the Sunk area. In addition, the HHA requested that no RAM concurrent works must be secured in the DCO. The Applicant responded that the issue was addressed in Table 2.2 of the oNIP [\[REP6-039\]](#) which prevents concurrent RAM activities taking place in the key areas of interaction between the Proposed Development and shipping and navigation stakeholders. The MCA [\[REP7-081\]](#) responded that it agreed with the HHA's approach to include in the DCO but also added that as an alternative it could be secured in the oNIP.

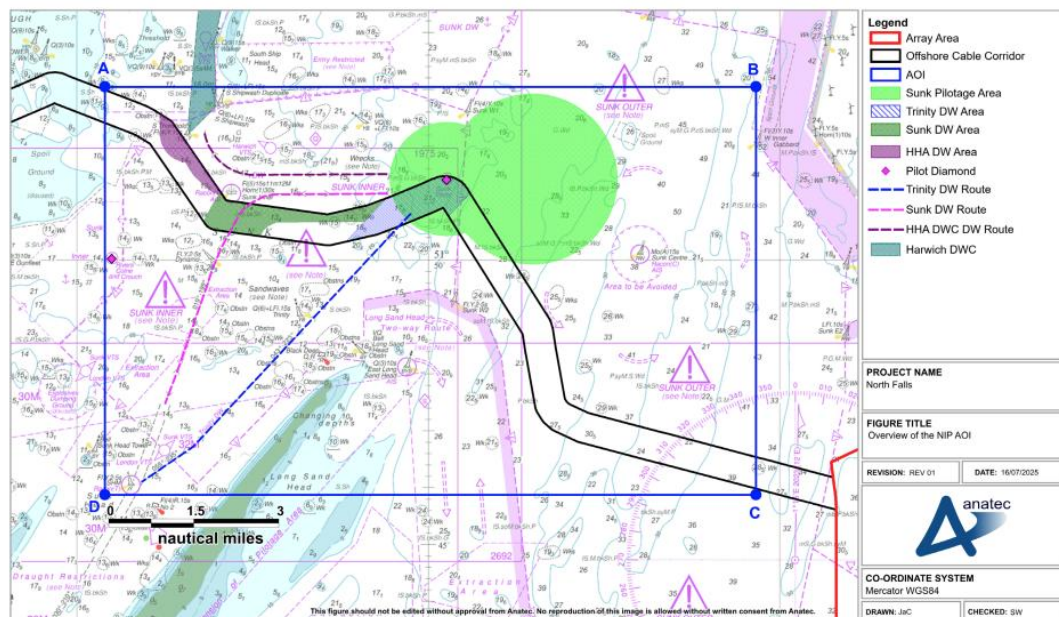


Figure 30: Overview of Area of Interest (including Concurrent Working Areas), extracted from Figure 2.1, Outline Navigation and Installation Plan [REP8-027]

- 5.3.73. The oNIP [REP8-027] states in paragraph 19 that there will be no concurrent working within the Sunk and Trinity DWRs (into the London ports), which are shown crossing the export cable corridor in Figure 30 above. In contrast, the oNIP states there are no restrictions on in combination working within the HHA Deep Water area, which is shown in the figure above as overlapping with the export cable corridor. The above figure also shows the HHA's Deep Water Channel route which does not directly cross the export cable corridor.
- 5.3.74. The HHA's representation regarding navigational safety and pilotage in the Sunk area [REP8-087] included a request for formal determination by the ExA, or ultimately the SoS, that the controls over concurrent construction and maintenance Restricted Ability to Manoeuvre (RAM) operations in the Sunk area must be explicitly secured within the DCO itself, rather than being embedded solely within associated certified documentation. HHA added from its perspective, this offers a more transparent and legally robust mechanism to manage a safety-critical issue.

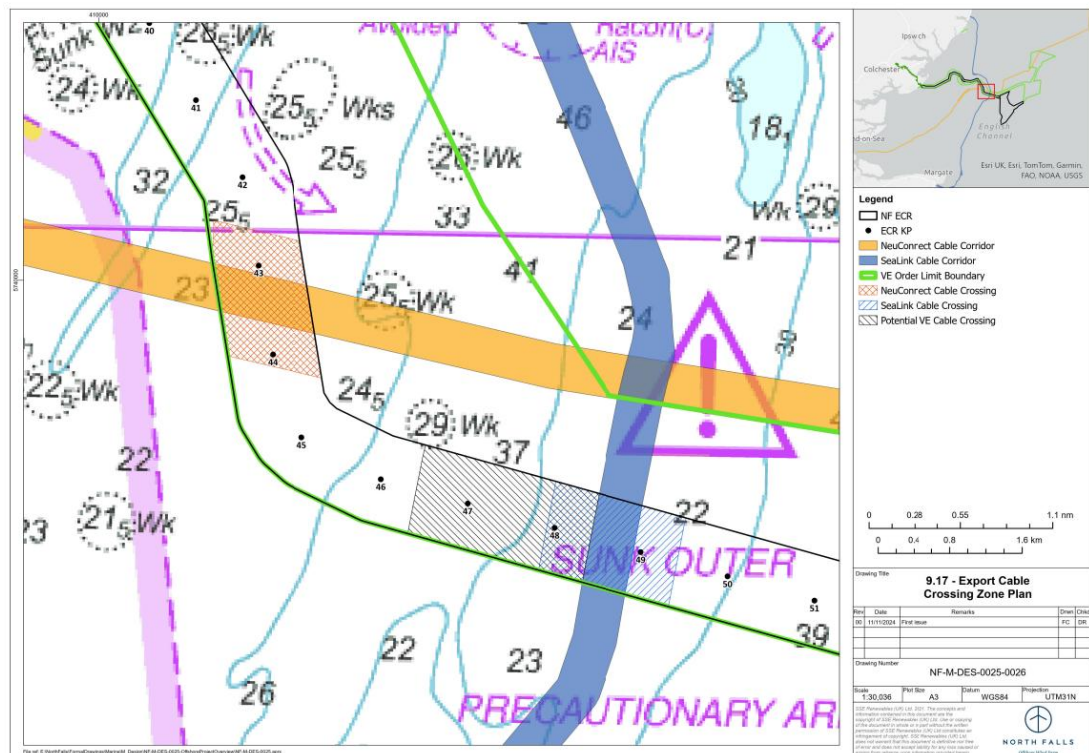


Figure 31: Export Cable Crossing Zone Plan (Rev 0) extracted from [REP1-059]

In the Applicant's response [REP2-020] to ExQ1 15.1.1 regarding potential concurrent working in the Sunk Area, the Applicant referred to the Export Cable Crossing Zone Plan [REP1-059] (see Figure 31). The Applicant explained the cable crossing from the Proposed Development's export cable with VEOWF's cable crossing would be approximately 9km from the Sunk Boarding station and its view was that it would be virtually impossible to have any concurrent working in the vicinity of the Sunk Pilot Boarding area due to the necessary sequential arrangement of the works, with sufficient time in between the two cabling activities to construct the crossing.

EXA'S CONSIDERATIONS

- 5.3.75. The ExA is mindful that the mitigation plans have been progressively updated during the Examination and is reassured that the MCA has no comments on the oNIP [REP5-028], oSDMP [REP5-042] and oCSIP [REP5-044], subject to the Applicant maintaining its commitment to continued consultation with relevant navigation stakeholders during the post-consent stage for the oNIP and subject to consultation during the post-consent stage for the CSIP. The ExA is satisfied with the content of the mitigation plans and that any remaining concerns could be resolved during the development of the final mitigation plans.
- 5.3.76. Subject to the recommendation to the SoS below, the ExA is satisfied that adequate controls would be in place for the approval of the mitigation plans and these would be secured through both the PPs in the rDCO, and Condition 21, Schedules 8 and 10, and Condition 22, Schedule 9 of the dDML in the dDCO [REP8-005]. Separate approval rights for the mitigation plans are given for the LGPL and the PLA in their respective PPs. Condition 21 includes for approval of the plans by MMO in consultation with the MCA, specifically 21-(1)(h) for the CSIP and 21-(1)(n) for the SDMP. Condition 22 includes for approval of the plans by MMO in consultation with the MCA, the local harbour authorities (the PLA, the HHA and the LGPL) and others

(specifically 22-(1)(h) for the CSIP, 22-(1)(n) for the NIP and 22-(1)(o) for the SDMP).

- 5.3.77. The ExA has considered the HHA's request [\[REP8-087\]](#) for formal determination by the ExA, or ultimately the SoS, that the controls over concurrent construction and maintenance RAM operations in the Sunk area must be explicitly secured within the DCO itself, rather than being embedded solely within associated certified documentation. The ExA is mindful of MCA's [\[REP7-081\]](#) view that it agreed with the HHA's approach to include in the DCO but also added that as an alternative it could be secured in the oNIP.
- 5.3.78. The ExA has considered whether the HHA's navigational safety concerns should be addressed and secured within the DCO or within the oNIP. The ExA has proposed that the LGPL's and the PLA's concerns would be addressed through including PPs (including the right to approve mitigation plans) in the rDCO. The ExA notes however that PPs for HHA have not been included in the dDCO and have not agreed in the HHA's final signed SoCG [\[REP8-054\]](#). The Applicant considered [\[REP4-044\]](#), PPs are not necessary or appropriate because there is no detriment to any statutory undertaking, the MMO is the appropriate regulator, unnecessary duplication of control and PPs would be unprecedented. The Applicant acknowledged in paragraph 3.1.4 [\[REP4-044\]](#), that a short section of the Proposed Development's export cable corridor does lie within the harbour limits of the HHA. The HHA agreed with the Applicant that a works licence granted by the HHA would be needed for this purpose [\[REP8-054\]](#).
- 5.3.79. Nonetheless, the ExA considers the Applicant's proposed works licence and the consultation with the HHA in Condition 22, Schedule 9, in the dDCO [\[REP8-005\]](#) would be insufficient to address the HHA's concern because the works licence area excludes the Sunk Pilotage area and that consultation only would not allow HHA the controls it is seeking.
- 5.3.80. Given the safety critical nature of this issue and that the rDCO includes for PPs, which include the right of approval of the mitigation plans, for both LGPL and the PLA, the ExA recommends the right of approval of the mitigation plans is offered to the HHA through agreement of PPs. This would allow the HHA the control it is seeking over concurrent construction and maintenance RAM operations in the Sunk area. The ExA considers that this approval of the mitigation plans would accord with the principles of minimising disruption or economic loss to the approaches to the Ports (NPS EN-3 2.8.328), and for risks to navigational safety to be reduced to ALARP (NPS EN-3 2.8.179 and 2.8.331). On the above basis, it is recommended that the SoS may wish to consult with the HHA and the Applicant to seek an agreed form of wording for PPs to include the HHA's right of approval of the mitigation plans and the use of arbitration to resolve disputes.
- 5.3.81. The ExA also considered the alternative of amending the dDCO itself, instead of addressing it through the PPs, however this is not recommended as it would be inconsistent with the approach taken for the LGPL and the PLA, it could inadvertently restrict flexibility with the future development of the mitigation plans and in any case the issue of the PPs would still need to be agreed with the HHA.
- 5.3.82. The ExA has also considered if the concern could be addressed under the existing controls in place under Condition 22, Schedule 9, in the dDCO [\[REP8-005\]](#) which relies on consultation with the HHA, but with approval by the MMO. However, the ExA does not recommend this approach as it would be inconsistent with the case for the LGPL, where the MMO [\[REP6-083\]](#) welcomed the approach for the LGPL's

request for the right to approve mitigation plans such as the final CSIP and final NSIP before they would be submitted to the MMO for approval.

EFFECTS ON SHIPPING MOVEMENTS

DEEP WATER ROUTES – SAFEGUARDING FUTURE DEPTHS

- 5.3.83. The Applicant's response to ExQ1 15.1.7 [\[REP2-020\]](#) states that when crossing the TSS South and the Precautionary area, the water depths of the locations have been selected such that the cable burial would be below the 22m, CD (chart datum). Concerns were raised by the HHA [\[RR-126\]](#), the LGPL [\[REP2-041\]](#) and the PLA [\[REP2-056\]](#), regarding the need to safeguard future depths of 22m below chart datum within the DWRs. In the NRA Part 2 [\[APP-107\]](#), paragraph 459 assumes a vessel draught future case (realistic worst case) of 20m; and paragraph 713 states it is noted that the current depths over the Sunk and Trinity DWRs do not allow for 20m draught vessels, and substantial future dredging operations would be required to accommodate such vessels regardless of the presence of the Proposed Development.
- 5.3.84. The ExA asked [\[EV6-011\]](#) the LGPL and the PLA to advise of any future plans for the dredging operations required to achieve the future depths and if the dredging was not undertaken whether it was reasonable and technically achievable to require the cables to be buried to this additional depth. The LGPL responded that there were future plans to dredge, and it was conceivable that during the lifetime of the Proposed Development there would be a requirement to dredge to 22m. The PLA had no timetable for future dredging but stated that it was actively looking to future proof its interests as once the cable would be installed it would be a permanent constraint.
- 5.3.85. To address the cable burial depth, the Applicant updated the oNIP [\[REP4-011\]](#) and the Site Characterisation Report [\[REP4-013\]](#) and produced an outline CSIP (oCSIP) [\[REP4-039\]](#) to all include reference to the 22m depth in the areas required. Furthermore, the Applicant produced an outline SDMP (oSDMP) [\[REP4-038\]](#) which includes details of restrictions for sediment disposal within the DWRs and in proximity to the pilot boarding area. The Applicant also revised the dDCO [\[REP4-005\]](#) to include a new paragraph under Schedule 1, Part 3 Requirements, Article 2 to define the area where the cable must be installed and maintained at a level which would not preclude dredging to a level of 22m below CD. The Applicant's amendments also included a DWR Cable Installation Areas (future dredging depths) Plan as a certified document [\[REP4-043\]](#).
- 5.3.86. In response to ExQ3 15.0.6 [\[REP7-051\]](#) the Applicant set out that the impacts of delays to vessels caused by the Proposed Development would be mitigated by good planning and communication and that the oNIP [\[REP6-040\]](#) includes a requirement to add notification procedures in agreement with Interested Parties. Further, the Applicant explained that regarding pilot boarding, the future dredging depth plan (see Figure 32 below) [\[REP6-055\]](#) includes burying the cable deeper in the Sunk pilotage area which means there would be no constraint on the deeper vessels caused by the presence of cables.

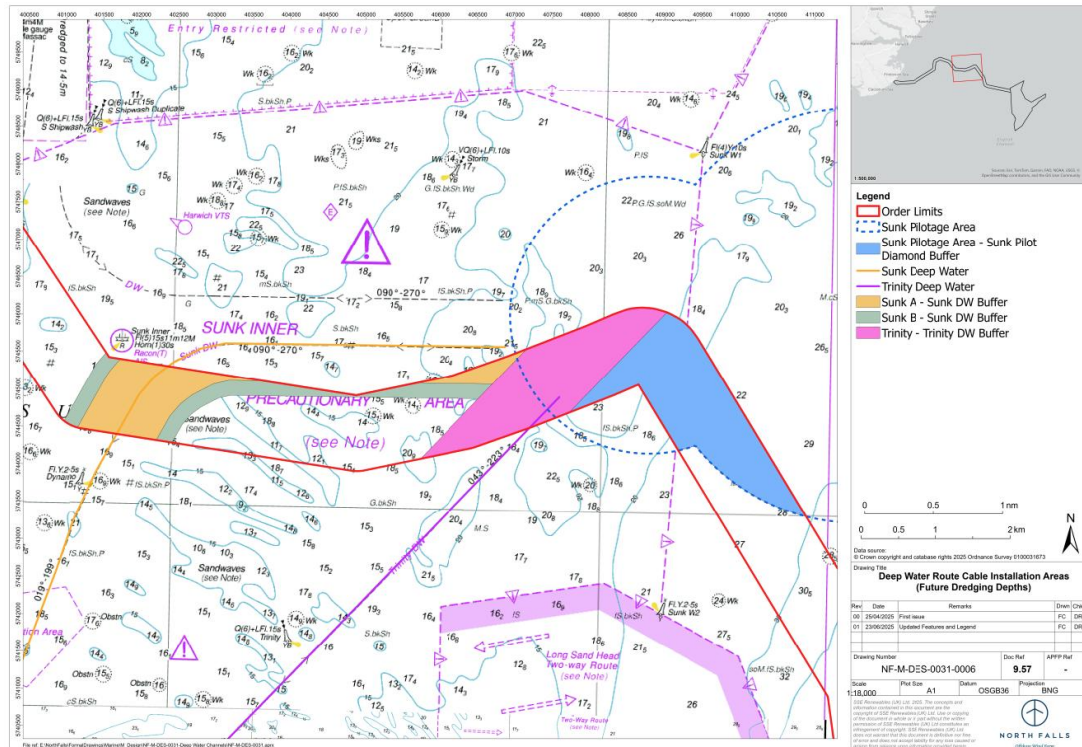


Figure 32: Deep Water Route Cable Installation Areas (Future Dredging Depths),
source [\[REP6-055\]](#)

EXA'S CONSIDERATIONS

- 5.3.87. The ExA has considered the permanent impacts to the Sunk and Trinity DWRs and Sunk Pilot Pilotage Area from the export cable corridor taking into account the possible future case to dredge to 22m during the lifespan of the Proposed Development. The ExA is mindful that all matters relating to the proposed export cable corridor, including the areas and depths proposed, were agreed with MCA in its final signed SoCG [\[REP8-058\]](#). The ExA recognises that the issue of the cable burial depth was agreed with the HHA [\[REP8-054\]](#) and the LGPL [\[AS-061\]](#) in their final signed SoCGs. While the PLA's final signed SoCG [\[AS-057\]](#) shows that the cable burial depth has been agreed, there remain disagreements regarding the issues of replication of the design R2(3) in Schedule 9 and remediation within PPs. The ExA notes that for the Port of Tilbury's (PoTL) final signed SoCG [\[AS-059\]](#), the cable burial depth was not agreed as the issue of remediation remained in discussion.
- 5.3.88. The ExA is satisfied that the permanent impacts to the Sunk and Trinity DWRs and Sunk Pilot Pilotage Area from the export cable corridor would be adequately secured through Schedule 1, Part 3, R(2)3 and the DWR Cable Installation Area (Future Dredging Depths) Plan [\[REP6-055\]](#) in the dDCO [\[REP8-005\]](#) and the changes in the rDCO (Schedule 9: Condition 10 and a new Condition 39; and including PPs in Schedule 14). The ExA is also satisfied by controls to restrict reductions in the navigable depth which would be secured in Schedule 9, DML Condition 13(3) and Condition 22(1)(h)(ii) of the dDCO [\[REP8-005\]](#). The ExA is satisfied that the remaining concerns from the PLA and the PoTL would be addressed in the rDCO by changes to Schedule 9, Condition 10 and a new Condition 39, and including PPs in Schedule 14. Furthermore, the ExA is satisfied that disruption would be minimised in relation to NPS EN-3 2.8.178.

- 5.3.89. The ExA concludes that the permanent impacts to the Sunk and Trinity DWRs and Sunk Pilot Pilotage Area from the export cable corridor would be mitigated, taking into account the possible future case to dredge to 22m during the lifespan of the Proposed Development.

EFFECTS FROM DISRUPTION TO NAVIGATION AND SHIPPING IN THE ASSESSMENT OF SOCIO-ECONOMICS

- 5.3.90. The UK Chamber of Shipping's final signed SoCG [\[REP8-056\]](#) shows that all shipping and navigation matters have been agreed, including the EIA impact assessment conclusions.
- 5.3.91. At ISH2 [\[EV6-011\]](#), the Applicant was asked by the ExA to clarify to what extent has the socio-economic assessment in ES Chapter 31 [\[APP-045\]](#) considered the range of stakeholders and routes presented in the NRA from Appendix 15.1 of the ES [\[APP-106\]](#) [\[APP107\]](#) [\[APP-108\]](#). The LGPL [\[EV6-011\]](#) also expressed concern that there is no consideration of London Gateway in ES Chapter 31 Socio-Economics [\[APP-045\]](#) which only considers Felixstowe and Harwich Haven. The PLA's view [\[EV6-011\]](#) was that the socio-economics assessment could be sufficiently robust if the PLA have the necessary mitigation and measures in place, to include the requirement for 22m dredging depth and the requested PPs.
- 5.3.92. At D7 the Applicant provided further information on Socio-Economic Impacts on Vessels to/from Tidal Thames [\[REP7-055\]](#) which concluded that with the commitments in the dDCO for burial depth together with the mitigation plans, the temporary, permanent and cumulative impacts would be not significant. The PLA responded [\[REP8-090\]](#) that remediation would be critical if for any reason the cable installation or maintenance does not occur to the required depth. Furthermore, the PLA explained that the Proposed Development may cause economic disbenefits to it but that it was satisfied that remediation would be secured through the ExA's schedule of changes to the dDCO [\[PD-019\]](#). However, the PLA was not satisfied that remediation would be secured in either the Applicant's Without Prejudice Ports PPs [\[REP7-059\]](#) or the dDCO [\[REP7-008\]](#).
- 5.3.93. In response to the Applicant's further information [\[REP7-055\]](#), the LGPL [\[REP8-088\]](#) noted that much of what the Applicant now relies upon to conclude that there are no significant effects on the ports are mitigations that were not originally part of the application as submitted. The LGPL further explained that R2(3) to ensure the cables are buried at sufficient depth and removal of the Applicant's ability to reduce water depth by 5% in the DWRs, have been introduced as a result of submissions made through the Examination by the Ports. The LGPL's view was that the reality appears to be that neither Chapter 15 nor Chapter 31 adequately considered the London ports in the way the Harwich ports were considered. The LGPL added it believed that the Applicant's conclusions regarding assessment and NPS compliance can only be robust with: (i) the inclusion of the PPs (with the right of approval of the Relevant Plans); and (ii) the improvement of the oNIP as sought.

TEMPORARY IMPACTS

- 5.3.94. Regarding the temporary socio-economic impacts, in response to ExQ2 16.0.6, the Applicant set out [\[REP5-054\]](#) that the PLA [\[REP2-056\]](#) disagreed that the potential economic impacts would be concentrated on the ports of Felixstowe and Harwich, with all other ports being scoped out of the assessment. The Applicant further noted that there are two DWRs (Sunk and Trinity) into the London Ports and the oNIP [\[REP-041\]](#) prevents concurrent working by the relevant projects (i.e. North Falls,

VEOWF and Sea Link) across both access routes thereby always giving one access route into the ports as mitigation.

- 5.3.95. In ExQ3 15.0.5 (i) the ExA asked the HHA, PLA, LGPL and MCA, if they agreed with the Applicant's proposal for one temporary access route into/ exit route from the ports. In response to ExQ3 Q15.0.5 (i), the PLA [\[REP7-093\]](#) highlighted it is important to note that the Sunk DWR is deeper than the Trinity DWR and therefore both routes are not equal and interchangeable, and careful planning and close communications would be critical to ensure that vessels would not be adversely affected at short notice. In response to the same question, the LGPL [\[REP7-077\]](#) [\[REP7-079\]](#) made similar points and added that its access or egress must not be disrupted and that no delay to vessels using its access or egress should be caused. In response to the above question, the MCA [\[REP7-081\]](#) agreed with the Applicant in principle regarding the timings of works in the area of the two DWRs. Further the MCA noted that the production of the oNIP is an additional mitigation to ensure that timings of any works within the areas covered by the oNIP would be managed between the projects accordingly to keep any potential socio-economic or navigation safety issues to a minimum.
- 5.3.96. In ExQ3 15.0.6, the ExA also asked the Applicant how it would address the PLA's concerns [\[REP6-091\]](#) related to the Sunk DWR being deeper than the Trinity DWR and how if the Sunk DWR is unavailable this may affect deeper draughted vessels' access to or from the port. In response, the Applicant [\[REP7-051\]](#) noted that any impact on the Sunk DWR from cable installation and dredging operations would be short term in nature and that the oNIP [\[REP6-040\]](#) includes a requirement to add notification procedures in agreement with Interested Parties, which include the PLA.
- 5.3.97. In response to ExQ2 16.0.6 the Applicant estimated [\[REP5-054\]](#) that the expected time for crossing the port channels with the cable burial tool would be of the order of 1.5 to 2 days. In ExQ3 15.0.4 and 15.05 (ii) [\[PD-016\]](#) the ExA queried with the Applicant and separately with the HHA, PLA, LGPL and MCA, what contingency plans would need to be in place, in the event that crossing the port channels with the cable burial tool could take longer. The Applicant's response to ExQ3 15.0.4 [\[REP7-051\]](#) noted that prior to the commencement of activities, the oNIP [\[REP6-039\]](#) requires a Hazard and Operability Study (HAZOPs) to be undertaken, detailing out contingency plans should a delay occur. Further, the Applicant explained that once the final burial depths below the future dredge depths are known and prior to detailed design of the cable installation, the most appropriate methodology would be selected to minimise impacts to ensure certainty of operations. In response to ExQ3 15.05 (ii) the MCA [\[REP7-081\]](#) noted the contingency plan should clearly demonstrate the ability to cease operations and remove vessels from the area to ensure uninterrupted port access at all times.

PERMANENT IMPACTS

- 5.3.98. Regarding ExQ2 16.0.7 [\[PD-012\]](#) concerning permanent socio-economic impacts which included concerns from the PLA [\[REP2-056\]](#), the Applicant explained [\[REP5-054\]](#) that the export cable crossing zone plan [\[REP1-059\]](#) shows that there are to be no crossings within the DWRs and that any crossing of the VEOWF cable would take place away from the Sunk Pilot diamond due to water depth reasons.
- 5.3.99. In response to ExQ2 16.0.8 [\[REP6-061\]](#) the Applicant confirmed that the socio-economic assessment [\[APP-045\]](#) of wider economic effects from disruption to shipping and navigation relied on information presented in the Shipping and Navigation assessment, including information on route deviations for which no likely

significant effects were assessed within ES Chapter 15 Shipping and Navigation [APP-029].

EXA'S CONSIDERATION

- 5.3.100. The Applicant's expected time for temporarily crossing the port channels with the cable burial tool will be of the order of 1.5-2 days. Given the importance of avoiding or minimising disruption to shipping in these channels, the ExA considers there are potential residual risks regarding adverse weather or seabed conditions which could cause a delay and therefore adequate contingency plans would need to be in place. The ExA is satisfied that the issue of contingency planning would be further developed in Section 4.2 of the oNIP [REP8-027], which includes for the plans to be discussed at the Hazard and Operability (HAZOP) workshop.
- 5.3.101. The ExA is also satisfied that the temporary disruption to shipping is minimised through commitments that there will be no concurrent working within the Sunk and Trinity DWRs and that the Applicant would work closely with interested parties to minimise disruption and delay, as set out in paragraphs 19 and 44 respectively of the oNIP [REP8-027]. The ExA is satisfied, subject to the inclusion of the PPs in the rDCO as discussed above, that appropriate controls would be in place for the NIP as this would require approval from the LGPL and the PLA and from MMO in consultation with the MCA, the local harbour authorities (the PLA, HHA and LGPL) and others, which would be secured in Schedule 9 Part 2 Condition 22-(1)(n) in the dDCO DML [REP8-005].
- 5.3.102. As discussed earlier, in the ExA's consideration of the effects on shipping movements, the ExA is satisfied that the permanent impacts to the Sunk and Trinity DWRs and Sunk Pilot Pilotage Area from the export cable corridor would be mitigated and secured in the dDCO [REP8-005], taking into account the possible future case to dredge to 22m during the lifespan of the Proposed Development.
- 5.3.103. The ExA finds that the original assessment of socio-economics doesn't appear to have considered the London Ports in the way the Harwich Ports were considered. Nonetheless, with the mitigation developed during the Examination subject to the changes in the rDCO (Schedule 9: Condition 10 and a new Condition 39; and including PPs in Schedule 14), the ExA concludes that the temporary, permanent and cumulative impacts would be not significant for the wider economic effects from disruption to shipping and navigation for the London Ports.
- 5.3.104. Regarding the wider economic effects on the HHA, subject to the above recommendation to the SoS, the ExA anticipates that the temporary, permanent and cumulative impacts would be not significant for the effects from disruption to shipping and navigation.

EFFECTS ON NAVIGATIONAL SAFETY

NAVIGATIONAL RISK ASSESSMENT

- 5.3.105. The MCA provided confirmation [REP2-046] that it is content that the mitigation measures proposed in Table 19.1 of the NRA [APP-107] and Table 15.3 of ES Chapter 15 [APP-029] are relevant and appropriate and will serve to reduce identified risks to ALARP. In ISH2 [EV6-009], the ExA asked the MCA whether there were any outstanding concerns regarding the risks to navigational safety being assessed ALARP for both the Proposed Development alone and cumulative effects, subject to implementation of management plans and the level of mitigation proposed by the Applicant. The MCA responded [EV6-009] that subject to the

implementation of the proposed mitigation measures and the removal of the Galloper recommended route it was largely content and did not have any other concerns to raise.

- 5.3.106. Concerning safety of navigation, the ExA asked the Applicant in ISH2 [\[EV6-009\]](#) to comment on the five conflicts raised by the Netherlands Ministry of Infrastructure and Water Management in point 9 of its D3 submission [\[REP3-065\]](#):
- The distances between the TSSs and the planned wind farms may not comply with paragraph 3.14 of the general provisions on ship routing. To ensure safe distances, it is recommended to adopt the NCSR 7-INF.15 report from the World Association for Waterborne Transport Infrastructure (PIANC);
 - the impact of the irregular shapes on ships' situational awareness;
 - the overlap between the southern wind farm and the precautionary area;
 - the positioning of the western border of the northern wind farm that is located within the boundaries of the adjacent traffic separation scheme; and
 - the Galloper recommended route (ferries) located within the southern wind farm area.

- 5.3.107. The Applicant responded [\[EV6-009\]](#) by pointing out that these comments were made on a previous iteration of the site boundary. The Applicant noted that agreement had been made with the MCA as to the distances for the array area and the TSS and precautionary areas and this has been secured through site size reductions and the implementation of the structure exclusion zone, noting these same measures have also streamlined the overall shape of the array area. The Applicant explained that the overlap between the southern array area and the precautionary area has been completely removed. In addition, the Applicant responded that the reductions made to the array area and the implementation of the structure exclusion zone ensure an appropriate buffer distance would be maintained between the Outer Precautionary Area and any surface piercing infrastructure. Furthermore, the Applicant noted the northern array has also been removed in its entirety meaning there is no direct interaction with the Sunk TSS North. The MCA clarified that [\[EV6-009\]](#) its starting position is that a 2nm distance is required from the TSS but in this case a 1nm buffer is being applied, following precedent from recent wind farms. The Applicant responded [\[EV6-009\]](#) that a number of existing turbines are closer than 1nm to the routing measures, with the closest being approximately 0.8nm. The Applicant also provided a detailed written response [\[REP4-027\]](#).

- 5.3.108. The MCA confirmed [\[REP4-080\]](#) in response to ExA's question [\[EV6-009\]](#) regarding the impact to routes 10 and 42 in Table 14.4, NRA [\[APP-107\]](#) that vessels transiting on routes 10 and 42 are not using the TSS in the Sunk area. The MCA further explained that these routes would deviate further south to ensure a safe clearance distance from the Proposed Development, and it would not interfere with the use of recognized sea lanes essential to international navigation. Furthermore, the MCA confirmed it was content with the list of mitigation measures and specific additional measures for the deviation of routes 10 and 42 would not be required.

EXA'S CONSIDERATIONS

- 5.3.109. The ExA notes that all matters relating to shipping and navigation were agreed with Trinity House in its final signed SoCG [\[REP8-083\]](#). The ExA also notes that generally all matters relating to shipping and navigation, except for the earliest timing for a submission to propose the formal removal of the Galloper recommended route to the NCSR, were agreed with the MCA in its final signed SoCG [\[REP8-058\]](#).

- 5.3.110. The ExA is satisfied with the content of the mitigation plans and that any remaining concerns could be resolved during the development of the final mitigation plans. As discussed earlier in this section of the Report, subject to the ExA's recommendation to the SoS regarding PPs for HHA, the ExA is satisfied that adequate controls would be in place for the approval of the mitigation plans and these would be secured through both the PPs in the rDCO, and Condition 21, Schedules 8 and 10, and Condition 22, Schedule 9 of the dDML in the dDCO [[REP8-005](#)].
- 5.3.111. The ExA has explored navigational safety matters at ISH2 [[EV6-009](#)], in three rounds of written questions and with a Rule 17 request [[PD-015](#)]. There is no compelling evidence to depart from the Applicant's finding that (supported by the MCA, Trinity House and UK Chamber of Shipping) with the implementation of the proposed mitigation and the removal of the Galloper recommended route, all impacts from the Proposed Development in isolation and on a cumulative basis would be no greater than tolerable and ALARP or broadly acceptable (not significant in EIA terms). Subject to the changes in the rDCO and the recommendations to the SoS, the ExA is satisfied with the Applicant's finding above and therefore that this complies with the requirement of NPS EN-3 2.8.179 and 2.8.331 for risks to navigational safety to be reduced to ALARP.

CONCLUSIONS

- 5.3.112. The ExA is satisfied that the Applicant's assessment, which included an NRA for the project alone and for cumulative effects, has adequately considered the potential navigation and shipping effects associated with the construction, operation and decommissioning of the Proposed Development in accordance with Section 2.8 of NPS EN-3 and Section 4 of NPS EN-1. The assessment is also compliant with MGN 654 requirements.
- 5.3.113. The ExA has considered the cases from both the Applicant and the LGPL and the PLA regarding the need for PPs for the Ports and the Ports' right to approve the mitigation plans and has concluded that the PPs (which include the Ports' rights to approve the mitigation plans) are included in the rDCO for both the LGPL and the PLA.
- 5.3.114. The ExA has considered the HHA's request [[REP8-087](#)] for formal determination by the ExA, or ultimately the SoS, that the controls over concurrent construction and maintenance Restricted Ability to Manoeuvre (RAM) operations in the Sunk area must be explicitly secured within the DCO itself, rather than being embedded solely within associated certified documentation. Given the safety critical nature of this issue and that the rDCO includes PPs, which include the right of approval of the mitigation plans, for both LGPL and the PLA, the ExA recommends the right of approval of the mitigation plans is offered to the HHA in the same manner through agreement of PPs. This would allow the HHA the control it is seeking over concurrent construction and maintenance RAM operations in the Sunk area. The ExA considers that this approval of the mitigation plans would accord with the principles of minimising disruption or economic loss to the approaches to the Ports (NPS EN-3 2.8.328), and for risks to navigational safety to be reduced to ALARP (NPS EN-3 2.8.179 and 2.8.331). The ExA notes that PPs have not been provided for the HHA or agreed in the HHA's final signed SoCG [[REP8-054](#)]. Given the above considerations, it is recommended that the SoS may wish to consult with the HHA and the Applicant to seek an agreed form of wording for PPs to include the HHA's right of approval of the mitigation plans and the use of arbitration to resolve disputes.

- 5.3.115. The ExA is satisfied with the content of the mitigation plans and that any remaining concerns could be resolved during the development of the final mitigation plans. Subject to the recommendation above to the SoS and the inclusion of the PPs in the rDCO, the ExA is satisfied that adequate controls would be in place for the approval of the mitigation plans and these would be secured through both the PPs for the PLA and the LGPL in the rDCO and Condition 21, Schedules 8 and 10, and Condition 22, Schedule 9 of the dDML in the dDCO [\[REP8-005\]](#).
- 5.3.116. The ExA concludes that the permanent impacts to the Sunk and Trinity DWRs and Sunk Pilot Pilotage Area from the export cable corridor would be mitigated, taking into account the possible future case to dredge to 22m during the lifespan of the Proposed Development. The ExA is also satisfied that this would be secured through Schedule 1, Part 3, R(2)3 and the DWR Cable Installation Area (Future Dredging Depths) Plan in the dDCO [\[REP8-005\]](#) and the changes in the rDCO (Schedule 9: Condition 10 and a new Condition 39; and including PPs in Schedule 14). The ExA is content with controls to restrict reductions in the navigable depth which would be secured in Schedule 9, DML Condition 13(3) and Condition 22(1)(h)(ii) of the dDCO [\[REP8-005\]](#). Furthermore, the ExA is satisfied that disruption would be minimised in relation to NPS EN-3 2.8.178.
- 5.3.117. The ExA is mindful of the MCA's concerns [\[EV6-011\]](#) that there is no guarantee the proposal to remove the Galloper Recommended route would be approved by IMO members in which case the route would remain in situ. Nonetheless, the ExA considers that the Applicant's confidence that the removal of the Galloper recommended route will be endorsed in due course by the IMO to be fully justified. Given the position of the Belgian maritime administration, the ExA agrees that this should be an administrative exercise. The ExA finds that the Applicant has to date properly managed this potential risk and has taken appropriate steps with a view to obtaining the IMO approval.
- 5.3.118. The ExA acknowledges that because the MCA [\[REP8-058\]](#) has now agreed that the removal of the route will now be raised at the Autumn 2025 UKSON session, there is a potential 1 year time saving from Q4 2028 to Q4 2027 for the earliest the removal of the route could be in force, as set out by the Applicant [\[REP5-071\]](#). This assumes that a development consent decision would have been received prior to the NCSR committee in June 2026. While there is an inconsistency between the Applicant's closing statement and the MCA's final SoCG [\[REP8-058\]](#), regarding agreement of the NCSR timing, this does not affect the ExA's conclusions on this matter.
- 5.3.119. The ExA agrees with the MCA [\[REP8-058\]](#) that data analysis and consultation undertaken for the Galloper recommended route shows that the usage is low and that there are safe and viable alternative routing options. Taking account of this, the ExA agrees with the Applicant that NPS EN-3 2.8.330 would apply because the Proposed Development affects a less strategically important shipping route, and as result a pragmatic approach should be taken to considering proposals to minimise negative impacts.
- 5.3.120. Nevertheless, the ExA considers that a requirement is necessary given the MCA's view [\[REP5-100\]](#) that the Galloper recommended route's status is a recognised sea lane adopted by the IMO and currently in use for international navigation, and there would be implications for navigational safety from the installation of surface piercing infrastructure associated with the Proposed Development. The ExA finds R30 which would preclude the commencement of the construction of the array area before the

IMO has ratified the proposal to remove the Galloper recommended route to be necessary and reasonable.

- 5.3.121. The ExA acknowledges that R30 in the dDCO [\[REP8-005\]](#) has been agreed by the MCA and the Applicant. Nonetheless, given that the provision for a safeguarded route in R30 introduces a high degree of uncertainty regarding the implications for navigational safety and generating capacity, which could ultimately affect the planning balance, the ExA considers that the R30 wording previously agreed by the MCA [\[REP7-081\]](#) should be applied and this is included in the rDCO. The SoS may wish to seek the views of the MCA and the Applicant as to the full implications of a requirement that includes provision for a safeguarded route as agreed by them in the SoCG.
- 5.3.122. The consequence of removing the provision for a safeguarded route would be that in the event that the removal of the route is not approved by the IMO, the Proposed Development would be unable to proceed, unless otherwise agreed by the SoS in consultation with the MCA. However, the ExA is mindful of the Applicant's position [\[REP6-063\]](#) that in those circumstances, the Proposed Development's business case indicates it would likely not be viable from a commercial perspective, because of the reduction in generating capacity resulting from the need to retain a corridor for the Galloper recommended route. Whilst the Applicant has subsequently agreed to such a requirement it has not explained how this would be accommodated, and the Proposed Development remain feasible and viable.
- 5.3.123. The ExA agrees with the consensus achieved by the parties by the close of the Examination in the Applicant's closing statement [\[REP8-036\]](#) that the Galloper recommended route is not a 'recognised sea lane essential to international navigation' within NPS EN-3 paragraph 2.8.326. The ExA notes the Applicant's position [\[REP8-036\]](#) that the inclusion of the dDCO requirement, as agreed with the MCA, would ensure there could be no interference with Galloper recommended route and would secure compliance with all relevant policy including NPS EN-3 and the East Marine Plan (Policy PS1). Given the above, the ExA is satisfied that Article 60(7) of UNCLOS 1982, the relevant provisions of NPS EN-3 (most notably, paragraphs 2.8.326 to 2.8.327) and s104(4) or (5) PA2008 would not be engaged in this case.
- 5.3.124. There is no compelling evidence to depart from the Applicant's finding that (supported by MCA, Trinity House and UK Chamber of Shipping) with the implementation of the proposed mitigation and the removal of the Galloper recommended route, all impacts from the Proposed Development in isolation and on a cumulative basis would be no greater than tolerable and as low as reasonably practicable (ALARP) or broadly acceptable (not significant in EIA terms). Subject to the changes in the rDCO and the above recommendations to the SoS, the ExA is satisfied with the Applicant's finding above and therefore that this complies with the requirement of NPS EN-3 2.8.179 and 2.8.331 for risks to navigational safety to be reduced to ALARP.
- 5.3.125. For the London Ports, the ExA concludes that for socio-economics, the temporary, permanent and cumulative impacts would be not significant for the wider economic effects from disruption to shipping and navigation, with the proposed mitigation and the changes in the rDCO (Schedule 9: Condition 10 and a new Condition 39; and including PPs in Schedule 14). Regarding the wider economic effects on the HHA, subject to the above recommendation to the SoS, the ExA anticipates that the temporary, permanent and cumulative impacts would be not significant for the effects from disruption to shipping and navigation.

- 5.3.126. The ExA is mindful of paragraph 2.8.178 of NPS EN-3, which accepts that it is inevitable that OWFs will have an impact on navigation in and around the area of the site and acknowledges that, although the proposed mitigation would minimise disruption, commercial sea users may be affected by disruption or economic loss. The ExA nonetheless concludes that the residual adverse effects on navigation and shipping, principally the wider economic effects from disruption to shipping and navigation during the construction stage, carry a little weight against the making of the Order. This finding is taken forward to the overall planning balance in Chapter 8 of this Report.

5.4. SEASCAPE AND VISUAL EFFECTS

INTRODUCTION

- 5.4.1. This section considers the seascape and visual effects of the Proposed Development relating to the construction, operation and maintenance, and decommissioning of the offshore works. Landscape and visual effects related to the onshore works, are addressed in Section 4.6 of this Report.

POLICY BACKGROUND

- 5.4.2. In its consideration of the seascape and visual effects, the ExA has had regard to:
- The overarching National Policy Statement (NPS) for Energy EN-1 (NPS EN-1), in particular Section 5.10;
 - the NPS for Renewable Energy EN-3 (NPS EN-3), in particular Section 2.8;
 - the relevant policies of the UK Marine Policy Statement (MPS);
 - the Local Impact Reports (LIRs);
 - any matters prescribed in relation to the development; and
 - any other important and relevant matters.

THE APPLICATION

- 5.4.3. The Applicant's assessment of Seascape, Landscape and Visual Impact Assessment (SLVIA) effects is set out in Environmental Statement (ES) Chapter 29 [\[APP-043\]](#). ES Chapter 30 [\[APP-044\]](#) covering Landscape and Visual Impact Assessment (LVIA) is also relevant.
- 5.4.4. The SLVIA includes a series of associated figures at Parts 1-6 [\[APP-077\]](#), [\[APP-078\]](#), [\[APP-079\]](#), [\[APP-080\]](#), [\[APP-081\]](#), [\[APP-082\]](#) including visualisations. ES Appendix 29.1 SLVIA and Visualisation Methodology [\[APP-170\]](#) sets out the detailed methodology used for offshore SLVIA and onshore LVIA including consideration of cumulative effects. The following assessments and supporting information are also relevant:
- Design Vision [\[REP5-004\]](#);
 - Design and Access Statement (DAS) [\[APP-235\]](#);
 - Environmental Statement Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#);
 - Environmental Statement Appendix 4.1 Site Selection Golden Rules [\[APP-091\]](#);
 - Planning Statement [\[REP8-003\]](#);
 - ES Chapter 5 Project Description [\[APP-019\]](#); and
 - Outline Landscape and Ecological Management Strategy (OLEMS) [\[REP7-027\]](#).
- 5.4.5. Additional submissions were provided during the Examination at various deadlines including:

- Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast - Technical Note (Rev 1) [REP5-038]; and
- Position Statement on various issues relating to National Landscapes [REP5-068].

BASELINE

- 5.4.6. The Applicant's SLVIA baseline reaffirms that the array area has been reduced from 149.5km² to 95km² as a result of feedback received during the Preliminary Environmental Information Report (PEIR) consultation. This change involved removing the northern array and decreasing the size of the southern array, now referred to as the 'array area'.
- 5.4.7. The SLVIA study area is a 60km radius surrounding the array area, an approach that was used at PEIR and agreed with stakeholders. As illustrated below (Figure 33) it encompasses a portion of the outer Thames estuary and parts of Suffolk, Essex, and Kent.

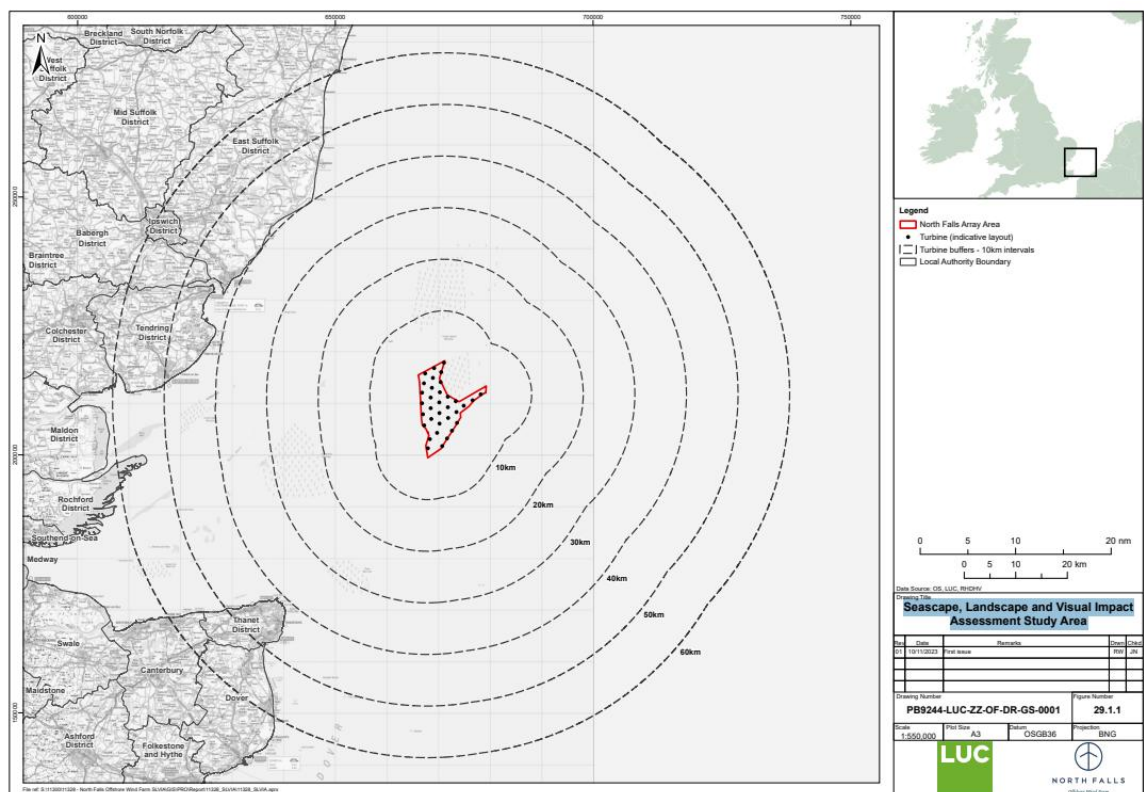


Figure 33: Seascope, Landscape and Visual Impact Assessment Study Area (Source: ES Figure 29.1.1 [APP-077])

- 5.4.8. Due to the proposed maximum blade tip height of 377m, and following good practice for recent offshore wind proposals, the Applicant uses a 60km SLVIA study area. This was recommended by stakeholders during PEIR due to increasing height of wind turbines.
- 5.4.9. A Zone of Theoretical Visibility (ZTV) map shows the areas within the study area from which the array could theoretically be seen. The ZTV does not account for screening from vegetation or buildings. It is designed to determine where significant visual effects might occur. Receptors that fall outside of the ZTV are not considered

in the SLVIA as they would not have a view of the offshore above-sea Proposed Development.

- 5.4.10. The ZTV to maximum blade tip height is shown in ES Figure 29.1.2a (reproduced below as Figure 34) and ES Figure 29.1.2b. The ZTV to maximum hub height is presented in ES Figure 29.1.3a.

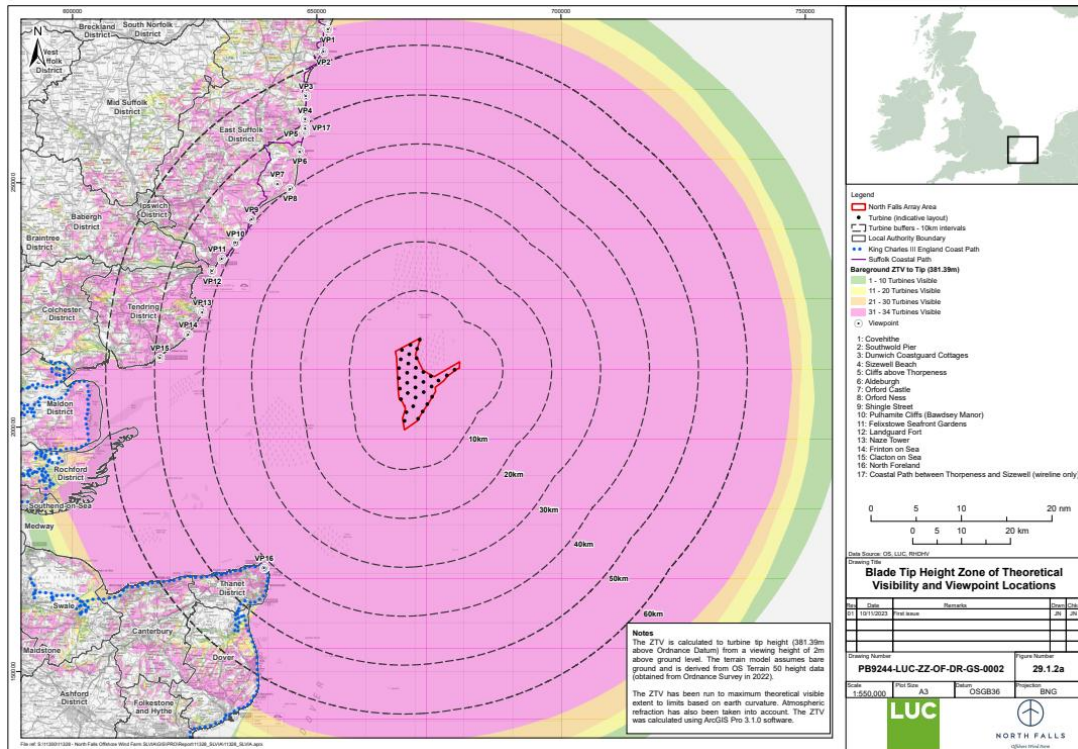


Figure 34: ZTV Blade Tip Height Zone of Theoretical Visibility and Viewpoint Locations (Source: ES Figure 29.1.2a [APP-077])

WIND TURBINE GENERATORS

- 5.4.11. For the SLVIA, the evaluation and visualisations are based on a scenario of 34 wind turbine generators (WTGs) with a maximum tip height of 377m above Mean High Water Springs (MHWS) and a rotor diameter of up to 337m. This maximum height scenario is considered the worst-case for the assessment because the larger size of these turbines results in greater long-distance visibility.
- 5.4.12. The Proposed Development could comprise a greater number of smaller turbines: up to a maximum of 57 WTGs, with a maximum tip height of 276m above MHWS and a rotor diameter of 236m. Although this is not considered the worst-case scenario, additional wireline visuals for this maximum number alternative are included within the ES for assessment.
- 5.4.13. Both the maximum height and maximum number scenarios are provided as indicative layouts designed to represent the worst-case, where WTGs are shown at the outer edges of the proposed array area. The final layout would be determined at the post-consent stage, through detailed engineering design studies. The arrangement of the turbines may therefore differ from what is shown in the visualisations but would remain within the scope of the assessed level of effect significance.

- 5.4.14. There may be either two offshore substation platforms or one offshore substation platform and one offshore converter platform. The indicative locations for these are shown in ES Chapter 29 Figures within the visualisations (ES Figures 29.2.1 to 29.2.16) and wirelines (ES Figures 29.2.17; and 29.3.3 to 29.3.17).
- 5.4.15. To allow flexibility, and to maximise energy capacity, the assessment is based on the largest turbines that would be available at the time of construction. The Applicant states that such an approach is consistent with NPS EN-3 paragraphs 2.8.263-264 which recognises that the design and scale of individual wind turbines cannot be changed without significantly affecting the electricity generating output of the wind turbines.

WTG LIGHTING

- 5.4.16. ES Chapter 29 confirms that the WTGs and other permanent structures would be lit in line with the standards set by the International Association of Lighthouse Authorities (IALA) and the requirements of the Civil Aviation Authority (CAA). There is, therefore, a possibility that the proposed NFOWF offshore array would be visible at night. Worst-case assumptions are used to inform the assessment, including:
- Permanent aviation lights would be placed on the nacelles of 23 perimeter WTGs;
 - aviation lights are red, with an intensity of up to 2,000 candela (cd), but can dim to 200 cd when visibility is over 5km, and have a synchronized flashing "W" pattern turned off during the day;
 - Search-and-rescue (SAR) lights are red (200cd). As they would only be activated at the request of the Marine Coastguard Agency (MCA) during SAR operations, these have not been modelled; and
 - marine lights would be placed on select peripheral structures as determined by Trinity House based on the final layout and IALA requirements. These would have a range of either 5 nautical miles (nm) or 2 nm. These have not been modelled as the Proposed Development is located beyond the 5nm range (approx. 9.3km) from the coast.

SEASCAPE CHARACTER

- 5.4.17. The SLVIA reports that the seascape of the proposed array area, and the outer Thames estuary, is characterised by human activity, including offshore wind farms and shipping traffic. There is an open outlook out to sea from parts of the low-lying coastlines of Essex, Suffolk, and Kent. Regional seascape character is defined by the seascape assessments published by the Marine Management Organisation (MMO). The array area would be situated within the East Anglian Shipping Waters Marine Character Area (MCA), which falls under the East Inshore and East Offshore Marine Plan Area (Natural England, 2012; MMO, 2012). The southern sections of the SLVIA study area are covered by the South East Inshore Marine Plan Area (MMO, 2018). MCAs across the SLVIA study area are mapped in ES Figure 29.1.4a-b [[APP-077](#)].
- 5.4.18. The key characteristics of the East Anglian Shipping Waters MCA, as described in the East Inshore and East Offshore Marine Plan Area (MMO, 2012), are as follows:
- A high concentration of shipping activity;
 - water depths consistently between 20 and 50 metres;
 - designated shipping routes;
 - a visually unified and expansive open water character, with very few surface features;

- extensive offshore commercial activities like fishing and dredging;
- a large military practice area;
- the presence of windfarm developments and gas fields; and
- the presence of significant archaeological features.

LANDSCAPE DESIGNATIONS

5.4.19.

The Suffolk coast, which lies to the north-west of the array area, is part of the Suffolk and Essex Coast and Heaths National Landscape (SECHNL) (see Figure 35, below). The Suffolk Heritage Coast (SHC) is located wholly within the SECHNL (see Figure 36). These areas extend from Felixstowe in the south, towards Lowestoft in the north.

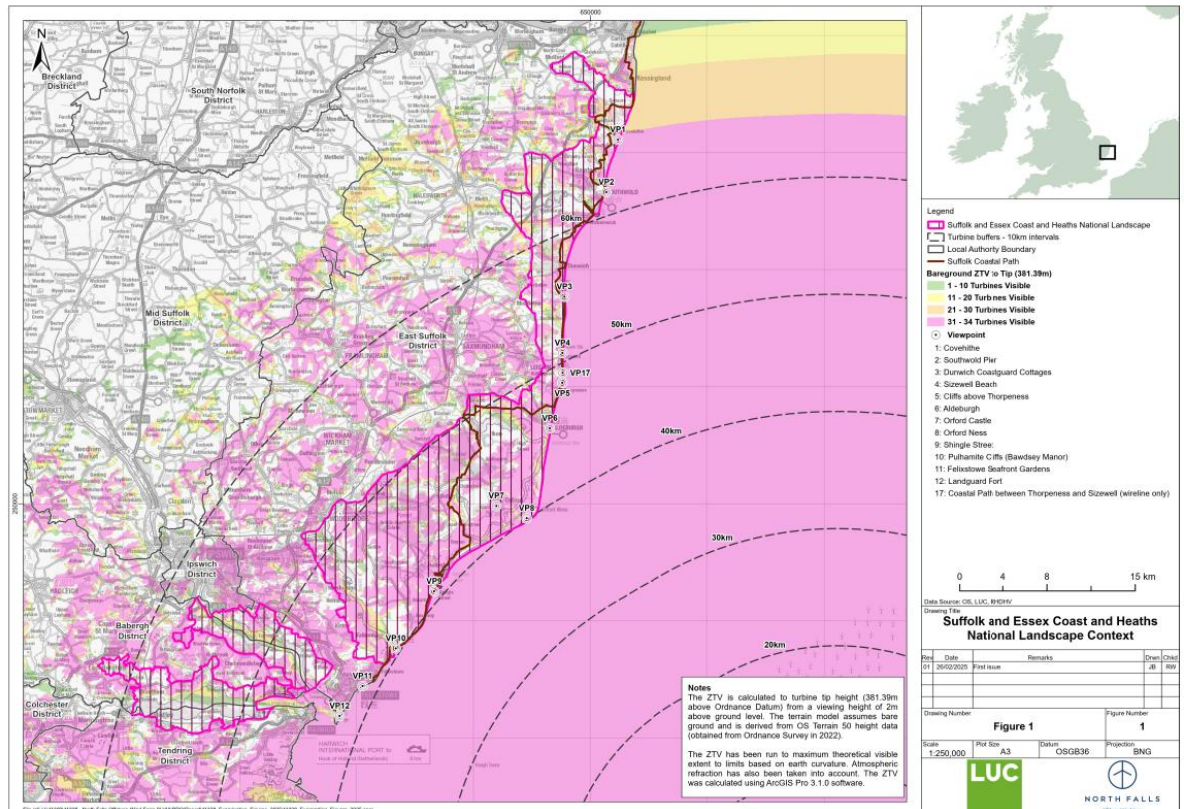


Figure 35: Suffolk and Essex Coast and Heaths National Landscape (Source: Figure 1 [REP5-038])

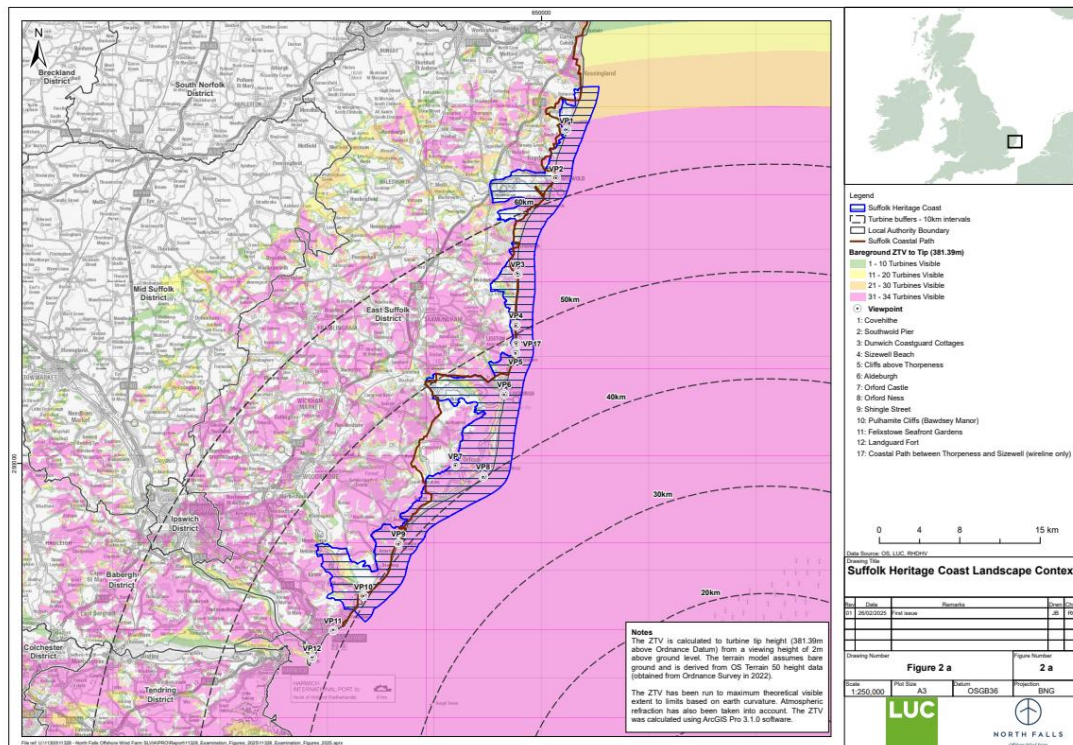


Figure 36: Suffolk Heritage Coast Landscape (Source: Figure 2a [REP5-038])

5.4.20. The special qualities of the National Landscape (NL) are outlined in its 2023-2028 Management Plan prepared in partnership with a range of organisations. These qualities include landscape and scenic qualities and sense of wildness. A detailed assessment of the effects on the landscape and scenic qualities of the SECHNL is set out in ES Chapter 29 (Table 29.21) [APP-043]. No relevant local landscape designations were identified in East Suffolk, Tendring, or Thanet that required a detailed assessment.

VIEWPOINTS AND VISUALISATIONS

5.4.21. A total of 17 viewpoints (VPs), selected across the 60km study area through desk study are included within the ES. Of these, 16 have been provided as photomontage visualisations and one as a wireline drawing only (VP17). ES Chapter 29 confirms that these were selected on the basis of discussion with consultees and are publicly accessible in accordance with Guidelines for Landscape and Visual Impact Assessment 3 (GLVIA3). They include:

- Representative locations chosen to represent the experience of different types of visual receptors;
- VPs at various distances to provide a representative range of viewing angles and distances, from short to long-range views;
- locations selected to illustrate key cumulative interactions with other existing, consented, and/or proposed wind farms, either in combination or succession.
- locations to represent a range of viewing experiences, including both static views and points along sequential routes;
- specific VPs because they represent promoted views or viewpoints within the landscape; and
- VPs selected specifically to demonstrate a particular visual effect or issue, such as restricted visibility in certain locations or effects from coastal settlements.

- 5.4.22. The VPs are listed in ES Chapter 29 Table 29.11 and shown alongside the blade tip height ZTV on ES Figure 29.1.2. Certain VPs were selected to help understand effects associated with turbine lighting.

CUMULATIVE ASSESSMENT

- 5.4.23. For cumulative assessment of the offshore above-sea Proposed Development, other plans and projects within 60km of the array area are included. The cumulative assessment specifically focuses on operational interactions between the Proposed Development and other offshore wind farms that are either consented or proposed. ES Chapter 29 considers it unlikely that there would be significant cumulative interactions with other offshore activities, such as additional vessels, during construction, operation, or decommissioning due to the temporary nature of these activities.
- 5.4.24. Because the array area is within a different landscape context, and a significant distance from the shoreline, ES Chapter 29 concludes that cumulative interactions with onshore projects, including onshore wind farms and single wind turbines, are unlikely to result in significant effects. The onshore part of the study area contains very few onshore wind developments, partly due to the existence of the NL designation.

APPLICANT'S ASSESSMENT OF EFFECTS AND PROPOSED MITIGATION

Embedded Mitigation

- 5.4.25. Embedded mitigation relevant to the SLVIA, which has been incorporated into the design of the Proposed Development is set out in Table 29.2 of ES Chapter 29 [APP-043], and reproduced below in Table 7:

Table 7: Embedded mitigation measures (Source: Table 29.2 ES Chapter 29 [APP-043])

Parameter	Mitigation measures embedded into North Falls design
Array area	Following PEIR, the array area has been reduced from 149.5km ² down to 95km ² . This has involved the complete removal of the former northern array. This has increased the distance from the coast from 22km to approximately 40km at the closest point.
Reduced tip height	Following PEIR, the maximum tip height of the wind turbines has been reduced from 397m to 377m above MHWS.
Reduced turbine numbers	Following PEIR, the number of turbines (assuming the largest turbine model) has been reduced from 40 to 34, and the maximum number of turbines (assuming the smallest turbine model) has been reduced from 72 to 57

ASSESSMENT OF EFFECTS

Effects on seascape during construction

- 5.4.26. ES Chapter 29 [APP-043] reports that the majority of seascape impacts during the construction phase would be short-term, reversible, and transient. The exception to this would be the construction of the wind turbines which would not be reversible at that point. Seascape character impacts would arise from the presence and movement of vessels, equipment, and partially constructed turbines within the proposed offshore area.
- 5.4.27. Activities would be geographically limited to the proposed array area, the offshore cable corridor, the area near the landfall, and the vessel routes to and from the array area. The assessed magnitude of impact from the presence and movement of vessels and equipment would be negligible due to their transient nature. As a result, the Applicant reports that the significance of these effects would be negligible and not significant in EIA terms.
- 5.4.28. However, the magnitude of impact would change throughout the construction phase. Initially, the impact would be negligible as first foundations takes place. Subsequently, it would increase as more turbines are erected. By the end of the construction phase, the impact magnitude would be very similar to that of the operational phase. ES Chapter 29, Table 29.14 [APP-043] reports this as a locally high magnitude of impact. This magnitude, combined with the medium-low sensitivity of the seascape, would result in negligible effects in the early stages within the local area of the East Anglian Shipping Waters MCA. However, this would increase to moderate adverse as the offshore above-sea Proposed Development nears completion. This is considered significant in EIA terms.

Effects on landscape during construction

- 5.4.29. ES Chapter 29 [APP-043] also reports that the majority of onshore landscape impacts during the construction phase would be short-term and reversible. These impacts would be limited to views of construction activity within the proposed offshore array area and the cable corridor. While the construction of the WTGs would not be reversible during this phase, effects on landscape character are expected to arise primarily from the distant views of vessels, equipment, and partially constructed turbines. These activities are geographically limited to areas which are generally far from the onshore landscape. However, some construction activity would take place near the proposed landfall, along with vessel movements to, and from, the proposed array area.
- 5.4.30. Due to their distance from the shore, transient nature, and the magnitude of the impact on landscape character from the presence and movement of vessels and equipment, the impact is reported as negligible. Consequently, these effects would also be negligible and not significant in EIA terms.
- 5.4.31. The impacts on landscape character from the construction at the landfall are detailed in Table 30.15 of ES Chapter 30 [APP-044]. The effects of vessel activity in the near-shore area, seaward of MHWS, would be short-term and transient, affecting only a small geographical area. The ES concludes that the magnitude of this impact would be small, and the overall effect on landscape character would be minor and not significant.

- 5.4.32. As with seascape impacts, the magnitude of impact on onshore landscape character from the presence of partially constructed turbines and platforms would also change as the construction phase progressed.
- 5.4.33. Initially the effect would be negligible as the foundations are constructed, and the WTGs would be difficult to perceive from the shore. This impact would increase with the increase in number of WTGs. By the end of the construction phase, the magnitude of the impact would be low. This is consistent with the operational phase. For certain high-sensitivity coastal landscape receptors, the effects would be negligible in the early stages of construction, increasing to moderate-minor adverse as the offshore development nears completion. This is also considered not significant in EIA terms.

Visual impacts

- 5.4.34. Visual impacts during the construction phase are also reported as short-term and reversible, and geographically limited. The exception to this is, again, the construction of the WTGs themselves. The ES concludes that these activities would be geographically contained, and distant from onshore locations where visual receptors are of higher sensitivity.
- 5.4.35. ES Chapter 29 notes that the presence and movement of vessels in the offshore area are already a characteristic of the coastal outlook. Due to their transient nature, the Applicant concludes that the magnitude of the visual impact from these activities would be negligible. Consequently, the visual effects would be negligible and not significant in EIA terms.
- 5.4.36. The visual impacts from construction at the landfall are detailed in ES Chapter 30 [APP-044]. The impacts of vessels and activity seaward of MHWS would be short-term and transient, affecting only localised views. The magnitude of this impact would be small, and the effect on visual receptors would be minor and not significant.
- 5.4.37. The magnitude of the visual impact initially would be negligible, increasing as construction progresses. Towards the end of the construction phase, the magnitude of the impact experienced by coastal visual receptors would be up to medium. At certain other high-sensitivity locations, effects would be negligible during the early stages of construction, increasing to moderate adverse as the offshore above-sea Proposed Development nears completion and enters operation. This is considered significant in EIA terms. The SLVIA concludes that the effect on the following VPs would be moderate adverse:
- VP8 – Orford Ness;
 - VP9 – Shingle Street;
 - VP10 – Pulhamite Cliffs (Bawdsey Manor);
 - VP11 - Felixstowe Seafront Gardens;
 - VP12 – Landguard Fort; and
 - VP13 – Naze Tower
- 5.4.38. VP8, VP9 and VP10 are within the SECHNL and the SHC [APP-043].

Operational effects on landscape character

- 5.4.39. The impacts of the offshore above-sea Proposed Development on Landscape Character Areas and Types (LCAs/LCTs) is set out in Table 29.10 of ES Chapter 29

[APP-043]. All operational impacts are considered to be long-term, reversible, and adverse unless stated otherwise.

- 5.4.40. The ES considers that all impacts, including cumulative ones, would be indirect because the changes assessed relate entirely to offshore wind farms. Where effects do occur, they would typically be in relation to perceptual landscape characteristics. For those landscapes with a strong relationship with the sea, changes in these perceptual characteristics may give rise to significant effects. Landscapes without a relationship to the sea will be less susceptible to change.

Operational effects on designated landscapes

- 5.4.41. ES Chapter 29 concludes that the Proposed Development would not have any direct physical impacts on the special qualities of the SECHNL. It would be located approximately 40km to the south-east in offshore waters. Therefore, any impacts would be indirect, resulting from changes to certain perceptual qualities.
- 5.4.42. The ZTV [APP-077] indicates widespread visibility along the coastal edge of the NL. Further inland, terrain undulations create a fragmented pattern of visibility, with larger areas of visual shadow. In these areas, woodland and hedgerows, combined with the flatter terrain, would further limit visibility.
- 5.4.43. The Applicant concludes that the effects of the Proposed Development on the special qualities of the NL would be as a result of changes to outward views towards the sea or along the coast. ES Chapter 29 states that the offshore above-sea Proposed Development would be seen within the context of large-scale views, set against expansive areas of sea and sky. The Applicant does not consider that it would affect the immediate setting of the NL as it is located outside of the higher sensitivity Suffolk Coastal Waters MCA 10 and would be seen on or beyond the horizon.
- 5.4.44. The Applicant concludes that the Proposed Development is expected to have a moderate-minor effect on the special qualities of the SECHNL. This is a result of a low magnitude of impact combined with the high sensitivity of the area. The Applicant considers that this is not significant in EIA terms. Adverse effects would be localised to the coastal strip between VP8, VP9 and VP10, likely to be experienced on clear days. Effects in other areas of the NL would be similar or lower.

Effects on Suffolk Coastal Path

- 5.4.45. A section of the Suffolk Coastal Path passes through the SECHNL and SHC. The Applicant considers that the Proposed Development is predicted to have moderate adverse effects on it at certain locations. These are considered significant in EIA terms for users of the southern section of the Suffolk Coastal Path where the impact would occur along a 19km stretch between the mouth of the Butley River and Landguard Point. Beyond this section, effects on Suffolk Coastal Path users are judged to be minor and not significant.
- 5.4.46. The assessment considers other consented and proposed Offshore Windfarms (OWFs). These include the East Anglia Two project located north of the Galloper and Greater Gabbard cluster which is considered to introduce additional OWFs into sequential views from the northern part of the Suffolk Coastal Path. The proposed VEOWF would reduce the apparent gap between East Anglia Two and this cluster. As users of the Path progress further south, the Proposed Development would intensify the effects of offshore wind farms in relation to the larger OWF cluster that

includes Galloper, Greater Gabbard, and East Anglia Two. On clear days, the offshore above-sea Proposed Development would be seen to the south of the Galloper and Greater Gabbard cluster from coastal sections of the path.

- 5.4.47. The relationship between the various schemes, including the gaps between them, would change as walkers move along the coastal edge. From the northern coastal section, the additional effect of the Proposed Development would be minor and not significant, due to its distance and the narrow angle of view it occupies. From inland sections, there would be no change.
- 5.4.48. From the southern coastal section, scale differences would be more apparent. The Proposed Development would contribute to the 'curtaining' of the skyline, although ES Chapter 29 states that it would be only a modest extent.

CUMULATIVE EFFECTS

- 5.4.49. While no significant additional cumulative effects are predicted on coastal or onshore landscape character, including the SECHNL's special qualities, significant effects are predicted elsewhere. The overall cumulative effect is predicted to be moderate, which is considered significant in EIA terms.
- 5.4.50. Specifically, significant major cumulative effects are predicted within a 10km radius of the proposed array area, affecting the East Anglian Shipping Waters MCA.
- 5.4.51. Significant moderate cumulative effects on views are predicted to impact high-sensitivity receptors in seafront locations between The Naze and Orford Ness, as seen in VP8, VP9 and VP10, which are within the SECHNL. At these VPs, when viewed in combination with other offshore turbines, the Proposed Development would contribute to the curtaining effect on the skyline.
- 5.4.52. The cumulative effects on the special qualities of the SECHNL are reported as indirect, due to changes to cumulative baseline caused by OWFs. Other projects, such as East Anglia Two would extend and intensify the influence of OWFs from the SECHNL's seaward views. Similarly, the VEOWF effects would intensify the influence of turbines seen from the south-east.
- 5.4.53. The ES concludes that the Proposed Development would further extend and intensify this from locations and views to the south-east. However, this is described by the Applicant as a matter of degree rather than a fundamental change in influence and concludes that the overall effects on the SECHNL's special qualities would not be materially different. The cumulative magnitude of change from the Proposed Development is judged to be low. This results in a predicted moderate-minor cumulative effect, which is considered not significant in EIA terms.

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.4.54. The principal representations and submissions concerning seascape and visual resources were received from Natural England (NE), Suffolk County Council (SCC) and Essex County Council (ECC). Concerns related to the assessment methodology and conclusions of the SLVIA. The main issues considered during the Examination therefore related to the following:
- The SLVIA methodology; and
 - effects on designated landscapes, including the assessment of views, effects on special qualities, effects of WTGs and whether or not the Proposed

Development complies with the duty to seek to further the purposes of protected landscapes.

SLVIA METHODOLOGY

- 5.4.55. A number of concerns regarding the SLVIA methodology were raised by NE throughout the process in its Relevant Representations (RR) [RR-243], responses to ExQs and closing at Deadline (D)8 [REP8-099]. These issues centred on several points and were rated in NE's Risk and Issues Log as red throughout the Examination. Regarding the SLVIA methodology, NE set out that [RR-243]:
- Despite the removal of the northern array, there remains insufficient information to discount significant impacts to landscape and visual receptors within the SECHNL and SHC from turbines within the southern array area. The implications for the special qualities of the SECHNL and special character of the SHC need to be fully assessed;
 - the potential impacts for NFOWF on the natural beauty of the SECHNL are not fully assessed within the SLVIA; and
 - the impacts of NFOWF on the special character of the SHC is not assessed.
- 5.4.56. The Applicant's stance on these matters was provided in various submissions including at ISH1 [REP1-044] [EV5-002]. Its position is based on the justification set out in the SLVIA ES Chapter 29 [APP-043]. The Applicant considers that it has taken a precautionary approach to the assessment and in doing so, the scale of change on certain perceptual aspects of the special qualities of SECHNL is judged to be medium whilst other special qualities would be entirely unchanged.
- 5.4.57. The Applicant's view is that the geographical extent of the change would be small, and limited to coastal areas within around 40km of the offshore Proposed Development. As a result, it would affect a very localised area of the coastal edge, which needs to be assessed in the context of the large-scale of the SECHNL. The effects would also be limited to days with clear weather.
- 5.4.58. The Applicant considers that its findings are in accordance with the recommendations set out in the Suffolk Seascape Sensitivity to Offshore Wind farms (2023 Updated Addendum) Report (White Consultants, 2023). This states that *"Wind farms with turbines over 400m high should be at least 40km away from the coast and preferably more.... If the nearest turbines of any given array are around 40km away from the AONB coast it is highly desirable for the number around this distance to be minimised in order to avoid significant adverse effects on the AONB and curtaining effects on the skyline in excellent visibility conditions."*
- 5.4.59. In its RR, SCC also concluded: *"In light of this assessment, the project's maximum turbine height of 377m at a distance of 40km from the coast means that SCC finds that there is not likely to be a significant effect on seascape and landscape or the Suffolk Coast and Heaths National Landscape Area"*. Notwithstanding this, at the conclusion of the Examination, neither SCC nor NE were in agreement with the Applicant on this point. NE and the Applicant had not entered into an SoCG, however its Risk Register rated these items as red.
- 5.4.60. The SoCG between the Applicant and SCC [REP8-068] confirms that SCC's initial position regarding effects on NLs was that it considered it unlikely that there would be significant effects on the SECHNL. However, following the publication of the Applicant's Technical Note [REP3-044], SCC raised concerns over the methodology used by the Applicant regarding its assessment of the project's impacts on the

special qualities of the SECHNL. SCC stated that it appreciates the additional detail but remains unclear on the reasoning process that has allowed a series of medium scale of change effects on the special qualities to then be said to come to a low magnitude of impact. SCC is particularly concerned about the combined judgements of scale of change, geographical extent, duration and reversibility of impact to come to its conclusions for each impacted special quality. It referred to the SLVIA Methodology [APP-170] which states that scale of change is often the “dominant factor” in making judgements on magnitude of effect and this was not clear in the judgments.

EXA’S CONSIDERATIONS

- 5.4.61. Based on the evidence presented throughout the Examination, the ExA considers that the Applicant's assessment does meet the provisions of NPS EN-3. The Applicant has justified the consideration and use of various guidance documents, including GLVIA3. Ultimately, the ExA is satisfied with the Applicant's approach to the SLVIA methodology.
- 5.4.62. Having reviewed the representations from NE and the Applicant, the ExA concludes that the Applicant has sufficiently justified the approach to the SLVIA methodology. The ExA acknowledges the concerns raised by NE but considers the information provided to be adequate. The ExA considers that the Applicant's Technical Note [REP3-044] updated at [REP5-038] provides a reasoning that allows the series of medium scale of change effects on the special qualities to then be said to come to a low magnitude of impact within ES Chapter 29. At table 4 [REP5-038] the Applicant sets out an assessment of scale of change which it summarises at paragraph 21. The ExA also considers that these assessments are robust, and in accordance with GLVIA3 and other best practice. It is therefore sufficient for arriving at the conclusions on certain perceptual aspects of the SECHNL special qualities [APP-043]. The specific effects on special qualities of the SECHNL, and special character of the SHC are considered further, below.

EFFECTS ON DESIGNATED LANDSCAPES

Effects on Views

- 5.4.63. NE maintained throughout the Examination that the impacts of the Proposed Development on the natural beauty of the SECHNL and the special character of the SHC have not been fully assessed within the SLVIA. VPs 1-10 in ES Chapter 29 SLVIA [APP-043] are within both the SECHNL and the SHC.
- 5.4.64. NE submitted an Appendix I2 to its RR [REP1-071] “*Appendix I2 to the Relevant Representations of Natural England SLVIA*”. This sets out its key concerns and recommendations to resolve the issues it identifies. It includes the concern that the significance of effects from the Proposed Development on visual receptors at VPs have been underestimated. Natural England’s judgements are set out in Table 3 of [REP1-071].
- 5.4.65. Whilst the Applicant’s judgement is that the effects on the following VPs would be moderate adverse, and therefore significant [APP-043], NE considers that the effects would be major adverse:
- VP8 - Orford Ness;
 - VP9 - Shingle Street; and
 - V10 - Pulhamite Cliffs (Bawdsey Manor).

- 5.4.66. NE also judges the effects on VP5 – Cliffs above Thorpeness, VP6 – Aldeburgh and VP7 – Orford Castle as being moderate-minor, which is greater than the Applicant's judgment of minor (not significant) [[REP8-099](#)].
- 5.4.67. Following discussion at ISH2 [[EV6-001](#)], the Applicant submitted a further assessment of the implications for the special qualities of the SECHNL and the special character of the SHC. This was updated at D5 [[REP5-038](#)]. It confirms that the Applicant considers that the assessment of effects on the SECHNL, presented in Table 29.21 of ES Chapter 29 [[APP-043](#)] is robust. Significant effects were identified for three assessment VPs (VP8, VP9 and VP10) and the users of the Suffolk Coastal Path. These represent higher sensitivity receptors at coastal locations along the south-facing section of the SECHNL and SHC. No significant effects were identified for any landscape receptors.
- 5.4.68. In response to ExQ2, Q14.0.6, NE [[REP5-110](#)] confirmed that it had not seen evidence that would cause it to change its advice on the impacts to landscape and visual receptors. NE therefore considers that impacts on the SECHNL and SHC are underestimated, and effects are understated in the Applicant's assessment.
- 5.4.69. Recognising that this difference in opinion is unlikely to be resolved, NE recommends that the Applicant set out how the Proposed Development would enable the decision-maker to further the purposes of the NL. At D6 NE confirmed that unless new information is provided, or the Applicant's assessment conclusions change it would not provide further comments during the Examination on all SLVIA matters.
- 5.4.70. In the final SoCG between the Applicant and SCC, SCC disagrees with the Applicant's view that it is appropriate to reduce the materiality of impacts on special qualities of the SECHNL (particularly those arising in the coastal parts of the SECHNL with views out to the proposed development) by reference to the fact that they are only a part of the overall National Landscape [[REP8-068](#)]. SCC considers that the materiality of an adverse impact on a special quality stands in its own terms, because each special quality is an intrinsic part of the National Landscape. SCC does not consider it appropriate to say that the effects on special qualities are diminished because the special qualities are only affected in certain areas.

EXA'S CONSIDERATIONS

- 5.4.71. Regarding the effects of the Proposed Development on views and visual amenity of designated landscapes, the ExA has considered the concerns where relevant to the conclusions on the significance of the effects on the SECHNL. The ExA agrees with IPs, including SCC, SECHNLP, ECC and with NE that there would be non-significant effects on the qualities of the SECHNL, for reasons relating to effects on visual amenity and landscape character. The principal area of disagreement between the Applicant and IPs is that the Applicant considers that the effects on the SECHNL are of a visual nature only and confined to views from locations along the southern coastal edge of the SECHNL.
- 5.4.72. During the Examination, the ExA conducted accompanied and unaccompanied site inspections (ASI) and (USI). During USI3 [[EV2-003](#)] the ExA visited the SECHNL and SHC, specifically to review these assessments. The effects on visual amenity at receptors VP1, VP2, VP4-7, VP9 and VP17 within the NL were assessed. VPs13-15, outside of the NL had previously been inspected at USI1 [[EV2-001](#)]. The ExA was able to experience the landscape and seascape characteristics, including the sensitivity and magnitude of change. The ExA was also able to experience the

views to sea from these locations, as well as their location and role within part of a Heritage Coast. The ExA has also considered the visualisations and wirelines provided at each VP, within the SLVIA.

- 5.4.73. The ExA considers that the introduction of the Proposed Development to these views would represent a change to the characteristics and nature of the views. Viewed from the more sensitive VPs, the proposed array would appear as a distant, but obvious feature which would detract from the experience of generally open views. The Proposed Development would disrupt a length of the undeveloped aspects of the view resulting in a change to their nature. Figure 37, below, is representative of these sensitive VPs at VP8. In particular, the wireline drawing illustrates the change, and from the visualisation, the ExA notes the absence of surrounding or intervening features.



Figure 37: VP8 – Orford Ness Wireline drawing and photomontage (Source: Figures 29.2.8d and 20.2.8e [APP-080])

- 5.4.74. The photomontage visualisations and wireline drawings together illustrate the presence of other offshore wind development within a larger field of view. However, the ExA is of the opinion that with existing and proposed OWFs, it would still be possible to experience panoramic, unbroken views of the sea and sky. The visualisations for VP9 and VP10, reproduced in Figure 38 and 39 below, further reinforce the ExA's judgement regarding the effects on panoramic views and large skies.

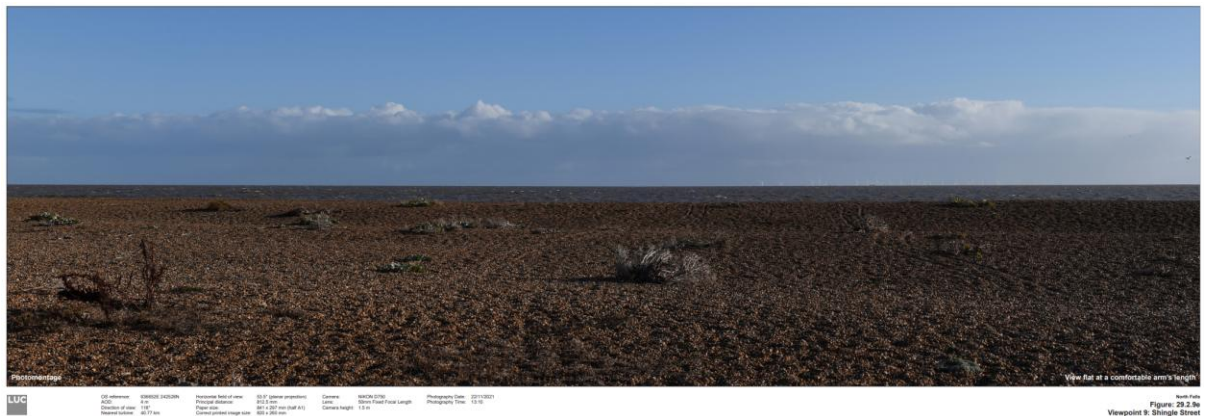


Figure 38: VP9 Shingle Street (Source: Figure 29.2.9e [APP-080])



Figure 39: VP10 Pulhamite Cliffs (Bawdsey Manor) (Source: Figure 29.2.10e [APP-080])

- 5.4.75. NE [REP1-071] states that the sensitivity of VP8, and the magnitude of change for VP8, VP9 and VP10 have been understated by the Applicant. The ExA notes that at VP8, access to this recreational receptor is restricted because it is a National Trust Nature Reserve accessed by a ferry. This restriction, in the ExA's view, reduces the susceptibility of the receptor, although its location within the NL is acknowledged.
- 5.4.76. For VP8, VP9 and VP10 NE considers the magnitude of change to be high. Conversely, the Applicant predicts a medium scale of change due to the viewing distance to the array area (40.1km – 40.8km). This distance influences the context of views in which existing offshore wind farms are currently visible [REP5-038].
- 5.4.77. With reference to the SLVIA methodology [APP-170], the ExA reviewed the definitions for each magnitude of seascape receptors in Table 1.11. A medium magnitude of change is defined as a “*Clearly perceptible change in view, perhaps where the development is relatively close but at an oblique angle or further away in the direct line of vision, creating a distinct new element in the view*”.
- 5.4.78. To judge the magnitude of change as high, it would need to meet the following definition, according to the methodology: “*Large change in view, perhaps where the development is in close proximity in a direct line of vision, or affecting a substantial part of the view, or providing contrast with the existing view.*” The ExA considers that, whilst the change in view would be perceptible, changes would not be of high magnitude as there would not be large changes to in views from the VPs. The ExA therefore agrees with Applicant's sensitivity and magnitude of change assessment.

These assessments mean that for VP8, VP9 and VP10, the ExA disagrees with NE that the effects would be major (significant). The ExA also notes that NE has not provided its own assessments, or evidence to support its assessment that effects would be major to support its assertion.

5.4.79. With regards to the effects on visual amenity at VP5 to VP7, the ExA also visited these during USI3. The ExA was able to experience the landscape and seascape characteristics. The ExA disagrees with NE [\[REP1-071\]](#) that the effects on receptors at VP5, VP6 and VP7 would be moderate-minor. These VPs are within the NL, and sensitivity has therefore been correctly judged as high in each case.

5.4.80. As these VPs are between 42.5km and 48.5kms from the proposed array area, the ExA agrees with the SLVIA methodology [\[APP-170\]](#) that the magnitude of change should be judged as low where:

- There is a small change in view;
- the development is at a distance or oblique angle; or
- where the scale of the landscape absorbs the development well.

5.4.81. Figure 40 (below) shows VP7 Orford Castle, at a distance of 42.5kms from the proposed array area. These views are representative of the effects on VP5 and VP6 which are further from the proposed array than and VP7.

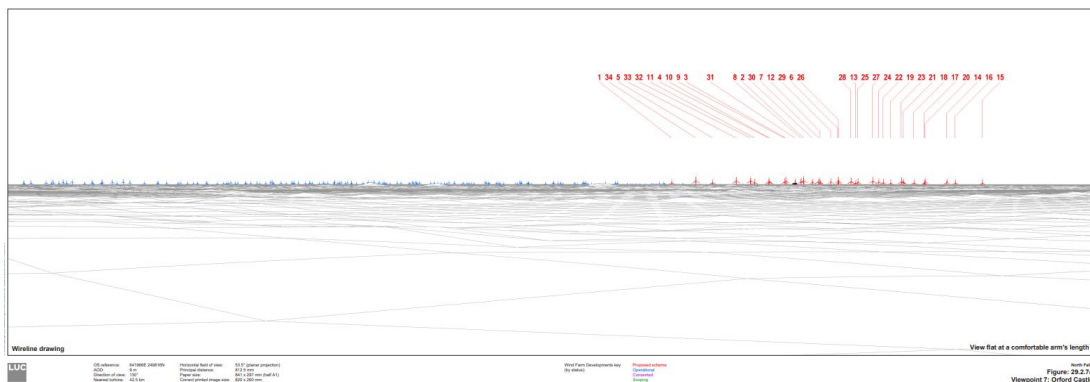


Figure 40: VP 7 Orford Castle Wireline drawing (Source: [\[APP-079\]](#))

5.4.82. As a result of the distances and context of views, including the presence of existing OWFs, and that the Proposed Development would only be visible in excellent visibility conditions, the ExA agrees that the magnitude of change would be low. In reaching this conclusion, the ExA has regard to the Suffolk Seascape Sensitivity Study which states that that “developments at around 39km offshore may be visible for 20% days annually”. The ExA considers that as the Proposed Development would be located approximately 40km to the south-east of the SECHNL and SHC, the impacts would therefore be as a result of changes to aspects of certain perceptual qualities.

5.4.83. Overall, visibility from the SECHNL would be limited to the open coastal edge. When visible, the Proposed Development would be seen in the context of large-scale coastal views. Expansive areas of sea and sky would remain. The Proposed Development would not affect the immediate setting of the SECHNL as it would be seen on, and beyond, the horizon. Again, the ExA notes that no evidence to substantiate NE’s difference of opinion was submitted. This leaves the ExA to draw its conclusions from the assessment submitted based on its inspection and the evidence presented.

- 5.4.84. Cumulatively, the Applicant's Technical Note concludes that the total effects of all operational and proposed development on the special qualities of the SECHNL and the special character of the SHC may be significant. However, it also considers that the contribution of the Proposed Development to this total effect would be limited due to the relatively modest horizontal extent of the wind turbines, when viewed from the north. The ExA agrees with this cumulative assessment. It is persuaded that the views of the Proposed Development from the coast, including those from the Coastal Path such as VP17 would continue to provide large scale open views.
- 5.4.85. On the basis that there would be up to moderate significant effects, which constitute harm to the NL, the ExA agrees with NE, SCC and SECHLP that the Applicant should clearly set out how the Proposed Development would enable the decision-maker to comply with the duty to further the purposes of the NL. This is considered later in this Report.

EFFECTS ON THE SPECIAL QUALITIES OF THE SECHNL AND THE SPECIAL CHARACTER OF THE SHC

- 5.4.86. In its RR [\[REP1-071\]](#), NE set out concerns regarding further harm to the seascape setting of the SECHNL, and the special character of the SHC. NE considers that the statutory purposes of the designation are already compromised, and that the statutory purpose of the SECHNL is to conserve and enhance. Its view is that adding further offshore wind turbines into the seascape setting of the SECHNL and SHC would not conserve and enhance the natural beauty of the designation. Neither would it positively contribute to the special character of the Heritage Coast which would be degraded further. It is, therefore, necessary to understand how much extra damage to the special qualities the Proposed Development would cause. NE does not consider that the potential impacts from the Proposed Development on the natural beauty of the SECHNL, nor the special character of the SHC, are fully assessed within the SLVIA. Without this NE cannot agree with the Applicant's assessment of no significant effects.

Special Qualities of the SECHNL

- 5.4.87. ES Chapter 29 [\[APP-043\]](#) was carried out in accordance with the methodology in ES Appendix 29.1 [\[APP-170\]](#). The assessment of effects on the SECHNL are presented in Table 29.21 of ES Chapter 29 [\[APP-043\]](#). The following approach was taken:
- The special qualities of the SECHNL were reviewed individually and together;
 - the sensitivity of the SECHNL as a whole was considered with reference to the susceptibility of the different landscape types within it, and the national value placed on the designation;
 - the magnitude of impact on the SECHNL was evaluated in terms of the theoretical visibility of the North Falls offshore wind farm, and the ways in which views of the offshore wind farm could affect special qualities;
 - consideration of magnitude included reference to the existing influence of development on the SECHNL, as recognised in two of the special qualities;
 - the assessment noted that the North Falls offshore wind farm "*could further alter aspects of certain perceptual special qualities, where the relationship with the sea is more strongly expressed*", and illustrated this with quotes from nine of the special qualities;
 - the scale of change on these special qualities was judged to be medium, and it was noted that other special qualities, not identified, would experience no change;

- the geographical extent of the impact was judged to be small in relation to the extent of the SECHNL;
- the magnitude of impact to the special qualities was judged to be “locally low along the coast, and negligible further inland”, resulting in moderate-minor (not significant) effects; and
- since effects were not significant, no examination was undertaken of effects on natural beauty or the purposes of the designation.

5.4.88. The special qualities of the SECHNL were developed in 2016 on behalf of EDF Energy, in consultation and agreement with the SECHNLP, and local authorities. The special qualities listed in Table 29.21 of ES Chapter 29 [\[APP-043\]](#) are taken from this. The focus is on natural beauty indicators because the primary purpose of the SECHNL designation is to conserve and enhance the natural beauty of the area. Which accords with NE guidance for assessing landscapes for designation. These are:

- Landscape quality;
- scenic quality;
- relative wildness;
- relative tranquillity;
- natural heritage features; and
- cultural heritage.

5.4.89. The ExA notes that not every indicator has the potential to be affected by the Proposed Development. To assist its assessment, the ExA requested that the Applicant reconsider the effects on the special qualities of the SECHNL. In doing so, the Applicant has had regard to the natural beauty factors associated with each selected special quality. This enables an understanding of the way in which the special qualities interact to contribute to natural beauty. It also enables an understanding of the effect that the Proposed Development could have on the natural beauty of the SECHNL.

5.4.90. The Applicant provided detailed commentary of the scope of effects on each of the selected qualities of the SECHNL in Table 4 of [\[REP5-038\]](#). It includes the Applicant’s assessment of relative tranquillity and natural heritage features which were discussed at ISH2 [\[EV5-002\]](#). IPs, including SECHNLP considered that these qualities should form part of the assessment. This was incorporated into Table 4 of [\[REP5-038\]](#) in response to ExQ2 [\[PD-014\]](#) Q14.0.8. After its initial inclusion, none of the special qualities associated with ‘natural heritage features’ are included because these qualities are not considered to be susceptible to changes arising from the Proposed Development. The assessments of scale of change set out in Table 4 can be summarised for each of the natural beauty factors as follows:

- Landscape quality: small or no change to the selected special qualities;
- scenic quality: medium for two selected special qualities, small or no change for others;
- relative wildness: medium for one selected special quality, small or no change for others;
- relative tranquillity: small for one selected special quality, and no change for one other;
- natural heritage features: no change (no special qualities selected); and
- cultural heritage: no change to the selected special qualities.

5.4.91. The Applicant concludes that “*the scale of change on certain perceptual aspects of the SECHNL special qualities is judged to be medium, although other special qualities will be entirely unchanged.*” It also clarifies which special qualities will be

affected in this way [APP-043]. The Applicant maintains that the magnitude of change to special qualities would be low. The methodology for the assessment is set out [APP-170]. The magnitude of change is assessed by combining judgements about the scale, geographical extent, duration and reversibility of the impact, in accordance with GLVIA.

- 5.4.92. The medium scale of effect combined with a smaller geographical extent to produce a low magnitude of change. Whilst the Applicant accepts that that NLs should be considered as a whole, GLVIA3 requires consideration of geographical extent. The Applicant therefore considers that it would not be appropriate to treat an impact as if it were occurring across the entirety of the geographical area of the SECHNL. Further, the Applicant states that it is also relevant to consider the frequency of effects (see Table 1.5 in ES Appendix 29.1 [APP-170]). The assumption adopted in ES Chapter 29 [APP-043] taken from the Suffolk Seascape Sensitivity Study, is that *“developments at around 39km offshore may be visible for 20% days annually”*.
- 5.4.93. Regarding the effects on the NL, the ExA considers it appropriate to consider worst case visibility, particularly when assessing effects at VPs. However, it is also appropriate to consider the effect on special qualities more holistically, considering all weather and visibility conditions. The Applicant concludes that the Proposed Development would give rise to moderate-minor on the selected special qualities. By extension, it would also give rise to moderate-minor (not significant) effects on the Scenic Quality and Relative Wildness aspects of the natural beauty of the SECHNL.

Special character of the SHC

- 5.4.94. NE states that effects on the special character of the SHC have not been assessed within ES Chapter 29 [APP-043]. The Applicant's position is that effects on the special character of the SHC should be considered as a sub-set of effects on the SECHNL. These are set out in Table 29.21 of ES Chapter 29 [APP-043]. NE draws attention to the purpose of Heritage Coasts, which were established to:
- conserve, protect and enhance:
 - the natural beauty of the coastline;
 - their terrestrial, coastal and marine flora and fauna; and
 - their heritage features;
 - encourage and help the public to enjoy, understand and appreciate these areas;
 - maintain and improve the health of inshore waters affecting heritage coasts and their beaches through appropriate environmental management measures;
 - take account of the needs of agriculture, forestry and fishing and the economic and social needs of the small communities on these coasts.
- 5.4.95. NE confirms in Appendix I2 to its RRs [REP1-071] that the special character of the SHC may be understood with reference to landscape character assessments, and the natural beauty of the SECHNL. The landscape character types (LCTs) defined in the Suffolk Landscape Character Assessment are set out in ES Chapter 29 [APP-043]. The effects of the Proposed Development on these landscapes are assessed.
- 5.4.96. Table 5 [APP-043] highlights the LCTs which fall inside the SHC, and have been considered in detail in ES Chapter 29 [APP-043]. These are shown in a Figures 2a, 2b and 2c of [REP5-038]. These are inland LCTs where the relationship with the sea does not have a strong influence on character, and/or are distant from the Array Area (over 50km). For each LCT the key characteristics (as defined in the Suffolk

Landscape Character Assessment) are listed. Key characteristics with the potential to be subject to perceptual effects arising from the Proposed Development are highlighted. The effects on landscape character identified in the SLVIA are also noted in each case.

- 5.4.97. In response to ExQ2 Q14.0.5, the Applicant added notes to Table 5 which responds to comments made by NE on the findings of effects on LCTs. The NE comments are in Table 3 of Appendix I2 to the RRs [\[REP1-071\]](#). Table 5 highlights that the perceptual aspects of landscape characteristics that may be affected. These also contribute to the SECHNL special qualities noted in Table 4, particularly those relating to Scenic Quality and Relative Wildness. A clear relationship is drawn between the characteristics of the landscape, the special qualities of the SECHNL, and the special character of the SHC.
- 5.4.98. The effects on LCTs were found to be moderate-minor (not significant) along sections of coastal landscape within the SHC. NE disagrees with these findings. However, the Applicant considers that the assessments made in the SLVIA and summarised in Table 4 take account of the factors highlighted by NE, and that the judgements reached are appropriate.
- 5.4.99. Effects on the Scenic Quality and Relative Wildness aspects of the natural beauty of the SECHNL were also found to be moderate-minor (not significant). On the basis that the special character of the SHC derives from the key characteristics of LCTs, and the natural beauty of the SECHNL, the Applicant concludes that effects on the special character of the SHC would also be moderate-minor (not significant).

EXA'S CONSIDERATIONS

Special Qualities of SECHNL

- 5.4.100. The ExA has reviewed the technical note which sets out potential effects on the special qualities of the SECHNL and explains the methodology for assessment. The ExA agrees that it sets out effects in detail for the individual special qualities and describes findings in relation to the natural beauty criteria. Table 4 of the Technical Note [\[REP5-038\]](#) highlights the special qualities likely to be subject to indirect effects.
- 5.4.101. The Applicant sets out that the scale of change on three of the selected special qualities would be medium, with small or no change to the others. The ExA agrees with the assessment which concludes that the project would give rise to moderate-minor (not significant) effects on three of the selected special qualities. The Proposed Development would give rise to moderate-minor (not significant) effects on the Scenic Quality and Relative Wildness aspects of the natural beauty of the SECHNL.

Special Character of the SHC

- 5.4.102. The special character of the SHC has also been considered in relation to landscape character and natural beauty. Table 5 of the technical note provides an analysis of the key characteristics [\[REP3-038\]](#). The ExA agrees that these are closely related to the special qualities of the SECHNL. The special character of the SHC is derived from the key characteristics of LCTs, and the natural beauty of the SECHNL. On this basis, the ExA agrees that effects on the special character of the SHC would be moderate-minor (not significant).

- 5.4.103. The ExA is satisfied that the Applicant has adequately justified its approach to character assessment. The Applicant's technical note submitted at D5 concludes that there would be no change to its overall conclusion or position set out in the SLVIA ES Chapter 29 [APP-043]. Nonetheless, the ExA considers that the effects on visual amenity and VPs would have a consequent effect on the SHC. However, the ExA finds that the Applicant's approach to character assessment meets the provisions set out in paragraph 2.0.207 of NPS EN-3, paragraph 5.10.17 of NPS EN-1.
- 5.4.104. With regards to assessed effects on the special qualities of expansive views, seascapes and peace and tranquillity, the ExA agrees with NE and SECHNLP that there would be effects on these qualities, for the reasons outlined above relating to effects on visual amenity and landscape character, both of which are an integral part of the special qualities. However, these would be moderate-minor (not significant).

THE EFFECTS OF WTG SITING ON DESIGNATED LANDSCAPES

- 5.4.105. The ExA considered how the Applicant's proposed turbine layout and siting would minimise harm to the surrounding seascape, landscape, and visual amenity, as per the principles of Section 2.8 of NPS EN-3. Various IPs, including East Suffolk Council (ESC) [RR-084] expressed concerns regarding the potential for seascape and landscape visual impacts to be introduced on the SECHNL. A number of IPs noted that seascape visual impact concerns were significantly reduced following the removal of the northern array of wind turbines, and the overall reduction in proposed maximum turbine heights to below 400m at a distance of approximately 42km offshore.
- 5.4.106. ESC acknowledged that the current maximum blade tip height proposed by the Applicant has been reduced further to 377m above mean sea level. ESC is concerned that this compromises the statutory purposes for designation of the NL to an extent that justify grounds for objection [REP1-064]. SCC shares this view [REP1-074]. In its RR [RR-318], at paragraph 9 SCC concludes that the project's maximum turbine height and distance from the coast means that "*SCC finds that there is not likely to be a significant effect on seascape and landscape or the Suffolk Coast and Heaths National Landscape Area.* [REP1-046]. However, at D8 SCC expressed the view that [REP8-091] it remains unclear on the reasoning process that has allowed a series of medium scale of change effects on the special qualities to then be said to come to a low magnitude of impact. In particular, the Applicant has not specified how it has combined judgements about scale of change, geographical extent, duration and reversibility of impact in order to conclude on impacts.
- 5.4.107. The Applicant confirmed that the distance of the turbines from the coast is the principal mitigating factor for reducing visual effects, rather than the internal layout of the array itself. The SLVIA set out that the visibility of turbines over 40km is acknowledged throughout ES Chapter 29 [APP-043]. At ISH2, the Applicant referred to various comparable schemes, for example Rampion 2 where the Applicant noted that the ExA accepted that it would have no significant effects on the NL at a distance of 31km.

EXA'S CONSIDERATIONS

- 5.4.108. With regard to the turbine layout, the ExA acknowledges the initial positions of the local authorities, where they expressed satisfaction with the siting justification. NPS EN-3 recognises that changes to design to achieve mitigation can significantly affect

project output. The ExA is satisfied that the Applicant has designed both the siting and layout of the Proposed Development appropriately.

- 5.4.109. Notwithstanding the justification provided, the ExA notes that in the final SoCGs, local authorities' (SCC and ESC) initial position altered [\[REP8-068\]](#) [\[REP8-075\]](#). The Councils expressed concerns regarding the methodology used by the Applicant's assessment of the impacts on the special qualities of the SECHNL. This matter remained not agreed, and a material impact in both SoCGs.
- 5.4.110. The ExA considers that the geographical extents of adverse effects on designated landscapes would be relatively limited when considering the SECHNL and SHC designations as a whole. As such, the Proposed Development would conflict with only a limited number of respective special qualities. As advised by NPS EN-1, visibility of a proposed project from within a designated area should not in itself be a reason for refusing consent. The ExA is satisfied that the Councils' initial assessment is appropriate: that there is not likely to be a significant effect on seascape and landscape on the basis of the reduced blade tip height, and the distance from the coast combined with the removal of the northern array.

THE DUTY TO SEEK TO FURTHER THE PURPOSES OF PROTECTED LANDSCAPES

- 5.4.111. With regards to the statutory duties outlined within s85 of the Countryside and Rights of Way Act 2000 (CRoWA), IPs including SCC, Suffolk & Essex Coast & Heaths National Landscape Partnership (SECHNLP) and ECC submit that the Proposed Development could potentially harm or compromise the purpose of the designation of the NLs [\[RR-093\]](#) [\[RR-316\]](#) [\[RR-318\]](#) [\[REP4-082\]](#) [\[REP4-083\]](#). The updated wording of s85 CRoWA requires the Applicant to seek to further the purposes of protected landscapes affected. IPs consider that the duty, as written, is not limited in its application only to instances where significant adverse effects on designated landscapes are identified.
- 5.4.112. Item 2.1 of the SoCG with SCC confirms that this remains an outstanding matter and is not agreed [\[REP8-068\]](#). SCC considers that although the northern array area was removed prior to submission of the application, it would still adversely affect the natural beauty of the SECHNL, and no enhancement proposals are included.
- 5.4.113. NE [\[RR-243\]](#) set out similar concerns. Its final Risk and Issues Log [\[REP8-099\]](#) confirms its view that the Applicant should provide clarity on how the Proposed Development would enable the decision maker to further the purposes of the SECHNL. SCC also submit that the duty on relevant authorities applies in exercising or performing any functions in relation to, or so as to affect, land in a NL. Further, the CRoWA does not distinguish between land in a designated landscape affected directly or indirectly. SCC therefore considers that the Applicant must demonstrate how the proposal has complied with the duty.
- 5.4.114. The submissions contend that the Applicant has failed to meet the requirement. Throughout the Examination, SCC suggested possible measures which could be undertaken to comply with the duty. These measures would need to be directed towards a positive effect. Paragraph 5.10.8 of EN-1 makes clear that any measures must be sufficient, as well as appropriate and proportionate [\[REP1-074\]](#).
- 5.4.115. Following representations from SCC and the SECHNLP, the ExA examined this matter at ISH1 [\[EV5-001\]](#) and ISH2 [\[EV6-001\]](#) and subsequently sought further information regarding compensation measures from the Applicant in its Rule 17

letter of 6 June 2025 [PD-014]. The ExA's Rule 17 letter acknowledges that the Applicant's view remains that the duty would be discharged without additional measures. However, this would ultimately be a matter of consideration for the Secretary of State (SoS). The ExA therefore requested, on a without prejudice basis, specific additional compensatory measures. It suggested that this could inform the development and delivery of a National Landscape Enhancement Scheme (NLES). The ExA drew attention to the guidance published by Defra on 16 December 2024 'Guidance for relevant authorities on seeking to further the purposes of Protected Landscapes', provided by SECHNLP at D4 [REP4-083].

- 5.4.116. If the SoS decides that there is a need to include provision for the enhancement of the NL to discharge the duty, these principles would then form the basis for the NLES, which would be secured through a DCO Requirement. The ExA drew the Applicant's attention to examples of other proposals which secure a landscape enhancement scheme for measures to compensate for the impact on various protected landscapes. The ExA requested that the Applicant consult with any party that it considers relevant and appropriate to establish these principles and to provide draft NLES principles and a mechanism for securing such a scheme, on a without prejudice basis by D6.

Proposed National Landscape Enhancement Scheme

- 5.4.117. The Applicant provided its 'without prejudice' NLES at D6 [REP6-062] and updated it at D8 [REP8-052]. The Applicant's position is that the duty imposed by s85 CROWA would be capable of being discharged without it, and that the effects on the SECHNL are visual in nature only. ES Chapter 29 [APP-043] concludes that there would be significant effects on views from locations along the southern coastal edge of the SECHNL (between the River Deben and Orford Ness). However, the Applicant's assessment concluded that there would be no significant effects on landscape character, and no significant effects on the special qualities of the SECHNL [REP5-038]. The Applicant has proposed a fund of £10,000 which it considers to be commensurate with the anticipated scale of effect of the Proposed Development on the special qualities of the SECHNL. The purpose outlined in the NLES is to deliver benefits to or to enhance the SECHNL in relation to the effects of the Proposed Development on the SECHNL. Projects and initiatives should be in line with the objectives of the Suffolk & Essex Coast & Heaths National Landscape Management Plan 2023-2028. The projects or initiatives that would be delivered as part of the NLES would be selected at the discretion of the SECHNLP.
- 5.4.118. SCC's response to ExQ3, criticises the Applicant's proposal due to the lack of connection to the affected special qualities and inadequate fund size [REP7-096]. An alternative proposal [REP8-094] was developed by the SECHNLP which would link proposed measures to the Proposed Development's assessed impacts on the special qualities of the SECHNL and to the NL management plan objectives. NE [REP7-089] welcomed progress, but also commented that the Applicant should develop an NLES strongly focussed on the impacts to the special qualities identified as part of the EIA. It considered that the Applicant should then bring forward relevant measures in appropriate locations to improve the landscape quality in ways that offsets those impacts.
- 5.4.119. SCC welcomed the principle of a new requirement to secure the NLES. As the SECHNL is primarily in Suffolk, SCC sought to be included as a named consultee, in addition SECHNLP, and ECC as discharging authority [REP7-096]. SECHNLP also welcome the new Requirement [REP7-095].

- 5.4.120. At D8 SECHNLP submitted further recommendations to address the duty [\[REP8-094\]](#). This confirms its view that the proposed fund is not commensurate with the impacts on the NL. The submission includes costed proposals directly linked to natural beauty indicators, which SECHNLP considers would contribute to furthering the purpose of conserving and enhancing the natural beauty and special qualities of the NL. These also link to the SECHNL management plan and the total contribution to these is set out as £469,264.
- 5.4.121. SCC does not consider that the Proposed Development seeks to further the purposes of conserving and enhancing the natural beauty of the SECHNL because it is clear from the Applicant's assessments that the natural beauty of the SECHNL would be adversely affected. SCC considers that this amounts to a failure to conserve the SECHNL's natural beauty. No measures which seek to offset or compensate for this failure to conserve the natural beauty of the SECHNL have been proposed. SCC therefore supports SECHNLP's alternative proposal [\[REP8-091\]](#) [\[REP7-096\]](#) including overarching principles and costed projects which it considers would contribute to the delivery of the statutory purpose of the National Landscape [\[REP8-094\]](#).
- 5.4.122. The updated NLES at D8 confirms that the geographical scope of proposed projects would extend throughout the area of the NL without limitation. The mechanism for delivery proposes new Requirement with a form of wording proposed. The Applicant's proposed fund size remains at £10,000 [\[REP8-052\]](#).
- 5.4.123. The Applicant's Closing Statement [\[REP8-036\]](#) identifies various documents submitted to the Examination regarding the effects of the Proposed Development on the special qualities of the SECHNL and the special character of the SHC by NE [\[REP4-083\]](#) [\[REP7-089\]](#) [\[REP8-099\]](#), SCC [\[REP1-074\]](#) [\[REP7-096\]](#) [\[REP8-068\]](#) and the SECHNLP [\[REP4-083\]](#) [\[REP7-095\]](#) [\[REP8-094\]](#).
- 5.4.124. The Applicant submits that its position is supported by published Defra guidance and relevant case law including *New Forest National Park Authority v Secretary of State for Housing, Communities and Local Government and Mr Simon Lillington* [2025] EWHC 726. The Applicant contends that both it and the SoS can discharge the Duty in respect of the SECHNL on the basis of actions already undertaken without the need for the imposition of any additional measures.
- 5.4.125. The Applicant considers its SLVIA [\[APP-043\]](#) to be comprehensive and identifies significant effects on views from certain key locations along the coast between Felixstowe and Orford Ness. This includes locations within the SECHNL and SHC. However, the Applicant concludes that the potential for effects on the special qualities of the SECHNL would not be significant as set out in Table 29.21 of ES Chapter 29 [\[APP-043\]](#).
- 5.4.126. The Applicant notes NE's comments that certain effects have been underestimated and refers to the additional detail in its Technical Note [\[REP5-038\]](#). This set out the predicted effects of the Proposed Development on the special qualities of the SECHNL and the special character of the SHC. It concludes that the Proposed Development would give rise to moderate-minor (not significant) effects on three of the special qualities. By extension it concludes that the Proposed Development would give rise to moderate-minor (not significant) effects on the Scenic Quality and Relative Wildness aspects of the natural beauty of the SECHNL. Sixteen other special qualities that were assessed would experience negligible effects or no change. These effects would be experienced along the coastal edge of the SECHNL where there would be potential view of the Proposed Development. The

Applicant, having reviewed these effects, reconfirms that the SLVIA findings are reliable, and submits that NE has not provided detailed assessment to support claims of effects being underestimated. The Applicant therefore maintains its position set out in its D5 Technical Note [\[REP5-038\]](#) as discussed above and reiterates that the WTGs would be located at least 40km from the SECHNL. At such distances, the turbines may be visible on around 20% of days annually.

5.4.127. The Applicant also notes SCC's submissions that additional measures are required in order for the Applicant to discharge the duty [\[REP1-074\]](#) [\[REP7-096\]](#) [\[REP8-068\]](#). In its response, the Applicant submits that there is no legal, policy or guidance requirement to always include specific measures, financial or otherwise, to enhance a NL regardless of the level of impact. The Applicant contends that the SoS must exercise judgment as to whether the measures included within the Proposed Development avoid and reduce impacts on the statutory purposes of the SECHNL are sufficient, appropriate, reasonable and proportionate and whether it would be appropriate, reasonable and proportionate to require any further measures. This includes consideration of:

- The scale, extent and significance of any harm to the NL;
- the relevant planning policies including the NPS-EN1 regarding minimising and mitigating landscape effects and critical national priority (CNP) infrastructure; and
- whether the development has been designed sensitively taking into account siting, engineering, operational and other relevant constraints.

5.4.128. The Applicant also states that the SECHNL was a key consideration in the design evolution process as set out in ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#). Through this process, the Applicant has taken steps to avoid, reduce and mitigate effects associated with the Proposed Development, including the significant reduction and then complete removal of the northern array. This increases the separation distance to the SENCHL, whilst the reduction in proposed WTG height following PEIR would also reduce the impact. The Applicant concludes that the resulting Proposed Development would have less than significant effects on the landscapes and special qualities of the SECHNL.

5.4.129. The Applicant concludes its position that it has discharged the duty and that the SoS can be confident that the duty can be discharged when determining the DCO application without the need to impose additional compensatory measures or requirements. The Applicant submits that because it considers that the measures it has undertaken to date are sufficient to discharge the duty it would not be reasonable or appropriate to impose additional measures such as a financial contribution towards the NLES.

EXA'S CONSIDERATIONS

5.4.130. The ExA is aware of the amended the duty within s85 CRowA such that the duty is now to further the purposes of conserving and enhancing the natural beauty of a designated landscape. What was previously a requirement to 'have regard to' the statutory purposes of the Protected Landscape is therefore now a more proactive one to 'seek to further' those statutory purposes. The NPPF also promotes the duty to protect and enhance landscapes, and Local Plan policies reiterate this.

5.4.131. The ExA has had regard to recent case law including *New Forest National Park Authority v Secretary of State for Housing, Communities and Local Government and Mr Simon Lillington* [2025] EWHC 726. We have also taken into account the Defra publication 'Guidance for relevant authorities on seeking to further the purposes of

Protected Landscapes'. This advises that a relevant authority should take appropriate, reasonable, and proportionate steps to explore measures which further the statutory purposes of Protected Landscapes as far as is reasonably practical.

- 5.4.132. The ExA notes that the duty does not require these purposes to be achieved but encourages seeking to further them. The purpose of conserving and enhancing should be considered as disjunctive rather than conjunctive. Therefore, a decision-maker needs to show that they have sought to advance one or other of these aims. The Defra guidance advises that a relevant authority should be able to demonstrate with proportionate, reasoned, and documented evidence the measures to which consideration has been given when seeking to further the statutory purposes of Protected Landscapes.
- 5.4.133. At USI 3 [\[EV2-003\]](#) the ExA visited VPs within the NL. Based on submissions and having inspected various VPs where visual harm would result, the ExA agrees that the Applicant should demonstrate how it has complied with the duty. The Applicant concludes in ES Chapter 29 [\[APP-043\]](#) that there would be significant effects on views from locations along the southern coastal edge of the SECHNL, between the River Deben and Orford Ness. The ExA notes the Applicant's conclusion that the Proposed Development would have less than significant effects on the landscapes and special qualities of the SECHNL. However, the ExA considers that Proposed Development would result in residual harm to landscape receptors (VP8, VP9 and VP10) which cannot be adequately mitigated.
- 5.4.134. Whilst we have had regard to the measures proposed by the Applicant as part of the Proposed Development to avoid and reduce impacts on the statutory purposes of the SECHNL, we consider that the degree of residual harm that would result is such that it would be reasonable and appropriate to require additional measures in order to comply with the duty. Therefore, the ExA agrees that compensation such as a financial contribution is required in order to discharge the duty and would represent an appropriate and reasonably practical step to be taken.
- 5.4.135. The ExA does not consider that the submitted NLES would directly mitigate harm caused by the Proposed Development to the identified seascape, landscape and visual receptors within the NL. It would not be capable of minimising or screening visual effects. However, it would secure a means whereby positive, and reasonably practical, relevant enhancement measures could be achieved for the future benefit of the NL. The ExA considers that the measures proposed by SECHNLP would help improve the landscape quality, commensurate with the identified impacts. This would, in the ExA's view, provide other benefits and enhance the identified receptors and their special qualities. It is the ExA's view that the proposed fund size within the submitted NLES [\[REP8-052\]](#) would not be commensurate with the harm identified. The ExA is persuaded that the principles set out by SENCHLP, which are costed and targeted on impacts to the special qualities, would bring forward relevant measures in appropriate locations that would be a proportionate response in the light of that harm [\[REP8-094\]](#).
- 5.4.136. The NLES would be secured by new Requirement (R31) of the dDCO. The ExA considers that a modified version of the updated Applicant's proposed wording [\[REP8-052\]](#) would be acceptable for the purposes of securing the NLES principles. This modification removes any reference to fund size. The proposed wording is set out below:

National Landscape Enhancement Scheme

(1) Work No. 1 and Work No. 2 must not be commenced until a National Landscape Enhancement Scheme has been submitted to and approved by the discharging authority in consultation with Suffolk County Council and Suffolk & Essex Coast & Heaths National Landscape Partnership.

(2) The National Landscape Enhancement Scheme must accord with the principles set out in the National Landscape Enhancement Scheme principles document.

(3) The National Landscape Enhancement Scheme must be implemented as approved.

(4) In this Requirement “the National Landscape Enhancement Scheme principles document” means the principles set out in Table 2 of Applicant’s Response to ExA’s letter dated 6 June 2025 as a request for further information under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010.

5.4.137. Whilst the ExA considers the principles and the approach to the NLES secured in this way would demonstrate compliance with the duty, it agrees with SCC and SECHNLP that the proposed fund size would not be sufficient to deliver measures proportionate to the harm. The ExA takes the view that the costed items within the SECHNLP alternative proposal, which are directly linked to the NL special qualities, represent a proportionate response to compliance with the duty. In contrast, the ExA does not consider that the fund size proposed by the Applicant demonstrates compliance with the duty within s85 of the CRoWA.

5.4.138. The ExA’s opinion is therefore that there is a need for a greater NLES fund size than that proposed by the Applicant to comply with the duty. The ExA’s view is that the NLES principles, with the exception of fund size, secured by a requirement would allow the SoS to comply with the duty to further the purposes of conserving and enhancing the natural beauty of the NL. Therefore, to comply with the duty we recommend that the SoS consults with the Applicant, SECHNLP, SCC and ECC on this matter. As the ExA considers that the alternative costed proposal put forward by SECHNLP, directly linked to natural beauty indicators would contribute to furthering the purpose of the NL, the NLES principles document [\[REP8-052\]](#) would need to be updated to:

- Confirm that it is the updated Applicant’s *response to ExA’s letter dated 6 June 2025 as a request for further information under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010*; and
- confirm that the amended fund size aligns with costed proposals set out in SECHNLP’s response to the Examining Authority’s written questions and request for information (EXQ3) Q.14.0.8 issued on 01 07 2025 [\[REP8-091\]](#).

5.4.139. Further matters for the SoS are set out in Chapter 11 of this Report. The ExA recommends that the SoS consult with the relevant bodies to secure a revised NLES, including a fund size commensurate with the level of harm. An updated response provided by the Applicant should be submitted prior to determination of the DCO which would be linked to R31 and allow the SoS to confirm compliance with the duty. On the basis of these suggested amendments, the ExA considers that the application would comply with the duty.

OTHER MATTERS

Proposed phasing Requirement

5.4.140. In its LIR, SCC proposes a new dDCO requirement that imposes a phasing restriction on undertaking works to construct the offshore WTGs [\[REP1-074\]](#). SCC

submits that the proposed phasing restriction is necessary to further the purpose of conserving the NL as required by the updated duty in s85 CRowA. SCC contends that it is necessary to not allow harmful development to proceed unless the justification for it (i.e. the contribution to energy supply to the grid) is capable of being delivered to the grid [\[REP4-095\]](#).

- 5.4.141. The restriction would be in force until it is clear that the East Anglia Connection Node (EACN) has been consented to be delivered as part of the Norwich to Tilbury (N2T) proposal [\[REP4-095\]](#), [\[REP5-117\]](#), [\[REP6-092\]](#) and [\[REP7-096\]](#). The purpose would be to ensure any negative effects on the setting and visual amenity of the SECHNL are avoided until such time as the offshore WTGs, defined as Work No.1, are required to deliver energy. This is reported in the final SoCG as a non-agreed item [\[REP8-068\]](#) with details set out in [\[REP4-095\]](#), [\[REP5-117\]](#), [\[REP6-092\]](#) and [\[REP7-096\]](#).
- 5.4.142. SCC considers that its proposed wording for the requirement set out in its LIR [\[REP1-074\]](#) meets the tests that requirements should be precise, enforceable, necessary, relevant to the development, relevant to planning and reasonable in all other respects. SCC submits that the financial risk involved in constructing the offshore elements of the Proposed Development does not undermine the notion that the phasing restriction is necessary. SCC's written summary of oral submissions made at ISH1 points out that the dDCO includes provision for transfer of the benefit of the Order so any assessment of the commercial risk of commencing construction before there is certainty as regards the connection would not necessarily be made by the Applicant. SCC contends that it does not unreasonably disadvantage the Applicant in terms of being overly restrictive. In addition, the wording does not preclude the possibility of the Applicant connecting to a NG substation other than the proposed EACN [\[REP4-095\]](#).
- 5.4.143. In response to ExQ3 [\[REP7-096\]](#), SCC suggested a potential drafting amendment to provide additional clarity as to the time of discharge of the requirement being the day that the notification is submitted to the relevant planning authority. SCC's view is that the MHCLG guidance does not prohibit phasing requirements related to dependencies on other projects. Further, para 4.11.12 of NPS EN-1 states that the deciding SoS should be satisfied that appropriate network arrangements would be in place for a given project regardless of whether one or multiple linked applications are submitted.
- 5.4.144. SCC provided additional justification in submissions including in response to ExQ3 Q9.1.5 [\[REP7-074\]](#). In summary, SCC does not consider that the phasing requirement would be a Grampian restriction because it does not seek to preclude the commencement of the Proposed Development pending the satisfaction of an external event. In formulating the restriction, SCC had regard to the Applicant's indicative timetable for the offshore construction programme. This is as set out within the ES Chapter 5 Project Description [\[APP-019\]](#), Table 5.23. The indicative programme shows WTG installation as being from year 5 onwards. SCC's view is that with the proposed requirement, the Applicant would be able to undertake all of the works programmed for Years 1 to 3 of the construction programme without restriction, including most of the onshore construction.
- 5.4.145. The SCC response to ExQ 3 9.1.13 [\[REP5-117\]](#) also states that the proposed requirement would not need to be discharged via the formal discharge process set out in the dDCO. Instead, the Applicant must only send a notification to the relevant authority. SCC does not envisage a notification of this kind as requiring formal approval and was content for the drafting of the requirement should reflect that.

5.4.146. SCC proposes the following wording for a requirement:

Work No. 1 must not be commenced until notification in writing has been submitted by the undertaker to the relevant planning authority which:

(a) states the date that development consent was granted for the National Grid substation; and

(b) sets out a timetable for the carrying out of all works comprised in Work No. 14, being the works necessary to connect the authorised development to the National Grid substation.

This requirement is discharged [at 23:59] on the day that the notification is submitted to the relevant planning authority.

5.4.147. In response to ExQ2 Q9.1.13 [\[REP6-061\]](#), and ExQ3 Q9.1.5 [\[REP7-051\]](#) the Applicant stated that it considers that the proposed requirement fails to meet relevant legal tests. The Applicant does not consider that the proposal is necessary, or reasonable for reasons including:

- There is a presumption in favour for granting consent for the N2T project as set out in the relevant NPSs because it is CNP infrastructure;
- the Applicant has a connection agreement with the National Energy System Operator (NESO) pursuant to which it is required to provide a connection. NESO has identified the EACN as the connection point;
- the Applicant is not aware of any precedent for the imposition of such a requirement. Nor does it consider the Proposed Development to be exceptional such that a phasing would be justified;
- the Applicant also considers that it would be unreasonable to require it to wait until discharge of the requirement, because this could create a significant delay to the Proposed Development;
- the Proposed Development could be adversely affected if the Applicant could not rely on its DCO to proceed with placing orders;
- the precedent effect of a decision to impose a condition of this type could also have wider consequences for the delivery of offshore wind and the ability of the sector to meet the need for increased generating capacity set out in the NPSs; and additionally,
- the Applicant set out in its oral submissions at ISH2 [\[EV6-001\]](#) that there are many instances for generating stations being consented at a point when the associated grid connection project has not been consented. The Applicant cited Hinkley Point C as an example where development consent was granted a year before the application for the related connection project was submitted. No equivalent requirement was imposed in that case.

5.4.148. The Applicant's Comments on Responses to ExQ2 [\[REP6-061\]](#), provides further submissions on this matter and ExQ3 Q9.1.5 [\[REP7-051\]](#). In relation to the EACN connection, the Applicant plans to commence pre-construction works in 2027 with an aim for the Proposed Development to be operational by 2030. The Applicant rejects any suggestion that the Proposed Development should be delayed (either in terms of the development consent process or construction) on the basis of an entirely hypothetical situation where plans for the EACN 'may change' such that the connection offer for the Applicant may be rescinded and replaced or otherwise delayed.

5.4.149. As regards the risk of delay, the Applicant explains that the construction of the offshore elements of the Proposed Development requires it to order a large number of long lead items at considerable cost prior to March 2027. The Applicant indicates

that this integral step would not be able to be completed, if the DCO cannot be implemented because the proposed phasing requirement has not been fulfilled. The relevant burden is that the procurement process and other preparatory steps required for the Proposed Development would be delayed until notification can be given that development consent for the NG substation has been granted which would, in turn, delay the construction of the Proposed Development. This would create a significant delay to construction timeframes making the Proposed Development's delivery by 2030 unachievable and jeopardising its ability to contribute to the UK's renewable energy targets in a timely manner. The Applicant does not anticipate that a delay to the timing of any consent for the EACN or other means of connection would have this type of impact on construction timeframes.

- 5.4.150. The Applicant has also set out in its oral submissions at ISH2 [REP-034] that there are many precedents for generating stations being consented at a point when the associated grid connection project was further back in the consenting process. This includes Hinkley Point C for which development consent was granted a year before the application for the related connection project was submitted. No equivalent requirement was imposed on the Hinkley Point C DCO. In response to ExQ3 Q9.1.5, the Applicant provides additional reasons to explain why it considers that the factual circumstances of the Hinkley Point C case are comparable with the Proposed Development.
- 5.4.151. The Applicant's response to ExQ3 Q9.1.5 [REP7-051] agrees that the N2T project will not automatically be granted consent because it is CNP infrastructure. However, it submits that the fact that the CNP presumption applies in favour of the N2T project is a relevant positive factor supporting the granting of consent.
- 5.4.152. Furthermore, the Applicant does not accept SCC's statement in [REP5-117] that there is potential for the NFOWF WTGs to be installed for 'a significant period of time' without being connected to the grid. The Applicant has signed a connection agreement with NESO, and the delivery of that connection is a matter for NGET and NESO. NFOWF could connect to the grid via an alternative means if development consent for the EACN substation is not granted as part of the N2T project.
- 5.4.153. The Applicant draws support from the comments at paragraphs 5.4.19 and 5.4.20 in the Recommendation Report prepared by the ExA in the Sheringham Shoal and Dudgeon Offshore Windfarm Extension Project (Sheringham Shoal). As was the case for the Sheringham Shoal ExA, the Applicant submits that the ExA and the SoS can also be satisfied that the signed grid connection contract does not depend on the delivery of the N2T project and that this is a matter for NGET to address and not the Applicant given the signed grid connection contract that is in place.
- 5.4.154. The Applicant disagrees that the proposed DCO requirement is necessary to comply with the duty for the reasons set out in its response to item 5 of its Position Statement on various issues relating to National Landscapes [REP5-068]. It submits that the proposed phasing restriction cannot be considered a sufficient, appropriate and proportionate measure required to enable itself and the SoS to discharge the duty in respect of the Proposed Development.

EXA'S CONSIDERATIONS

- 5.4.155. The ExA has considered the proposed new phasing requirement having regard to NPS EN-1 which states that the SoS: "*should only impose requirements in relation to a development consent that are necessary, relevant to planning, relevant to the*

development to be consented, enforceable, precise, and reasonable in all other respects”.

- 5.4.156. SCC in response to action points of ISH1 and 2 [\[REP4-095\]](#) submits that the proposed requirement is necessary to comply with updated duty in s85 CRowA. This is because the proposed requirement ensures that it is not possible for a scenario in which the proposed development adversely affects the relevant National Landscape without providing the benefits of clean energy production which serves as the justification for these adverse effects.
- 5.4.157. We have given detailed consideration to the s85 CRowA duty above. We conclude that it would be reasonable and appropriate to require additional measures in order for the SoS to comply with the duty. We have set out our views as to how this could be achieved by means of the submitted NLES. We shall now consider whether it is reasonable and necessary to impose a phasing requirement over and above the new requirement that would secure the NLES fund.
- 5.4.158. SCC points out EN-1 paragraph 3.3.63 provides that the presumption in favour of CNP is ‘subject to any legal requirements and paragraph 4.2.7 that ‘the policy applies following the normal consideration of the need case, the impacts of the project, and the application of the mitigation hierarchy’. We accept the submissions of SCC that this Examination cannot conclude that the CNP presumption would fall to be applied in that case. We do not therefore place reliance upon the Applicant’s submissions in relation to CNP status in reaching our conclusions on this matter.
- 5.4.159. The ExA has nevertheless considered whether it would be unreasonable to require the Applicant to wait until the proposed requirement could be discharged before commencing the restricted works. In that respect, we note that it is drafted such that it would only apply to Work No.1 – construction of the wind turbine generators (WTGs). We also recognise that the drafting of the proposed requirement would not preclude the possibility of the Applicant connecting to a NG substation other than the proposed EACN and the process for securing discharge would be by notification to the relevant authority rather than through the dDCO formal discharge procedure.
- 5.4.160. As regards the risk of delay, the Applicant’s Comments on Responses to ExQ2 [\[REP6-061\]](#) and its response to ExQ3 Q9.1.5 [\[REP7-051\]](#) explain that it plans to commence pre-construction works in 2027 with an aim for the NFOWF to be operational by 2030. It advises that the construction of the offshore elements of the Proposed Development would require it to order a large number of long lead items at considerable cost prior to March 2027. The Applicant contends that this integral step would not be able to be completed if the DCO could not be implemented because the proposed requirement has not been fulfilled. The Applicant also highlights the implications that the requirement would have for the level of risk associated with other pre-construction commercial decisions including any procurement bids.
- 5.4.161. We have borne in mind SCC’s submissions in relation to the Applicant’s indicative timetable for the offshore construction programme. However, we accept the Applicant’s position in relation to the potential delay that such a requirement could cause to the construction timeframes including the procurement process and other preparatory steps required for the Proposed Development. We therefore agree that such a requirement would in practice be unduly restrictive and would have the potential to give rise to a significant and unreasonable delay to the Proposed Development.

- 5.4.162. Having regard to all relevant factors, the ExA does not find the proposed phasing requirement to be justified in this case. We do not believe that its imposition is necessary, as an aspect of the SoS's discharge of the s85 CRoWA duty on which our views are set out above. Furthermore, it would not be reasonable to impose such a requirement given the implications in terms of delay that would potentially flow from it. The ExA concludes that the imposition of such a requirement would therefore be inappropriate as it would not meet the policy and legal tests for requirements in NPS-EN1.

CONCLUSIONS

- 5.4.163. The Proposed Development would have a range of significant and not significant effects on the SECHNL and SHC designated landscapes. Adverse effects, albeit less than significant would also arise to some of the special qualities of the statutory designated landscapes, and the harms identified would conflict with the statutory purpose to conserve and enhance the natural beauty of SECHNL and SHC.
- 5.4.164. The ExA affords substantial weight to the conservation of the natural beauty of SECHNL. The ExA notes that NPS EN-1 recognises that the fact that a proposed project would be visible from within a designated area should not in itself be a reason for refusing consent. The ExA also accepts that the Applicant has aimed to avoid, as far as possible, compromising the purposes of designation and has had regard to sensitive design taking into account various siting, layout, operational, and other relevant constraints.
- 5.4.165. The ExA is also mindful that the geographical extents of adverse effects on designated landscapes would be relatively limited when considering the SECHNL as a whole and that the Proposed Development would conflict with only a limited number of their respective special qualities. This applies in particular for the significant effects on SECHNL considered by the ExA, with only a limited number of VPs affected, in a limited area, including when assessed cumulatively. The ExA has also borne in mind that the effects, whilst permanent insofar as they would be present for the duration of the operational life of the Proposed Development, would ultimately be reversible and would no longer be present after decommissioning of the Proposed Development. The same findings relate to the SHC, where the ExA finds that the character is interwoven with the qualities of the NL.
- 5.4.166. The ExA considers that the Proposed Development would be in general conformity with NPS EN-1 and NPS EN-3 in relation to seascape, landscape and visual matters. This includes the assessment provisions (such as methodology), which, although the subject of a number of concerns raised during the Examination, are considered to have been met by the Applicant.
- 5.4.167. Furthermore, the ExA is satisfied that the Applicant has applied the mitigation hierarchy as far as possible to reduce the seascape, landscape and visual effects of the Proposed Development.
- 5.4.168. Having regard to the significance of effects on the VPs, the special qualities of SECHNL and the special character of SHC identified, in addition to the beneficial effects identified including the NLES and other mitigation, the ExA attributes moderate weight to the adverse effects on seascape, landscape and visual matters relating to the Proposed Development against the Order being made.
- 5.4.169. The ExA considers that the proposed NLES would compensate for some of the seascape, landscape and visual harms identified and would provide benefits to the

SECHNL and SHC landscapes over the longer term, including in respect of their special qualities. This scheme would be secured under new R31 of the dDCO, which the ExA considers to be appropriate, subject to further consideration of the SoS.

- 5.4.170. The NLES would not directly mitigate the harm caused by the Proposed Development to the identified seascape, landscape and visual receptors, as the scheme would not screen or minimise the visual effects of the proposed turbines on the receptors. However, the ExA recognises that an enhancement scheme could provide other benefits and potentially enhance the identified receptors and their special qualities.
- 5.4.171. The ExA notes the duty in s85 CRowA placed on public bodies. It is aware that the duty referred to in paragraph 5.10.8 and 5.10.34 of NPS EN-1 to seek to further the purposes of nationally designated landscapes relates to the wording in the CRow Act 1990 that was amended by the LURA. Notwithstanding that the ExA has identified harm to the SECHNL, the ExA concludes that the application together with the NLES principles would be consistent with above objective, subject to the provision of a proportionate fund size. On the basis that the NLES principles document is updated prior to commencement to align with the alternative costed fund size set out at D8 within [\[REP8-094\]](#) the ExA's concludes that the ExA's Report, the ES and updated NLES is sufficient to inform the SoS in this respect and that the duty can be discharged.

6. ONSHORE AND OFFSHORE ISSUES

6.1. AVIATION AND RADAR

INTRODUCTION

6.1.1. This section considers the effects of the Proposed Development on aviation and radar.

6.1.2. In its consideration of aviation and radar below, the Examining Authority (ExA) has had regard to:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1) in particular Section 5.5;
- the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8;
- the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5), in particular Section 2.11;
- the relevant policies of the UK Marine Policy Statement (MPS), East Inshore and East Offshore Marine Plans, and the South East Inshore Marine Plan;
- the Local Impact Reports (LIRs), to the extent that they are relevant to the topic;
- any matters prescribed in relation to the development; and
- any other important and relevant matters.

THE APPLICATION

6.1.3. Environmental Statement (ES) Chapter 17 Aviation and Radar [\[APP-031\]](#) presents the assessment of the potential impacts of the Proposed Development. The Chapter:

- Presents the existing baseline and identifies any assumptions and limitations encountered in compiling the baseline information;
- presents the potential effects of the Proposed Development on aviation and radar during the construction, operation and decommissioning phases; and
- highlights any necessary monitoring and/or mitigation measures which could avoid, reduce, or mitigate the possible effects of the Proposed Development on aviation and radar.

6.1.4. Other application documents that are relevant include the associated figures [\[APP-062\]](#), Appendix 17.1 Airspace Analysis and Radar Modelling [\[APP-110\]](#) and Appendix 17.2 Southend Airport Instrument Flight Procedure Assessment [\[APP-111\]](#).

BASELINE

6.1.5. In terms of the study area for aviation and radar, the Applicant has set this on the basis of potential for Wind Turbine Generators (WTGs) within the North Falls array area to have an impact on civil and military radars, taking into account required radar operational ranges. Civil Aviation Authority (CAA) Civil Aviation Publication (CAP) 764 (Policy and Guidance on Wind Turbines, CAA 2016) guidance criteria has been used to identify civil aerodrome receptors within the study area. This provides criteria for the distances between wind turbine developments and various types of civil aerodrome, where consultation should take place, ES Chapter 17, para 12 [\[APP-031\]](#).

- 6.1.6. As set out by the Applicant, the study area includes the North Falls array area and the airspace between the array area and the United Kingdom mainland, extending from the NERL (National Air Traffic Services (En Route plc)) radar facility at Cromer to the north, and to Southend Airport and Stansted Airport to the west, ES Chapter 17, para 10 [\[APP-031\]](#).
- 6.1.7. ES Chapter 17 [\[APP-031\]](#) includes evidence of consultation responses from aviation and radar stakeholders on the scoping report and the Preliminary Environmental Information Report (PEIR).
- 6.1.8. Regarding Section 5.5 of NPS EN-1, in relation to safeguarding, and communications, navigation and surveillance (CNS) infrastructure, the Applicant confirmed in paras 52 to 53 of ES Chapter 17 [\[APP-031\]](#) that all known Secondary Surveillance Radars are beyond the ranges by a significant margin and would therefore not be affected by the WTGs and are therefore not considered further. In addition, the Applicant explained that there would be no measurable effects upon other terrestrial based aviation CNS systems as North Falls is considerably outside applicable safeguarding limits pertaining to such CNS infrastructure. Therefore, terrestrial CNS infrastructure (other than Primary Surveillance Radar) is not considered further, as no sites would be affected.

MITIGATION

- 6.1.9. The Applicant's proposed embedded mitigation which is relevant to the issue of aviation effects is presented in ES Chapter 17, Section 17.3.3 [\[APP-031\]](#). The mitigation of the obstacle environment created by North Falls Offshore Wind Farm (NFOWF) includes compliance with appropriate international and national requirements for the promulgation of the obstacle locations on charts and in aeronautical documentation, together with the permanent lighting and marking of obstacles. The mitigation measures proposed for increased air traffic in the area related to wind farm activities are managed by existing Air Traffic Service (ATS) infrastructure and pilot compliance with regulatory requirements.
- 6.1.10. The Applicant's proposed additional mitigation included addressing the interference with radar by applying a technical solution to impacted radars where significant effects identified are to be agreed with operators, as presented in ES Chapter 17, Table 17.9 [\[APP-031\]](#). This was subsequently found to not be necessary as discussed below.
- 6.1.11. The proposed embedded mitigation measures in ES Chapter 17 [\[APP-031\]](#) would be secured in Requirement (R) 3 Aviation Safety (which includes permanent lighting) and in the draft Deemed Marine Licences (dDMLs) (Schedules 8 and 10, Part 2, Conditions 16, 18, 21 and 23; and Schedule 9, Part 2, Conditions 17, 19, 22 and 24) in the Applicant's draft Development Consent Order (dDCO) [\[REP8-005\]](#). These conditions include aids to navigation, aviation safety, pre-construction plans and documentation (including reference to an aids to navigation management plan, which replaced the lighting and marking plan in dDCO revision 3 [\[REP2-007\]](#)) and offshore safety management (including reference to Marine Guidance Note (MGN) 654).

ASSESSMENT OF EFFECTS

CONSTRUCTION, OPERATION AND DECOMMISSIONING

- 6.1.12. Potential impacts considered in ES Chapter 17 [\[APP-031\]](#) include:

- Impacts on civil and military radar systems due to high construction vessels / cranes and partially complete structures;
- WTGs causing permanent interference on civil and military radars;
- creation and removal of an aviation obstacle environment; and
- increased air traffic in the area related to wind farm activities;

6.1.13. These were assessed against what is considered worst-case scenarios, based on the project design envelope which includes potential options for the Proposed Development's electricity transmission national grid connection point. As set out by the Applicant, in the case of the civil and military aviation, the project design envelope is considered to be the worst-case scenario for all impacts with no change to the likely significant effects as a result of the optionality from Options 1, 2 or 3, ES Chapter 17 para 20 [APP-031].

6.1.14. A cumulative effects assessment has also been undertaken as part of ES, Chapter 17, section 17.8 [APP-031]. This considered the residual impacts assessed for NFOWF which on their own have the potential for a cumulative impact with other plans, projects and activities. Other projects within 100 kilometres (the maximum range where radar cumulative effect may occur) of NFOWF were considered for the effect of wind turbines causing interference on radar systems.

6.1.15. The Applicant concluded that the residual effects would be not significant or to cause no change, following consideration of mitigation measures, for any phase of the Proposed Development. When considering any phase of the Proposed Development cumulatively with other projects/ infrastructure, the Applicant's assessment concludes the residual effects would be not significant following consideration of mitigation, refer to ES Chapter 17, Table 17.9 [APP-031].

ISSUES CONSIDERED DURING THE EXAMINATION

6.1.16. Issues emerging during the Examination that the ExA has examined, considered and concluded on are:

- Potential effects of the WTGs on civil and defence aviation (including radar systems), including:
 - adequacy of the proposed mitigation and monitoring arrangements; and
 - the means whereby this would be secured by the draft DCO.

6.1.17. There were no substantive comments relating to aviation in any of the submitted LIRs.

CIVIL AVIATION EFFECTS

AIR TRAFFIC RADARS

6.1.18. Following an initial objection from National Air Traffic Services (NATS) [RR-242], relating to the impact on the air traffic radars at Cromer and Debden, the Applicant confirmed [REP2-020] that NATS's concerns related to the former array boundary submitted at PEIR stage, in particular the former Northern Array Area, which was removed from the order limits in response to PEIR feedback. Furthermore, the Applicant confirmed that no mitigation or monitoring would be required in respect of air traffic radars at Cromer and Debden. NATS subsequently [AS-038] withdrew its objection following further discussions with the Applicant and refinement of its modelling based on the latest proposal. The Applicant confirmed [REP1-054] that NATS confirmed that no Statement of Common Ground (SoCG) is required.

- 6.1.19. The CAA did not comment on the matter during the Examination. The Applicant confirmed [\[REP1-054\]](#) that the CAA was not seeking to agree a SoCG in respect of the project.

LONDON SOUTHEND AIRPORT

- 6.1.20. An Instrument Flight Procedures (IFP) assessment was undertaken, as presented in Appendix 17.2 [\[APP-111\]](#), which shows that North Falls WTGs would have no impact on Southend Airport's existing published IFPs. In response to ExQ1 4.1.5 [\[REP2-020\]](#), the Applicant confirmed that London Southend Airport (LSA) agreed that having reviewed the October 2022 IFP assessment, there would be no anticipated impact to the current published IFPs at LSA.
- 6.1.21. ES Chapter 17 [\[APP-031\]](#) states that there are two Required Navigation Performance (RNP) IFPs with the CAA awaiting approval and that the RNP procedures have been designed by NATS, who has confirmed by email (27 January 2023) that the proposed WTGs would be laterally well beyond the protected areas of the RNP procedure set and that there would be no impact on the RNP procedures. The CAA did not comment on the matter during the Examination.
- 6.1.22. In response to ExQ3 4.0.1 [\[REP7-051\]](#), the Applicant clarified that the two RNP IFPs are in no way related to or required as a result of North Falls (i.e. it is not mitigation for North Falls). Furthermore, the Applicant explained that the IFPs relate to an Airspace Change Proposal that was submitted to the CAA by LSA in 2019.

MET OFFICE WEATHER RADAR

- 6.1.23. The ExA sought confirmation in ExQ1 4.1.4 [\[PD-009\]](#) that the 20km safeguarded zone for Met Office Weather radar, referred to in ES Chapter 17 [\[APP-031\]](#) had been agreed with the Met Office. The Applicant's response [\[REP2-020\]](#) referred to confirmation from the Met Office that the North Falls turbines would be comfortably below the beam of the closest weather radar (at Thurnham) and that there would not be any detrimental impact on the weather warnings and forecasts derived from the radar data.

EXA'S CONSIDERATION

- 6.1.24. Based on the above, the ExA is satisfied that for civil aviation there would be no adverse effects from the Proposed Development on air traffic radars, London Southend Airport or Met Office weather radar.

Defence Aviation Effects

- 6.1.25. The Defence Infrastructure Organisation (DIO)/ Ministry of Defence (MoD) [\[RR-237\]](#) confirmed that there would be no impact to the Air Defence (AD) radar at Remote Radar Head (RRH) Neatishead. In addition, for Air Traffic Control (ATC) Radars, MoD's assessments of the potential impacts identified that the Proposed Development would have no operational impact on the Primary Surveillance Radar (PSR) sited at Wattisham Station. The DIO/MoD confirmed [\[REP2-031\]](#) that they were content that the construction and installation of the onshore cable route did not introduce a detrimental effect on the East 2 Wide Area Multilateration (WAM) network. In summary, the DIO/MoD confirmed [\[REP2-031\]](#) they do not object to the Proposed Development on the basis that requirements relating to MoD accredited aviation safety lighting scheme and charting would form part of any Development Consent Order. The Applicant had confirmed [\[REP1-054\]](#) earlier in the examination that the MoD was not seeking to agree a SoCG in respect of the project.

EXA'S CONSIDERATION

- 6.1.26. Based on the above, the ExA is satisfied that for defence aviation there would be no adverse effects from the Proposed Development on AD radar, ATC radars or the East 2 WAM network.

CONCLUSIONS

- 6.1.27. The ExA is content that the Proposed Development is in accordance with NPS EN-1, NPS EN-3 and NPS EN-5 and with other national and local policies and strategies and all other relevant legislation and there are no other important or relevant considerations.
- 6.1.28. The ExA is satisfied that the Applicant has demonstrated that the effects associated with the Proposed Development would be satisfactorily mitigated and managed through R3 Aviation Safety and in the dDMLs (Schedules 8 and 10, Part 2, Conditions 16, 18, 21 and 23; and Schedule 9, Part 2, Conditions 17, 19, 22 and 24) in the Applicant's dDCO [\[REP8-005\]](#).
- 6.1.29. The ExA concurs with ES Chapter 17 Aviation and Radar [\[APP-031\]](#) that when considering any phase of the Proposed Development alone or cumulatively with other projects/ infrastructure, the residual effects would be not significant at the most, following consideration of mitigation.
- 6.1.30. The ExA finds that there are no matters relating to civil and defence aviation which would weigh for or against the Order being made and it is a matter to which the ExA ascribe neutral weight.

6.2. CLIMATE CHANGE

INTRODUCTION

- 6.2.1. This section considers the effects of the Proposed Development on climate change and the potential environmental effects of climate change on the proposed North Falls Offshore Wind Farm (NFOWF).
- 6.2.2. In its consideration of climate change the ExA has had regard to:
- National Policy Statement for Renewable Energy EN-3 (NPS EN-3), in particular Section 2.4;
 - National Policy Statement for Electricity Networks Infrastructure EN-5 (NPS EN-5), in particular Section 2.3;
 - Local Impact Reports (LIRs) of the Babergh District Council [\[REP1-063\]](#), the Essex County Council [\[REP1-065\]](#), the Suffolk County Council [\[REP1-073\]](#) and the East Suffolk Council [\[REP1-064\]](#);
 - any matters prescribed in relation to the development; and
 - any other important and relevant matters including:
 - The Paris Agreement 2015;
 - the Climate Change Act 2008 and Climate Change Act 2008 (2050 Target Amendment) Order 2019;
 - the Climate Change Committee (CCC) UK Carbon Budgets and progress reports;
 - the Climate Change Risk Assessment 2022; and
 - the third National Adaptation Programme (NAP) 2023.

THE APPLICATION

- 6.2.3. The Need Case and Project Benefits Statement [[APP-232](#)] sets out why there is considered to be an urgent need for new electricity infrastructure. It explains why the legally binding targets in the Climate Change Act 2008 (as amended) are important for the Proposed Development and concludes that the delay of offshore wind farms proposed for connection before 2030 (including NFOWF beyond 2030) would jeopardise the UK's ability to meet the Sixth Carbon Budget. New offshore wind energy is stated to be fundamental to the Government achieving net zero Greenhouse Gas (GHG) emissions by 2050.
- 6.2.4. The Environmental Statement (ES) Chapter 33 Climate Change [[APP-047](#)] comprises a GHG assessment and Climate Change Resilience Assessment (CCRA) to consider the likely significant effects related to climate change during the construction, operation and maintenance (O&M), and decommissioning phases of the Proposed Development. It also sets out the assessment methodology and the NPS assessment requirements in Table 33.6. The assessment includes consideration of the Institute of Environmental Management and Assessment (IEMA) publications, 'Assessing Greenhouse Gas Emissions and Evaluating their Significance' guidance (2022) and the 'Environmental Impact Assessment Guide to Climate Change Resilience and Adaptation' (2020).
- 6.2.5. For the ES assessment, climate change has broadly been considered in two parts:
- The effect of GHG emissions caused directly or indirectly by the Proposed Development, which may have the potential to contribute to climate change; and
 - the potential effect of changes in climate on the Proposed Development which could affect it directly or could modify its other environmental impacts.
- 6.2.6. The GHG assessment predicts the contribution of the Proposed Development to GHG emissions in the UK, and its 'net effect' compared to a baseline of 'without the NFOWF'. ES Appendix 33.1 Greenhouse Gas Assessment Methodology [[APP-172](#)] presents the GHG assessment methodology, associated assumptions and emissions factors used for calculating GHG emissions arising from the Proposed Development. The CCRA considers the Proposed Development's adaptive capacity to climate change, defined by the potential or ability to adapt to the effects of climate change, which is based on its resilience to the projected effects of climate change over its lifespan.

BASELINE

- 6.2.7. ES Chapter 33, Section 33.5 [[APP-047](#)] describes the existing environment in relation to climate change associated with the NFOWF study area. It considers a baseline or 'Do Nothing' scenario which assumes that the Proposed Development is not constructed. The 'Do Nothing' scenario is established from the assumption that electricity from the Proposed Development would displace generation from 'natural gas' sources, as this is the most common form of new plant in terms of fossil fuel combustion (BEIS, 2022).

GHG EMISSIONS FROM THE 'DO NOTHING' SCENARIO

- 6.2.8. GHG emissions produced from the generation of electricity of an equivalent gas power station to the Proposed Development in the 'Do Nothing' scenario is presented in ES Table 33.16. The anticipated energy produced by the NFOWF is 4,579 GWh per year and GHG emissions from electricity generated from gas per year are anticipated to be 1,698,917 tonnes CO₂. For the 30-year duration of the

Proposed Development those figures are respectively 137,379 GWh and 50,967,498 tonnes CO₂.

CLIMATE CHANGE RESILIENCE ASSESSMENT (CCRA)

- 6.2.9. ES Chapter 33, Sections 33.5.2.1 and 33.5.2.2 discuss the current and future baseline climate. Specific receptors with the potential to be affected by climate change, and assessed in the CCRA, are identified as part of 'Step 1: Identifying receptors, climate variables and hazards' of the CCRA presented in Section 33.6.2. For the CCRA, data was obtained for Representative Concentration Pathway (RCP) 4.5 and RCP8.5, which are described further in ES Table 33.18.

ASSESSMENT OF EFFECTS

GHG ASSESSMENT FOR THE CONSTRUCTION PHASE

- 6.2.10. The Applicant's assessment estimates that emissions during the construction phase would be 2.65 million tonnes CO₂e. Embodied carbon in materials is expected to be the largest source of emissions during construction, contributing approximately 82% of overall the total during this phase.
- 6.2.11. The Proposed Development's construction phase falls under the 5th Carbon Budget period (2028 to 2032). Estimated construction emissions would constitute around 0.15% of the 5th Carbon Budget, which the Applicant submits forms a relatively small proportion, and GHG emissions during construction would occur over a short duration as a single occurrence.
- 6.2.12. The Applicant's position is that based on their negligible contribution to the 5th Carbon Budget, construction emissions arising from the Proposed Development are unlikely to affect the UK's ability to meet future Carbon Budgets and progress towards achieving a science-based net zero transition. Therefore, the Proposed Development's construction emissions are assessed by the Applicant as having a minor adverse and not significant effect on climate change.

GHG ASSESSMENT FOR THE OPERATIONAL PHASE

- 6.2.13. GHG emissions calculated for each source group in the O&M phase are shown in ES Chapter 33 [\[APP-047\]](#) Table 33.22 by source group. Table 33.23 presents the quantity of emissions that would have been produced under the 'Do Nothing' scenario in the absence of NFOWF. The assessment finds that the Proposed Development would result in a saving of approximately 49.5 million tonnes CO₂e over the 30-year O&M phase.
- 6.2.14. The first five years (2031-2035) of the Proposed Development's O&M phase broadly falls under the 6th Carbon Budget period (2033 to 2037). The estimated O&M emissions that would be released from activities associated with the NFOWF over this period would constitute around 0.03% of the 6th Carbon Budget. Although O&M GHG emissions would occur continuously over the Proposed Development's operational lifetime, the Applicant contends that the magnitude of emissions would be negligible in comparison to the Carbon Budget.
- 6.2.15. Given the low GHG intensity of electricity generation, and emission savings associated with the Proposed Development's operations, the Applicant assesses the effect on GHG emissions during the O&M phase to be a significant benefit.

GHG ASSESSMENT FOR DECOMMISSIONING

- 6.2.16. Decommissioning would result in a single occurrence of GHG emissions. The Applicant anticipates that the UK economy is likely to decarbonise over the lifespan of NFOWF. Hence, emission estimates based on present day activities are likely to result in an overestimation. Therefore, the Applicant considers that the Proposed Development's decommissioning emissions would have a negligible effect on climate change.

WHOLE LIFECYCLE GHG

- 6.2.17. The whole lifecycle GHG intensity of the Proposed Development (including construction, O&M and decommissioning GHG emissions) is estimated to be 30.5 gCO₂e per kWh. Total GHG emissions saved as a result of the Proposed Development would be approximately 46.8 million tonnes CO₂e over the 30-year operational phase. The Applicant assesses the effect for the whole lifecycle of the Proposed Development to represent a significant benefit.

CCRA ASSESSMENT FOR THE CONSTRUCTION PHASE

- 6.2.18. The ES Chapter 33 [\[APP-047\]](#) identifies construction site workers; onshore and offshore project infrastructure (including temporary construction compounds and trenchless crossings) and construction equipment/vessels/vehicles associated with the Proposed Development as the receptors which might be vulnerable to the effects of climate change during the construction phase.
- 6.2.19. The potential climate hazards with potential to affect these receptors are identified as flooding, heatwaves, and storm events (high winds and flooding), including marine storm surges.
- 6.2.20. Increased flooding risk during the construction phase is considered in ES Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#) and within the Flood Risk Assessment presented in ES Appendix 21.3 Flood Risk Assessment [\[APP-121\]](#). ES Appendix 21.3 Flood Risk Assessment [\[APP-121\]](#) considers the appropriate climate change allowances and concludes that Chapter 33 Climate Change mitigation measures to mitigate the risk of flooding over the Proposed Development's lifetime can be achieved. Based on the criteria identified in Table 33.11, the receptors are considered to have low vulnerability to flooding.
- 6.2.21. The Applicant's assessment identifies the potential for heatwaves to cause harm to both onshore and offshore construction site workers and damage to the onshore infrastructure during construction, specifically the onshore cable route and onshore substation. Due to the short duration of the construction phase and the application of industry good practice measures, receptors that could be sensitive to heatwaves are considered to have low exposure during the construction phase and a low sensitivity to such climatic changes. Based on the criteria identified in Table 33.11, the receptors are considered to have low vulnerability to heatwaves.
- 6.2.22. While there is likely to be a minor change in the likelihood or severity of storm events during the construction phase, mitigation measures based on industry good practice in the construction sector would be incorporated into construction management plans, such as the Outline Code of Construction Practice (Outline CoCP) [\[REP1-033\]](#), to minimise the likelihood of climate change impacts. Based on the criteria identified in Table 33.11, the receptors are considered to have low vulnerability to storm events.

- 6.2.23. The Applicant's assessment concludes that there is a low likelihood of climate change impacts adversely affecting the Proposed Development during its construction phase, and any effects of climate change on it are not considered to be significant.

CCRA ASSESSMENT FOR THE OPERATION AND MAINTENANCE PHASE

- 6.2.24. The ES Chapter 33 [\[APP-047\]](#) identifies the climate hazards with potential to affect receptors associated with the Proposed Development as:

- Higher temperatures (including heatwaves);
- increased precipitation and surface water flooding;
- sea level rise and conditions, including coastal erosion; and
- storm events (high winds and flooding), including storm surges.

- 6.2.25. The vulnerability of the Proposed Development and its receptors to the climate hazards identified are considered further in Step 2 of the CCRA and outlined in Table 33.27. This concludes that the Proposed Development would have low vulnerability to all climate hazards identified. The assessment has determined that, accounting for the Proposed Development's embedded mitigation, the vulnerability rating of all hazards identified would be low. Therefore, there is a low likelihood of climate change impacts adversely affecting the Proposed Development during its O&M phase, and any effects of climate change on the Proposed Development are not considered to be significant.

CCRA ASSESSMENT FOR DECOMMISSIONING PHASE

- 6.2.26. A high-level assessment of the decommissioning phase was undertaken which considered the same receptors as the construction phase. Based on this, the vulnerability rating of all hazards was deemed to be low. Therefore, it is assumed that there is a low likelihood that climate change impacts would adversely affect the Proposed Development during the decommissioning phase, and any impacts would not be significant.

CUMULATIVE EFFECTS

- 6.2.27. The Cumulative Effects Assessment (CEA) section of ES Chapter 33 is split into two sections:

- The first describing a detailed CEA covering effects predicted to arise from development of Five Estuaries Offshore Wind Farm (VEOWF) and NFOWF; and
- the second, detailing effects predicted to arise from the development of VEOWF, NFOWF and other projects.

NFOWF AND VEOWF CEA

- 6.2.28. The realistic worst-case scenario for likely cumulative effects arising from development of NFOWF and VEOWF is summarised in ES Chapter 33 Table 33.29.

- 6.2.29. ES Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#) presents the cumulative assessment for the NFOWF and VEOWF in relation to surface and groundwater flood risk during construction. This concludes that additional impacts on surface and groundwater flows above those concluded for NFOWF are not anticipated and cumulative effects from both projects would not be significant.

- 6.2.30. ES Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#) presents the cumulative assessment for the Proposed Development and VEOWF in relation to surface and

groundwater flood risk during the O&M phase. This concludes that additional impacts on surface and groundwater flows at the substation due to the additional VEOWF substation are not expected due to the mitigation measures described in the Outline Operational Drainage Strategy [\[APP-254\]](#). Therefore, cumulative effects from both projects are assessed as not significant.

- 6.2.31. The detail and scope of the decommissioning works would be determined by the relevant legislation and guidance at the time of decommissioning and would be agreed with the regulator. ES Chapter 21 Water Resources and Flood Risk assumes that residual effects during decommissioning would be no worse than for construction and so not significant.

NFOWF, VEOWF AND OTHER PROJECTS CEA

- 6.2.32. In addition to VEOWF, the Norwich to Tilbury (N2T) project has been included in the CEA for further assessment.
- 6.2.33. Table 21.25 of ES Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#) shows the cumulative assessment for the NFOWF, VEOWF and the N2T project. This concludes that cumulative effects are anticipated to be not significant.
- 6.2.34. The decommissioning strategies have not yet been finalised for NFOWF, VEOWF or N2T. However, the cumulative impacts are expected to be the same as those of the initial construction phase and hence not significant.

OVERALL SUMMARY OF POTENTIAL CUMULATIVE EFFECTS ON CLIMATE CHANGE

- 6.2.35. The summary of the CEA between the Proposed Development and other projects, including VEOWF, is presented in ES Chapter 33, Table 33.34. The assessment does not identify any significant cumulative effects arising from the development of VEOWF, NFOWF and other projects under this topic heading.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.2.36. The key issues considered during the examination were:
- The effects that all stages of the Proposed Development would have on climate change with particular regard to GHG emissions and the ability of Government to meet its carbon reduction plan targets for the UK;
 - whether the Proposed Development would be sufficiently resilient against the possible future impacts of climate change during its construction and operational lifespan.

THE EFFECTS THAT THE PROPOSED DEVELOPMENT WOULD HAVE ON CLIMATE CHANGE WITH PARTICULAR REGARD TO GHG EMISSIONS AND THE ABILITY OF GOVERNMENT TO MEET ITS CARBON REDUCTION PLAN TARGETS FOR THE UK

- 6.2.37. In response to ExQ1 5.1.3 (i) [\[REP2-020\]](#), the Applicant summarises the steps taken to reduce the GHG emissions of the construction and decommissioning stages for the Proposed Development and explains why they should be regarded as being reasonable. Mitigation to reduce emissions is being adopted into the design development process where practicable by following the principles of the GHG mitigation hierarchy in the IEMA guidance “Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance”.

- 6.2.38. Table 33.4 of ES Chapter 33 Climate Change [APP-047] sets out ways in which the Proposed Development has sought to minimise GHG emissions. In particular, the Applicant is seeking to reduce the quantity of materials used for both the offshore and onshore infrastructure components. The inclusion of the option to share an onshore cable route with VEOWF and co-locating of separate project onshore substation infrastructure would also reduce the quantity of materials used.
- 6.2.39. In response to ExQ1 5.1.3 (ii) [REP2-020], the Applicant refers to Table 33.4 of [APP-047] and explains that the Proposed Development would utilise where appropriate, new available proven technology. Construction of the Proposed Development would rely on the use of specialised equipment, particularly for the offshore component such as vessels. The efficient use of vessels would be managed through the Vessel Management Plan. In addition, the Outline CoCP [REP1-033] includes various measures relating to the reduction of emissions.
- 6.2.40. The IEMA guidance recommends comparing the magnitude of a project's carbon footprint against available carbon budgets. The Applicant's response to ExQ1 5.1.5 [REP2-020] confirms that the magnitude of emissions released or avoided in each phase of the Proposed Development have been compared to Carbon Budgets where relevant or were evaluated as to whether they would contribute towards the UK's progress towards meeting its emission reduction targets.
- 6.2.41. ES Chapter 33 [APP-047], paragraph 101, states that the GHG assessment is inherently cumulative, and no additional consideration of cumulative effects is required. In response to ExQ1 5.1.6 [REP2-020], the Applicant sets out the reasons why the GHG assessment is inherently cumulative which are as follows:
- The impact arises from the change in GHG emissions when comparing the 'Do Nothing' scenario to avoided emissions enabled by the Proposed Development;
 - the location of emissions released from activities associated with the Proposed Development, and those it 'avoids' is not relevant to the impact arising from it, as any change in GHG emissions has the same impact despite the geographic location; and
 - climate change impacts are derived from aggregated GHG levels in the global atmosphere, not the magnitude of change in GHG emissions in the local area.
- 6.2.42. In response to ExQ1 5.1.7 [REP2-020] the Applicant submits that the Proposed Development has employed a conservative approach to managing the assumptions and limitations associated with a GHG assessment. Table 33.14 of ES Chapter 33 Climate Change [APP-047] details the specific assumptions or limitations for the GHG assessment that will have influenced the outcome of the assessment. As an example, emission factors for the most recent year of available data at the time of assessment were used in the assessment to provide a precautionary assessment, even though most sectors are expected to decarbonise over the next 30 years. Therefore, the Applicant contends that emissions associated with the O&M and decommissioning phases of the Proposed Development are likely to be an overestimation.

EXA'S CONSIDERATIONS

- 6.2.43. The Need Case and Project Benefits Statement [APP-232] confirms that the purpose of the Proposed Development is to contribute to climate change mitigation by replacing outgoing high carbon energy generation with a renewable form of energy which would improve energy security and help the UK meet its net zero commitments.

- 6.2.44. NPS EN-1, paragraph 5.3.4, requires that all proposals for energy infrastructure projects should include a GHG assessment as part of their ES and sets out what should be considered within that. Given the explanation provided in the Applicant's National Policy Statement's Accordance Table [\[REP8-033\]](#), we are content that the Proposed Development would comply with this policy requirement.
- 6.2.45. The GHG assessment in ES Chapter 33 Climate Change [\[APP-047\]](#) quantifies GHG emissions arising from the construction, O&M, and decommissioning phases of the Proposed Development and includes a 'whole lifecycle' assessment of GHG emissions from these phases. The ExA is satisfied that the Applicant's assessment has employed a conservative approach to managing the assumptions and limitations associated with a GHG assessment. We are also content that the GHG assessment is inherently cumulative, and no additional consideration of cumulative effects is required.
- 6.2.46. The Proposed Development would seek to minimise, where practicable, GHG emissions during each phase through the use of best available techniques and efficient design/management. A summary of mitigation measures recommended to reduce GHG emissions through the lifetime of the Proposed Development is provided in Sections 33.3.3 and 33.6.1 of ES Chapter 33 Climate Change [\[APP-047\]](#).
- 6.2.47. Mitigation measures to curb GHG emissions have also been considered as part of the assessment and embedded into the design as outlined in ES Chapter 33 Sections 33.3.3.1 and 33.6.1. These include the minimising of emissions associated with the Proposed Development, through industry good practice measures in the Outline CoCP [\[REP1-033\]](#), and a sustainable approach to securing materials and the like.
- 6.2.48. The ES has compared the magnitude of emissions released or avoided in each phase of the Proposed Development to Carbon Budgets where relevant or evaluated to assess whether they would contribute towards the UK's progress in meeting its emission reduction targets.
- 6.2.49. Whilst there would be some residual emissions from the construction and decommissioning of the Proposed Development, estimated construction emissions would constitute around 0.15% of the 5th Carbon Budget which we consider represents a relatively small proportion of the total. We also find that for decommissioning, the emission estimates based on present day activities have been conservatively assessed. The ExA has no reason to doubt the Applicant's position that the Proposed Development's decommissioning emissions would also have a negligible effect on climate change.
- 6.2.50. The estimated O&M emissions that would be released from activities associated with the NFOWF over this period would constitute around 0.03% of the 6th Carbon Budget. Although O&M GHG emissions would occur continuously over the Proposed Development's operational lifetime, we consider that the magnitude of emissions would be negligible in comparison to the Carbon Budget.
- 6.2.51. The GHG assessment calculated the potential for avoided emissions by replacing electricity that would have been generated by fossil fuels. The ExA recognises that the Proposed Development would result in a saving of approximately 49.5 million tonnes CO₂e over the 30-year O&M phase and whole lifecycle savings of approximately 46.8 million tonnes CO₂e which represents a significant beneficial

effect. Once operational, the Proposed Development would have a carbon benefit after 2.5 years (Section 33.6.1.4, paragraph 170 of ES Chapter 33 [\[APP-047\]](#)).

6.2.52. In terms of NPS EN-1, paragraphs 5.3.8 to 5.3.10, the ExA is satisfied that the Applicant has, as far as possible, assessed the GHG emissions of all stages of the development. Furthermore, we are content that the Applicant has taken all reasonable steps to reduce the GHG emissions of the construction and decommissioning stages of the development.

6.2.53. The ExA concludes that the Proposed Development would have a positive and significant beneficial effect overall on climate change and the ability of Government to meet its carbon reduction plan targets for the UK.

WHETHER THE PROPOSED DEVELOPMENT WOULD BE SUFFICIENTLY RESILIENT AGAINST THE POSSIBLE FUTURE IMPACTS OF CLIMATE CHANGE DURING ITS CONSTRUCTION AND OPERATIONAL LIFESPAN

6.2.54. The CCRA presents the projected impacts of climate change across a range of scenarios and considers the direct impacts of climate change on the Proposed Development, as provided in Sections 33.5.2 and 33.6.2 of ES Chapter 33 Climate Change [\[APP-047\]](#). The high emissions scenario (RCP 8.5) for future climate baseline has been considered in the assessment. Climate change resilience mitigation measures have also been included as part of the assessment in Section 33.3.3 of ES Chapter 33 Climate Change [\[APP-047\]](#).

6.2.55. In response to EXQ1 5.1.1 [\[REP1-020\]](#), the Applicant explains that measures to increase the resilience and adaptation capacity of the Proposed Development are detailed in Sections 33.3.3.2, 33.6.2.1.2 and 33.6.2.2.2 of ES Chapter 33 Climate Change [\[APP-047\]](#). The mitigation and adaptation measures proposed that are referenced in Section 33.6.2.1.2 are relevant to the construction phase, and those listed in Section 33.6.2.2.2 (notably Table 33.27) are relevant to the O&M phase.

6.2.56. They include measures that would be included as part of construction management plans, such as the Code of Construction Practice (CoCP) and Project Environmental Management Plan (PEMP). This would reduce the risk of exposure of site workers and construction equipment to extreme weather events. This section of the ES also includes measures incorporated as part of the design of the Proposed Development to account for future climatic changes.

6.2.57. In addition, Section 33.6.2.1.2 of ES Chapter 33 Climate Change [\[APP-047\]](#) states that construction drainage infrastructure would be developed and agreed with the appropriate regulators, where relevant, and implemented to minimise water within the working areas, ensure ongoing drainage of surrounding land and that there is no increase in surface water flood risk. ES Appendix 21.3 Flood Risk Assessment [\[APP-121\]](#) considers the appropriate climate change allowances and concludes that mitigation measures to mitigate the risk of flooding over the Proposed Development's lifetime could be achieved. Prior to the commencement of decommissioning activities, as part of health and safety protocols, a review of recent climate hazards and up-to-date climate projection data would be undertaken to develop suitable mitigation and management measures, which would be secured in management plans for this stage of works.

6.2.58. In response to ExQ1 5.1.1 (iii) [\[REP1-020\]](#), the Applicant submits that the CCRA, presented in Section 33.6.2 of ES Chapter 33 Climate Change [\[APP-047\]](#), demonstrates how paragraphs 4.10.8 - 4.10.13 of EN-1 would be satisfied. The

CCRA assesses the direct impact of climate change on the operational lifetime of the Proposed Development, across a range of climate scenarios, obtained from the UK Climate Projections database, accessed in 2024. Inherent to the assessment is the mitigation that has been adopted to ensure the resilience of the Proposed Development to the projected impacts of climate change.

- 6.2.59. The Applicant's response to ExQ1 5.1.2 confirms that in the light of NPS EN-1 paragraph 4.10.15, the CCRA was completed based on the worst-case high emissions scenario (RCP 8.5), using data from the 90% percentile. The Applicant considers this to be an extreme scenario, particularly for a project with an expected 35-year operational lifespan and is commonly adopted when considering future climate change projections.
- 6.2.60. In response to ExQ1 5.1.4 [\[REP1-020\]](#), the Applicant indicates that the main items exposed to storm conditions would be the wind turbine foundations, and the turbines themselves. Details of the design of these features can be found in Sections 5.3.3 of ES Chapter 5 Project Description [\[APP-019\]](#). Furthermore, in relation to the onshore substation, ES Appendix 21.3 Flood Risk Assessment [\[APP-121\]](#) considers the appropriate climate change allowances and concludes that mitigation measures to mitigate the risk of flooding over the Proposed Development's lifetime could be achieved, including for storm events. Details of where mitigation is secured are listed in the Schedule of Mitigation [\[APP-012\]](#). The real-time monitoring and the shutdown of turbines would be secured through the PEMP, and the dDCO DML conditions.
- 6.2.61. As regards the CEA, Chapter 5 Project Description [\[APP-019\]](#) provides full details of the cumulative build-out scenarios that have been considered in the CCRA, where Scenario 3 is assessed as the worst-case scenario. In Scenario 3 there is no reuse in onshore temporary works between NFOWF and VEOWF, and all onshore cable route associated works are rebuilt and reinstated in full by the second project. The cumulative effects of Scenario 3 in relation to surface and groundwater flood risk have been assessed for the construction, operation and maintenance and decommissioning phases of the projects, which concludes that cumulative effects from both projects would not be significant.

EXA'S CONSIDERATIONS

- 6.2.62. The application includes measures to increase the resilience and adaptation capacity of the Proposed Development. Such measures would be required as part of construction management plans, such as the CoCP which is secured by Requirement 8 of the dDCO and the PEMP which is secured under the Deemed Marine Licences contained in dDCO Schedules 8, 9 and 10. In the light of those provisions, the ExA is content that the ES satisfactorily sets out how the Proposed Development would take account of the projected impacts of climate change in compliance with NPS EN-1, paragraphs 4.10.9 and 4.10.11.
- 6.2.63. The CCRA assessed the direct impacts of climate change over the operational lifetime of the Proposed Development, across a range of climate scenarios, obtained from the UK Climate Projections database including the high emissions scenario (RCP 8.5). In the light of that assessment, the ExA accepts that the Proposed Development would be safe and resilient to climate change, and that necessary action could be taken to ensure the operation of the infrastructure over its estimated lifetime in accordance with Section 4.10.15 of NPS EN-1.

- 6.2.64. NPS EN-3, paragraph 2.4.8, provides that whilst offshore wind farms will not be affected by flooding, applicants should demonstrate that any necessary land-side infrastructure (such as cabling and onshore substations) will be appropriately resilient to climate-change induced weather phenomena. Similarly, applicants should particularly set out how the proposal would be resilient to storms.
- 6.2.65. The Applicant's National Policy Statement Accordance Table [\[REP8-033\]](#) confirms that 'Changes to surface and groundwater flows and flood risk' have been assessed in Section 21.6.1.4 and Section 21.6.2.2 of ES Chapter 21 Water Resources and Flood Risk [\[APP-035\]](#). Flood Risk is assessed in the ES Appendix 21.3 Flood Risk Assessment [\[APP-121\]](#).
- 6.2.66. The ES includes details of the design of the main items that would be exposed to storm conditions, namely, the wind turbine foundations, and the turbines themselves. In addition, for the onshore substation ES Appendix 21.3 Flood Risk Assessment [\[APP-121\]](#) considers the appropriate climate change allowances and concludes that mitigation measures to mitigate the risk of flooding over the Proposed Development's lifetime could be achieved, including for storm events. The ExA accepts the outcome of that assessment and is satisfied that all aspects of the Proposed Development would be appropriately resilient to climate-change induced weather phenomena in accordance with NPS EN-3 paragraph 2.4.8 and NPS EN-5 paragraphs 2.3.1 to 2.3.2.
- 6.2.67. As regards cumulative impact, the CCRA has assessed the cumulative effects of Scenario 3 as being the worst-case scenario in relation to surface and groundwater flood risk for the construction, operation and maintenance and decommissioning phases. We find no reason to question the conclusion reached that the cumulative effects in relation to climate change would not be significant.

OTHER MATTERS

DOWNSTREAM GHG EMISSIONS

- 6.2.68. No issues were raised during the Examination by IPs or other parties in relation to the potential implications of the Supreme Court judgement in *R (Finch on behalf of the Weald Action Group) v Surrey County Council* [2024] UKSC 20 or the high court ruling in *Friends of the Earth Ltd v SSLUHC* [2024] EWHC 2349 (Admin) on the GHG assessment undertaken for the Proposed Development in relation to 'downstream' GHG emissions.
- 6.2.69. The ExA does not consider these cases to have any implications for the GHG assessment undertaken for the Proposed Development, given that it would provide energy generated through renewable means, rather than through the combustion of fuels. We are content that there would be no adverse implications in relation to downstream GHG emissions caused by the operation of the Proposed Development.

WAKE EFFECTS

- 6.2.70. No issues were raised during the Examination by IPs or other parties in relation to potential wake effects on the operation of existing offshore wind farms in the North Sea and potential implications for energy yield and GHG emissions. Given the proposed location of the array for NFOWF, and the absence of any concerns expressed by any party on this topic, the ExA is content that offshore wake effects do not have any bearing on the conclusions of the GHG assessment undertaken for the Proposed Development.

CONCLUSIONS

- 6.2.71. The ExA is satisfied that the Applicant has complied with the provisions set out in NPS EN-1, NPS EN-3, and NPS EN-5 concerning climate change effects, both from and on the Proposed Development.
- 6.2.72. The ExA considers that the Applicant has adequately assessed the GHG emissions of all stages of the Proposed Development and has taken all reasonable steps to mitigate and reduce the GHG emissions associated with its construction, operation and maintenance, and decommissioning.
- 6.2.73. Mitigation to reduce emissions would be adopted into the design development process where practicable by following the principles of the GHG mitigation hierarchy in the IEMA guidance. The ExA finds that appropriate mitigations have been included within the design of the Proposed Development to protect it against climate-related weather events, and that the mitigation hierarchy has therefore been applied.
- 6.2.74. The ExA agrees with the conclusions of the ES assessment that the carbon emissions that would result from the Proposed Development would not have a material impact on the ability of UK Government to meet its carbon budgets. Indeed, we consider that the Proposed Development would have an overall significant beneficial effect on reducing GHG emissions and meeting the Government ambition to deliver 50GW of offshore wind capacity by 2030. Since this factor has already been attributed weight in the overarching need case for the Proposed Development, we do not attribute any further weight to it under this topic heading.
- 6.2.75. The ExA is also content that the Applicant has appropriately identified and assessed how the Proposed Development would take account of the projected impacts of climate change in the light of the latest UK Climate projections. We are satisfied that the Proposed Development would be safe and resilient to climate change, and that necessary action could be taken to ensure the operation of the infrastructure over its estimated lifetime. Both the offshore and the onshore works would be appropriately resilient to climate-change induced weather phenomena. The proposed mitigation and adaptation measures would be secured through dDCO requirements and would ensure that the Proposed Development would be sufficiently resilient against the possible future impacts of climate change during its lifespan.
- 6.2.76. The ExA finds that there are no matters relating to climate change which would weigh for or against the Order being made and it is a matter to which we ascribe neutral weight.

6.3. CUMULATIVE IMPACT

INTRODUCTION

- 6.3.1. The Applicant did not provide a separate chapter relating to cumulative effects as part of the initial application. The Applicant included a cumulative effect assessment in the following chapters of the Environmental Statement (ES):
- Chapter 8 Marine Geology Oceanography and Physical Processes [[APP-022](#)];
 - Chapter 9 Marine Water and Sediment Quality [[APP-023](#)];
 - Chapter 10 Benthic and Intertidal Ecology [[APP-024](#)];
 - Chapter 11 Fish and Shellfish Ecology [[APP-025](#)];
 - Chapter 12 Marine Mammals [[APP-026](#)];
 - Chapter 13 Offshore Ornithology [[APP-027](#)];

- Chapter 14 Commercial Fisheries [[APP-028](#)];
- Chapter 15 Shipping and Navigation [[APP-029](#)];
- Chapter 16 Offshore and Intertidal Archaeology and Cultural Heritage [[APP-030](#)];
- Chapter 17 Aviation and Radar [[APP-031](#)];
- Chapter 18 Infrastructure and other Users [[APP-032](#)];
- Chapter 19 Ground Conditions and Contamination [[APP-033](#)];
- Chapter 20 Air Quality [[APP-034](#)];
- Chapter 21 Water Resource and Flood Risk [[APP-035](#)];
- Chapter 22 Land Use and Agriculture [[APP-036](#)];
- Chapter 23 Onshore Ecology [[APP-037](#)];
- Chapter 24 Onshore Ornithology [[APP-038](#)];
- Chapter 25 Onshore Archaeology and Cultural Heritage [[APP-039](#)];
- Chapter 26 Noise and Vibration [[APP-040](#)];
- Chapter 27 Traffic and Transport [[APP-041](#)];
- Chapter 28 Human Health [[APP-042](#)];
- Chapter 29 Seascape, Landscape and Visual Impact Assessment [[APP-043](#)];
- Chapter 30 Landscape and Visual Impact Assessment [[APP-044](#)];
- Chapter 31 Socio-economics [[AS-010](#)];
- Chapter 32 Tourism and Recreation [[APP-046](#)]; and
- Chapter 33 Climate Change [[APP-047](#)].

6.3.2. This section considers both the cumulative impact of the Proposed Development and the cumulative impact of the Proposed Development alongside other projects. The Applicant has assessed the cumulative impact for the onshore, offshore and project wide topics associated with the Proposed Development. The ES also considers other reasonably foreseeable development-related activities that would occur within a similar timeframe as the Proposed Development and for which there is reasonable information available to use as a basis for the cumulative assessment.

6.3.3. In its consideration of the cumulative impacts, the ExA has had regard to the following:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Section 4.3;
- The National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.8; and
- The National Policy Statement for Electricity Networks Infrastructure (NPS EN-5);
- The Local Impact Reports;
- Any matters prescribed in relation to the development; and
- Any other important and relevant matters.

THE APPLICATION

CUMULATIVE EFFECTS ASSESSMENT

6.3.4. The Applicant was requested in ExQ1 Q7.1.2 [[PD-009](#)] to provide a summary of the cumulative effects assessment provided in each chapter and to present this as a separate document. This was provided at Deadline 3 as the Cumulative Effects Assessment Summary and revised as the status of projects has changed during the course of the Examination [[REP6-047](#)].

6.3.5. The Cumulative Effects Assessment Summary (CEA) [[REP6-047](#)] identifies a list of projects which have the potential to interact with the Proposed Development. The list of projects are set out in:

- Table 1.1 Projects included in the CEA for offshore technical assessments [\[REP6-047\]](#)
- Table 1.2 Projects included in the CEA for onshore technical assessment [\[REP6-047\]](#)
- Table 1.3 Projects included in the CEA for project-wide chapters assessments [\[REP6-047\]](#)

6.3.6. The Applicant has followed the Planning Inspectorate (PINS) Advice on Cumulative Effects Assessment (Planning Inspectorate 2024) and split the projects being considered in the CEA into tiers. In providing the CEA [\[REP6-047\]](#), the Applicant has considered the status of each project, potential construction period together with distance from the Proposed Development. A rationale for the inclusion or non-inclusion in the CEA for each project is provided.

6.3.7. The tiered approach provides a framework for placing relative weight on the potential for identified projects to be included in the CEA, which is based on the current status of the project and its certainty. The following categories are set out in the tiered approach:

- Tier 1
 - Projects under construction;
 - permitted applications under the Planning Act or other regimes but not yet implemented
 - submitted applications under the Planning Act or other regimes that are not yet determined; and
 - all refusals subject to appeal procedures not yet determined.
- Tier 2
 - Projects on the Planning Inspectorate's programme of projects.
- Tier 3
Other existing and, or approved development
 - projects on the Planning Inspectorate's programme of projects where a scoping report has not been submitted;
 - identified in the relevant Development Plan and emerging Development Plans, with appropriate weight given as they near adoption, recognising that there would be limited information on the relevant proposals; and
 - identified in other plans and programmes as appropriate, which set the framework for future development consents or approvals, where such development is reasonably likely to come forward.

6.3.8. The Applicant has used a two-part process in the CEA [\[REP6-047\]](#), with the initial identification of projects that have the potential to interact with the Proposed Development and then the tiered approach to further assess the impact, based on the information available for each project. Where a project was sufficiently implemented, it was considered as part of the baseline for the Environmental Impact Assessment (EIA) in accordance with the PINS Advice on Cumulative Effects Assessment.

6.3.9. The Applicant has also worked with Five Estuaries Offshore Wind Farm (VEOWF) in relation to the environmental assessments and in considering the cumulative impact, each technical chapter of the ES includes consideration of the realistic worst case cumulative scenario.

- 6.3.10. In Tables 1.4 -1.29 of the CEA [\[REP6-047\]](#), the Applicant summarises the CEA outcomes for each of the technical chapters of the ES and sets out the cumulative effect and the additional mitigation that is proposed.

ISSUES CONSIDERED DURING THE EXAMINATION

CUMULATIVE EFFECTS ASSESSMENT

- 6.3.11. The principal issues relating to cumulative effects, raised during the Examination include:
- Cumulative interrelated effects relating to the Proposed Development alone;
 - cumulative effects of the Proposed Development with other developments under construction and operation;
 - the scope for coordination with other projects; and
 - whether there are any additional mitigation measures to avoid, reduce or compensate for any cumulative adverse impacts that are identified.

CUMULATIVE INTERRELATED EFFECTS RELATING TO THE PROPOSED DEVELOPMENT ALONE

- 6.3.12. The Essex County Council (ECC) Local Impact Report (LIR) [\[REP1-065\]](#), the Suffolk County Council (SCC) LIR [\[REP1-074\]](#) and the Babergh District Council (DC) [\[REP1-062\]](#) and other interested parties (IP) raised a number of matters relating to topic specific cumulative effects. As these have been considered in the relevant sections of this Report, they are not repeated here.
- 6.3.13. During the Examination, the Applicant submitted the CEA [\[REP6-047\]](#), which provided the summary of the CEA for the offshore, onshore and project wide topics assessed in the ES. The CEA [\[REP6-047\]](#) considers the likely significant effects associated with the construction, operation and maintenance and the decommissioning phases of the Proposed Development alone.
- 6.3.14. The relevant representations (RRs) received from Councils requesting that cumulative effects be considered along with the impacts on tourism, socio-economics, Dedham Vale and Suffolk and Essex Coast and Heaths National Landscape (SECHNL) include:
- Tendring District Council (TDC) [\[RR-327\]](#);
 - Ardleigh Parish Council [\[RR-027\]](#);
 - Suffolk County Council (SCC) [\[RR-318\]](#); and
 - Babergh DC [\[RR-029\]](#).
- 6.3.15. The issue of the cumulative impact was raised at the hearings during the examination by IP's and the Councils. Simon Amstutz of Suffolk and Essex Coast and Heaths National Landscape Partnership (SECHNLP) spoke at the open floor hearing (OFH) [\[REP1-051\]](#) setting out concerns relating to the cumulative impact on the National Landscape (NL).
- 6.3.16. In the SCC SOCG [\[REP8-068\]](#), the LVIA assessment of the onshore substation and cumulative effects on the Dedham Vale NL is not agreed. In the ECC and TDC SOCG [\[REP8-060\]](#), the position relating to the cumulative effects of noise and the visual impacts are not agreed. The Commercial Fisheries Working Group SOCG [\[REP8-062\]](#) sets out the position with regard to the CEA for fisheries, in particular the methodology used and this is not agreed for the Proposed Development alone.

- 6.3.17. The Applicant concluded that for the majority of topics, the potential cumulative effects were not significant in EIA terms.

EXA'S CONSIDERATIONS

- 6.3.18. The ExA has considered the individual topics in the relevant sections of this Report and is satisfied that the Applicant has satisfactorily assessed the cumulative impacts for the Proposed Development alone. The ExA is content that the Applicant has followed the approach in the PINS advice and that it accords with the EIA Regulations and the relevant NPSs.
- 6.3.19. Paragraph 4.3.19 of NPS EN-1 states that in considering an application, the Secretary of State (SoS) should consider how the accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place. Taking account of the findings in the individual topics of this Report, and the mitigation measures that would be secured, the ExA considers that the cumulative effects resulting from the accumulation of and interrelationship between effects of the Proposed Development would remain acceptable in terms of paragraph 4.3.19 of NPS EN-1.

THE CUMULATIVE EFFECTS OF THE PROPOSED DEVELOPMENT WITH OTHER DEVELOPMENTS UNDER CONSTRUCTION AND OPERATION

- 6.3.20. The ECC LIR [\[REP1-065\]](#) refers to other projects that are proposed and submits that there would be a cumulative effect on the residents and the landscape which would be significant and permanent. The Babergh District Council LIR [\[REP1-063\]](#) sets out concerns relating to the cumulative effects of the Proposed Development and other projects, in particular the Norwich to Tilbury (N2T) project and pylons, requesting a Landscape and Visual Impact Assessment (LVIA) for these. It also suggests compensation for the residual visual effects in line with NPS EN1 4.1.5.
- 6.3.21. A significant number of IPs made representations referring to cumulative effects of the Proposed Development and other projects including Five Estuaries Offshore Wind Farm (VEOWF), East Anglia Connection Node (EACN) and the Tarchon Interconnector. Many IPs followed a standard form of representation, including Dave Smith [\[RR-032\]](#), Barry Hobbs [\[RR-064\]](#) and John Stacey [\[RR-169\]](#). Other IP representations included T R Fairley Farming Partnership [\[RR-324\]](#), Carolyn Mason [\[RR-047\]](#) and Graham Lucas [\[RR-209\]](#) which asked that the cumulative effects of the Proposed Development with other projects be considered.
- 6.3.22. The Applicant submitted the CEA at D6 [\[REP6-047\]](#). The CEA sets out a summary of the likely significant cumulative effects with other plans and projects. The Applicant considered the potential impacts, the receptors, rationale, cumulative effect and whether additional mitigation would be required. The Applicant concluded that for the majority of the topics, the potential cumulative effects of the Proposed Development with other development would not be significant in EIA terms.
- 6.3.23. The ExA raised questions at ExQ1 Q7.1.1 [\[PD-009\]](#) and ExQ2 Q7.0.6, Q7.0.7, Q7.0.8, Q7.0.9, Q7.0.11 and Q7.0.12 [\[PD-012\]](#) in respect of the cumulative effects of the Proposed Development together with other projects including in relation to the N2T project, of which the East Anglia Connection Node (EACN) forms part and the progress of the discussions between the Applicant and National Grid Electricity Transmission (NGET). The Applicant was also asked to respond to the cumulative assessment of the projects and the proposed Tarchon interconnector.

- 6.3.24. The Applicant's responses to the ExQ1 Q7.1.1 [\[REP2-020\]](#) and ExQ2 Q7.0.9 [\[REP5-054\]](#) explain that it has dealt with the potential cumulative effects of the Proposed Development along with other projects in the CEA of each of the topic chapters and in its response to the actions list for ISH1 and ISH2 [\[REP4-036\]](#). The Applicant's response to ExQ2 Q7.0.7 sets out why it considers the cumulative effects assessment to be robust including in relation to the LVIA and the location and parameters for the EACN substation and its Q7.0.8 response confirms that the cumulative effects of the N2T project, including the EACN and the associated overhead lines, has been included within the CEA.
- 6.3.25. In EXQ2 Q7.0.7 [\[PD-012\]](#), the Applicant was asked to consider the Tarchon project as part of the CEA. The Applicant's response to ExQ2 Q7.0.7 [\[REP5-054\]](#) is that this is dealt with in 3.8.4 of its response to the actions list for ISH1 and ISH2 [\[REP4-036\]](#). The Applicant stated that as there is limited information in respect of the Tarchon project, it is unable to undertake a more detailed cumulative assessment. When the Tarchon project is brought forward, the Applicant states it would need to undertake their own CEA and that assessment would need to consider the cumulative effects of the Proposed Development, VEOWF and the EACN.
- 6.3.26. In the final Statements of Common Ground (SOCG) with the Councils, the Babergh District Council SOCG [\[REP8-075\]](#) indicates that the position on landscape visual impacts and cumulative impacts is not agreed in respect of the cumulative effects with other projects. In the ECC and TDC SOCG [\[REP8-060\]](#), the Councils maintain that the Tarchon interconnector should be included in the CEA and that the Applicant has not fully considered the cumulative effects of the Proposed Development along with VEOWF and the EACN substation.
- 6.3.27. The Commercial Fisheries Working Group SOCG [\[REP8-062\]](#) sets out the position with regard to the CEA for fisheries and this is not agreed. The National Federation of Fishermen's Organisations SOCG [\[REP8-066\]](#) also sets out that they are not content with the methodology that underpins the cumulative impact assessment and are not content with the conclusions assessed.
- 6.3.28. The Closing Statement of ECC [\[REP8-101\]](#), states that the cumulative impact of the EACN, VEOWF and Tarchon interconnector would significantly alter the rural character of Ardeleigh and the neighbouring areas. In addition, the Proposed Development and other projects would cumulatively have a significant residual negative effect on the landscape and visuals. ECC submits that the Proposed Development together with the other Nationally Significant Infrastructure Projects (NSIP) would have a cumulative impact on tourism and if there is a negative impact identified, the Applicant needs to be in a position to provide a package of mitigation measures.
- 6.3.29. The Closing Statement of TDC [\[REP8-092\]](#) states that it still remains deeply concerned about the cumulative impact of the Proposed Development together with the other proposals in the area. It submits that the cumulative visual and functional impact of the schemes would permanently harm the character of the landscape.
- 6.3.30. SCC's Closing Statement [\[REP8-091\]](#) refers to the lack of assessment of the cumulative effects in relation to other projects, most notably the N2T pylons.

EXA'S CONSIDERATIONS

- 6.3.31. During the Examination, the ExA has considered the cumulative effects arising from the Proposed Development together with other plans and projects in the locality,

including VEOWF, the EACN substation and N2T. The ExA is satisfied that the Applicant has appropriately assessed the interrelationship between the Proposed Development and those other projects and their combined cumulative effects.

- 6.3.32. The ExA notes the concerns relating to the cumulative impact assessment of the Tarchon project and is in agreement with the Applicant that as the information available is limited, it would not be possible to set out a clear assessment of the potential cumulative effects and that the assessment would need to be undertaken by the applicants for the Tarchon project as those proposals are developed.
- 6.3.33. The ExA acknowledges that there would be adverse effects arising from the Proposed Development cumulatively with other projects. However, in the light of the ES assessment of those effects, as summarised in the CEA, and the Applicant's responses to our questions, we agree with the Applicant that for the majority of topics the cumulative effects of the Proposed Development taken together with other plans and projects would not be significant. Those matters for which significant cumulative effects have been identified such as loss of agricultural land, some aspects of ecology, landscape and visual, and seascape have been considered in detail in the relevant topic sections of this Report. We have had regard to the proposed mitigation, and any residual adverse harm has been taken into account in the weighting attributed to those matters.

THE SCOPE FOR COORDINATION WITH OTHER PROJECTS

- 6.3.34. In ExQ1 Q7.1.1 [\[PD-009\]](#), the ExA asked about the cumulative impacts of the Proposed Development, VEOWF and EACN and in particular, what discussions have taken place with National Grid Electricity Transmission Plc (NGET) regarding the EACN. The Applicants were also asked to respond on how the cumulative impact of the proposed EACN substation would be assessed and how the overhead lines and pylons associated with the N2T project be assessed. The Applicant responded in [\[REP2-020\]](#) that the discussions with NGET are ongoing in respect of the EACN onshore substation. The Applicant stated that the CEA for each chapter includes reference to the EACN and N2T projects and the cumulative impacts have been assessed in each chapter, together with the cumulative impacts of the overhead lines and pylons.
- 6.3.35. The ECC LIR [\[REP1-065\]](#) notes that whilst the Proposed Development is a stand-alone project, there is a need to ensure that it and the other projects in the area are considered and delivered in a coordinated way. The coordination of the different projects was raised at ISH1 [\[REP4-026\]](#). In the written summary of oral submissions at ISH1 [\[REP4-026\]](#), the Applicant sets out how it has coordinated the Proposed Development with other projects, including the Design Vision [\[APP-234\]](#) and the Coordination Report [\[REP1-004\]](#).
- 6.3.36. The Statement of Common Ground (SoCG) between the Applicant and ECC and TDC [\[REP8-061\]](#) Section 2.11 identifies the inclusion of the Co-ordination Report [\[REP1-004\]](#) as a document to be certified in the DCO Schedule 12 as an outstanding area of disagreement. The Councils submit that the Co-Ordination Report [\[REP1-004\]](#) is the only over-arching document within the submission to insert responsibility upon the Applicant to co-ordinate and collaborate with all the stakeholders, not only between the Applicant, VEOWF and National Grid. They maintain the view that it should be listed as a certified document within the dDCO [\[REP8-005\]](#) to ensure that the Applicant is committed to and continues to work collaboratively with other nearby NSIP applicants and partners, during all stages of the development, from detailed design all the way to decommissioning.

- 6.3.37. The Applicant contends that certifying the Co-ordination Report [\[REP1-004\]](#) is not an appropriate way to secure ongoing collaboration with other projects, and that is best done through the management plans, which are already certified. The Applicant notes that ongoing co-ordination and collaboration with other developments is captured by:
- The dDCO [\[REP8-005\]](#), for example Requirements (R) 19 and 20, which allow for the Proposed Development to be able to construct elements of the onshore project infrastructure in co-ordination with VEOWF;
 - ES Chapter 5 Project Description [\[APP-019\]](#) which sets out the onshore Build Options for the Proposed Development which encapsulate the options to undertake joint construction of the onshore temporary works with VEOWF; and
 - relevant certified documents such as the Design Vision [\[REP5-004\]](#), the Outline Construction Traffic Management Plan [\[REP7-031\]](#), Outline Landscape and Ecological Management Strategy [\[REP7-027\]](#) and others which set out the specific commitments regarding collaboration between the Applicant and other developments during construction.

EXA'S CONSIDERATIONS

- 6.3.38. The ExA notes the concerns raised by the Councils and IP's relating to the co-ordination of the Proposed Development and other projects in the area and the need to ensure that the projects are delivered in a co-ordinated manner. The ExA has had regard to the Co-ordination Report [\[REP1-004\]](#) and the ongoing discussions with NGET to provide the framework for the ongoing co-ordination and collaboration between the schemes. The ExA is satisfied that the Applicant has addressed the co-ordination of the Proposed Development with other projects and that it would continue to co-ordinate and collaborate with other projects as set out in the Co-ordination Report [\[REP1-004\]](#).
- 6.3.39. The ExA has had regard to the Applicant's position that the Co-ordination Report [\[APP-236\]](#) is looking backwards at how the co-ordination undertaken to date has fed into the application and that other documents are more relevant to securing co-ordination going forwards. However, the Co-ordination Report [\[REP1-004\]](#), itself, states that it sets out the framework for future co-ordination and collaboration. It also sets out the specific targeted measures captured within the Tripartite Position Statement (Appendix C) [\[REP1-004\]](#) between the relevant parties and confirms that the Applicant would continue to engage with the relevant parties on opportunities for further co-ordination. The ExA concurs with the Councils that although the other certified documents referred to by the Applicant mention co-ordination with other projects, these are currently scattered in various documents and lack a cohesive approach. The ExA therefore recommends that the Co-ordination Report [\[APP-236\]](#) should be a certified document in Schedule 12 of the dDCO [\[REP8-005\]](#). This would secure that the Applicant continues with the co-ordination of the Proposed Development with other projects and provision for this is included in the rDCO.

WHETHER THERE ARE ANY ADDITIONAL MITIGATION MEASURES TO AVOID, REDUCE OR COMPENSATE FOR ANY CUMULATIVE ADVERSE IMPACTS THAT ARE IDENTIFIED

- 6.3.40. The CEA [\[REP6-047\]](#) sets out the additional mitigation in respect of the cumulative impacts for each topic area. For many of the topics, no requirement for any additional mitigation is identified as the cumulative effects arising are considered unlikely to result in either different or greater effects than the individual effects in isolation. The individual topics in this Report consider the additional mitigation where it is required.

6.3.41. The main areas where the additional mitigation is not agreed are:

- In the ECC Closing Statement [\[REP8-101\]](#) on landscape and visual matters,

“The Councils maintain their position that when judging the North Falls substation in isolation, there would be significant residual negative effects at a site level in terms of landscape and visual issues. These effects are magnified when judged cumulatively with Five Estuaries, Tarchon and the proposed N2T”.

- In the ECC Closing Statement [\[REP8-101\]](#) on tourism,

“Whilst both Councils accept that the impacts on tourism of the NFOW application in isolation is unlikely to be significant in EIA terms, the NFOW project if granted consent will not proceed in isolation. As such the cumulative impacts of all four NSIPs within the Tendring District on Tourism require monitoring and if found to be negative, a mitigation package will be required”.

EXA’S CONSIDERATIONS

6.3.42. The ExA has noted the embedded mitigation proposed by the Applicants and the assessment of the cumulative impacts of the Proposed Development and other projects. The section in this Report relating to landscape and visual matters considers the cumulative impacts on the landscape and the ExA is satisfied that the mitigation proposed by the Applicants would adequately deal with the cumulative effects of the Proposed Development together with the other projects. The ExA agrees with the Applicant that there would not be a requirement for further mitigation, over that which has been proposed for the Proposed Development in isolation.

6.3.43. In terms of tourism, the ExA has noted that substantive evidence of the cumulative effects on tourism has not been provided and the ExA agrees that the mitigation provided by the Applicants to address issues relating to tourism is sufficient. The ExA considers that the mitigation proposed by the Applicants is sufficient to address the issues relating to the cumulation of effects without the need to provide further mitigation.

CONCLUSIONS

6.3.44. The cumulative effects both arising from the Proposed Development and other projects where relevant are considered in the individual sections of this Report. The conclusions made by the ExA in relation to cumulative effects are set out in those sections together with the weight to be ascribed to the conclusions made. On the basis that the conclusions and weightings have been set out in the individual chapters, these will not be repeated in this section.

6.3.45. However, the ExA finds the Applicant’s assessment of the both cumulative and inter-related effects of the Proposed Development to be satisfactory and in accordance with the EIA Regulations and NPS EN-1 which requires an applicant to assess the long term and cumulative adverse impacts as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts.

6.3.46. In terms of co-ordination with other projects, the ExA has had regard to paragraph 3.3.71 of NPS EN-1 which expects a more co-ordinated approach to be delivered where there are multiple windfarms or offshore transmission projects, to reduce the cumulative environmental impacts. In addition, paragraph 4.11.7 of NPS EN-1 encourages co-ordinated applications, which bring economic efficiencies and reduced environmental impact. The ExA considers that the Applicant has

satisfactorily addressed the co-ordination of the Proposed Development with other projects and that it would continue to co-ordinate and collaborate with other projects as set out in the Co-ordination Report [\[REP1-004\]](#). However, we recommend that the Co-ordination Report should be a certified document to ensure that a cohesive approach is taken to the co-ordination of the Proposed Development with other projects and provision for this has been included in Schedule 12 of the rDCO.

- 6.3.47. The ExA has had regard to paragraph 4.3.19 of NPS EN-1 and we have considered how the accumulation of, and interrelationship between effects might affect the environment, economy, or community as a whole. We have taken account of the findings in the individual topics of this Report, and the mitigation measures that would be secured. Given that individual topic sections of the Report have already taken account of cumulative effects in the weight attributed to them in the planning balance, the ExA finds that no further weight should be attributed to cumulative effects. This matter therefore weighs neither for nor against the making of the Order

6.4. DESIGN

INTRODUCTION

- 6.4.1. This section considers the design implications of the Proposed Development and the effects of the design on its setting. It considers whether the Proposed Development meets the criteria for good design. Whilst good design should be achieved through the Proposed Development as a whole, particular attention is paid to the application of good design principles to the onshore elements of the Proposed Development. Consideration has also been given to the offshore elements of the Proposed Development in this section, and further in Sections 4.6 and 5.4.

POLICY BACKGROUND

- 6.4.2. In its consideration of the design of the Proposed Development, the Examining Authority (ExA) has had regard to:
- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Sections 4.7 and 5.10;
 - the National Policy Statement for Renewable Energy (NPS EN-3), in particular Section 2.5;
 - the National Policy Statement for Electricity Networks Infrastructure EN-5 (NPS EN-5) in particular Section 2.4;
 - the Local Impact Reports (LIR), to the extent that it is relevant to the topic;
 - any matters prescribed in relation to the Proposed Development; and
 - any other important and relevant matters including the National Planning Policy Framework 2024 (NPPF) which is a relevant consideration for Nationally Significant Infrastructure Projects (NSIP) development proposals.

THE APPLICATION

- 6.4.3. The Applicant's approach is set out in the Design Vision (DV) [\[REP5-004\]](#), and the Design and Access Statement (DAS) [\[APP-235\]](#) supplemented by:
- Environmental Statement (ES) Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#);
 - ES Appendix 4.1 Site Selection Golden Rules [\[APP-091\]](#);
 - Planning Statement [\[REP8-003\]](#);
 - ES Chapter 5 Project Description [\[APP-019\]](#); and
 - Outline Landscape and Ecological Management Strategy (OLEMS) [\[REP7-027\]](#).

- 6.4.4. The DV [\[REP5-004\]](#) is a document that explains the approach to the design of the Proposed Development's onshore substation (OnSS) and associated infrastructure. Therefore, it describes the engineering, building design and landscape mitigation principles that would be applied during detailed design. The DAS [\[APP-235\]](#) sets out the overall design approach for the wider project including the landfall and onshore cable route, setting out the relevant national and local design policies.
- 6.4.5. The DV was updated during the Examination to incorporate further detail and explanation relating to the design principles and post-consent design process. At Deadline (D)5 the DV was updated to provide additional information relating to the proposed Joint Design Guide (JDG). The Applicants of the Proposed Development and those of Five Estuaries Offshore Windfarm (VEOWF) committed to the JDG to support detailed proposals for two co-located OnSSs, as well as the wider site.
- 6.4.6. Requirement (R)5 of the dDCO provides that Work No.11 (the OnSS) must not commence until written details have been approved by the discharging authority. Elements that would be provided in those details include:
- Layout and scale;
 - proposed finished ground levels;
 - external hard surfacing materials;
 - dimensions, external colour and materials used for the buildings;
 - security fencing, height, colour and materials;
 - vehicular and pedestrian access, parking and circulation areas; and
 - operational external lighting;
- 6.4.7. R5(2) requires details to be in accordance with R6 (detailed design parameters onshore) as well as being substantially in accordance with the DV including its design and consultation process. Details would also be substantially in accordance with any design guide.
- 6.4.8. The OLEMS [\[REP7-027\]](#) sets out the landscape and ecology strategy for the onshore elements of the Proposed Development. It provides general principles and objectives for onshore mitigation, enhancement, monitoring and management of the landscape and ecology. R7 requires that the proposed construction of the OnSS could not commence until a written landscaping scheme and programme in accordance with the OLEMS has been submitted to and approved by the discharging authority in consultation with the relevant statutory nature conservation body.
- 6.4.9. The good design principles described by the Applicant within the DV relate to the onshore elements of the Proposed Development. Consideration of design of the proposed offshore elements, including the proposed offshore wind turbine generators (WTGs) is considered elsewhere in the ES. The Applicant's DAS [\[APP-235\]](#), as well as ES Chapter [\[APP-043\]](#) describe and assess heights and mitigation measures, and the colour of the WTGs in relation to their impact on visual receptors. This section of the Report is therefore primarily concerned with the onshore elements of the Proposed Development's design. Offshore elements of design consideration have been included where the ExA considers them necessary.
- 6.4.10. In summary, the Applicant sets out the scope of the design vision as an iterative process. It identifies how the four design criteria identified within the National Infrastructure Commission's (NIC) "*Design Principles for National Infrastructure*" which are defined as climate, people, places and value, have informed the overarching design principles. It also sets out the design process that would take

place post-consent, and how design principles would ensure that best practice would be carried through. The Applicant intends to use the DV [REP5-004] to facilitate meaningful engagement in the design process. It has already formed part of the public consultation at Preliminary Environmental Information Report (PEIR) stage and has been shared with key stakeholders including a review by the Design Council.

- 6.4.11. The Applicant considers that the design principles identified would evolve, ultimately providing a fixed reference point for design opportunities through the later stages of designing the Proposed Development. These onshore design principles are discussed in more detail, below.

SUBSTATION SITE SELECTION AND DESIGN

- 6.4.12. The Applicant describes details of the site selection process within ES Chapter 4 [APP-018]. The key principles underpinning the area selection are set out in DV Section 5 [REP5-004], and include:

- Site location to be as close as possible to the proposed National Grid connecting substation;
- availability of adjacent land for temporary works and permanent access to the highway network;
- consideration of sites that would have lesser impact to environmental effects locally;
- sites must be technically feasible and economically viable, subject to a constructability review; and
- consider whether co-location with other known developments and/or shared infrastructure is feasible.

ONSHORE DESIGN PRINCIPLES

- 6.4.13. Section 7 of the DV [REP5-004] establishes a set of design principles for the OnSS. It provides principles that could be adopted for components of the OnSS and wider site infrastructure and sets out certain fixed design parameters. Fixed parameters are governed by technical or statutory requirements. These include, for example, the minimum safety distances between electrical equipment set to limit health and safety risks, and the location of the proposed onshore cable route which would be a limiting factor on the location of the OnSS.

- 6.4.14. The 14 design principles are set out in Table 5 of the DV [REP5-004], which is reproduced below in Figure 41. Each design principle is shown in relation to the four NIC design principles of 'Climate', 'People', 'Place' and 'Value'. Within the ES, each principle is then discussed further with considerations of fixed parameters, and how each aligns with the NIC principles.

	NIC Design Principles			
North Falls Design Principles	Climate 	People 	Places 	Value 
Site Layout	X	X	X	X
Built Form	X	X	X	X
Building Materials	X	X	X	X
Colour	X	X	X	X
Site Access		X	X	X
Public Rights of Way		X	X	X
Earthworks and Landform	X	X	X	X
Boundary Treatments	X	X	X	X
Surfacing	X		X	X
Lighting	X	X	X	
Planting	X	X	X	X
Biodiversity Enhancements	X	X	X	X
Lighting	X	X	X	X
Drainage and Water	X	X	X	X

Figure 41 NFOWF Design Principles and relation to NIC Design Principles (Source: Design Vision Table 5 [REP5-004])

- 6.4.15. The DV states that the Applicant has undertaken an extensive design process and consistently sought feedback from stakeholders, including the Design Council as an independent design panel. This would result in a more cohesive and holistic design that includes co-ordination with VEOWF and National Grid with the East Anglian Connection Node (EACN). With VEOWF there would be a co-ordinated landfall location, onshore cable route, and co-located substation works area.
- 6.4.16. Overall, the design principles aim ensure that the detailed design would deliver against the criteria set out and would ensure an appropriate response to the local context.

OUTLINE LANDSCAPE STRATEGY MASTERPLAN

- 6.4.17. The DV [REP5-004] provides an Outline Landscape Strategy which builds up a series of layers exploring the following:
- The existing site context and broader setting;
 - ways in which to improve the baseline condition through enhancement;
 - compensation for features likely to be lost;
 - ways to strengthen green and blue infrastructure; and

- mitigation for adverse landscape and visual effects.

6.4.18. Figure 42 reproduces the Outline Landscape Strategy Masterplan [REP5-004] showing proposed OnSSs for VEOWF and NFOWF, and indicative proposed mitigation.



Figure 42: Outline Landscape Strategy Masterplan (Source: Design Vision Figure 20 [REP5-004])

6.4.19. The Applicant considers that mitigation measures would ensure significant adverse effects are minimised and significant beneficial impacts are maximised. Proposed landscape enhancements include the scope to enhance the landscape character of the site through the planting of new hedgerows and scattered trees. They would provide additional benefits in the form of green infrastructure and habitat connectivity.

6.4.20. The layout is based on the realistic worst-case scenario for the Proposed Development, and the maximum design scenario for VEOWF. The heights of buildings and boundaries shown on the sections reflect the design parameters outlined (see Figure 43, below). Section 5.5 of the DV [REP5-004] provides illustrative indicative site sections and an illustration of the principles of visual mitigation, landscape and ecological enhancement throughout the site. Further visual representations are found within ES Chapter 30 [APP-044]. Illustrative site

sections accompany the masterplan to demonstrate the application of the mitigation and enhancement measures to the site and show how it could be knitted into its immediate context (see Figure 42, above).

Section AA'



Section BB'



Section CC'



Section DD'



Figure 43: Outline Landscape and Ecological Management Strategy and Sections of Proposed OnSS (Source: OLEMS [\[REP7-027\]](#))

OFFSHORE DESIGN PRINCIPLES

- 6.4.21. The Applicant's DAS [APP-235] has regard to guidance produced by the Commission for Architecture and the Built Environment (CABE) and to the Planning Practice Guidance (PPG). It sets out the management and control of the design of different onshore elements at the detailed design stage. This includes the limits of deviation, and specific design parameters. Design principles are not reported within the DAS, however, the DAS confirms the use of a 'Rochdale Envelope' approach. Because not all details of Proposed Development are confirmed, for example the precise dimensions, maximum development parameters are tested to cover all possible future design scenarios.
- 6.4.22. The Applicant's SLVIA (ES Chapter 30 [APP-043]) assesses a scheme of 34 WTGs with maximum tip height of 377m and with a maximum rotor diameter of 337m. Condition 17 of the Deemed Marine License (DML), Schedule 8 of the dDCO [REP8-005] would ensure that the WTGs would be painted light grey (colour code RAL 7035). The effects of the siting and layout of the WTGs are considered as part of the ExA's consideration of seascape and visual effects.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.4.23. In the main, design matters and concerns regarding the design of the Proposed Development relate to the effects on the amenity of the surrounding landscapes. Certain design-specific matters were raised in Councils' Local Impact Reports (LIRs). Essex County Council (ECC) refer to Local Plan policies including Policy SP7 which requires all new development meet high standards of urban and architectural design. ECC set out that design guidance documents should be prepared in consultation with stakeholders [REP1-065]. The Council also refers to other sources that would need to be considered when designing the proposed OnSS, such as the Essex Design Guide and the Local Nature Recovery Strategy (LNRS). Suffolk County Council (SCC) acknowledge that National Grid provides guidelines on siting and design of substations through the Horlock Rules as part of the policy context. Regarding design, SCC's LIR highlights the importance of fully assessing potential visual receptor locations within the National Landscapes (NL) from areas of higher visibility, and to include cumulative effects with other projects into this assessment [REP1-074].
- 6.4.24. The main issues relating to design considered during the Examination were:
- The Applicant's design vision;
 - Design proposals for the OnSS; and
 - Post-consent design process, including the design champion and other stakeholders

THE APPLICANT'S DESIGN VISION

- 6.4.25. The Applicant's design vision was explored during ISH1 [EV5-001] and ExQ1 Q8.1.5 [PD-009] where the ExA asked the Applicant to explain how it considers the design vision takes account of guidance including the Planning Inspectorate's (PINS) Advice "*Nationally Significant Infrastructure Projects: Advice on Good Design*" (available at Gov.uk). The ExA sought to understand how the vision responds positively to climate, people, place and value, and how it would create a sense of place.
- 6.4.26. In its response [REP2-020], the Applicant cites sections 2.1-2.4 of the DV [REP5-004] which sets out the sources of guidance that informed it. It did not include

reference to PINS advice which was published after submission of the application. It has, however, had regard to NPS EN-1 which provides criteria for good design for energy. The Applicant also notes that the NIC “*Design Principles for National Infrastructure*” guides the vision, including how a sense of place could be created that aligns with the receiving landscape setting.

- 6.4.27. The Applicant considers that the site strategy and design principles have been informed by analysis of the underlying landscape characteristics within the immediate site and context. The Applicant concludes that the design principles align with, and reinforce, positive characteristics contributing to the creation of a sense of place [\[REP2-020\]](#).

EXA’S CONSIDERATIONS

- 6.4.28. The ExA considers that the Applicant has justified the site selection process for the proposed OnSS including necessary consideration of the Horlock Rules and the provisions of the NPSs, as well as design and functionality set out in NPS EN-5 Section 2.4. The Applicant has demonstrated the evolution of the design vision through the site selection process and a clear narrative which explains how it has derived design principles through consideration of the local landscape context for the site selected.
- 6.4.29. The design vision evolved throughout the period of the Examination. It was amended to include additional details including considerations when selecting boundary treatments, maintaining optionality for the secure boundary fencing. Beyond this, matters of detail such as colours of the OnSS layout and materials would be contained in detailed guidance set out within the JDG.
- 6.4.30. The ExA has considered the Applicant’s overall process and approach to establishing its design vision including engagement with outside bodies. The ExA considers that for the approach to design, the DV [\[REP5-004\]](#) explains the context for the proposed OnSS. It provides justification for the rationale, including how there would be benefits of the landscaping proposed to mitigate visual impacts.

DESIGN PROPOSALS FOR THE ONSS

- 6.4.31. ECC set out the Councils’ position in its LIR [\[REP1-065\]](#), and how it considers that the proposed OnSS would forever change the local area. It acknowledges that the ExA would only be considering the proposed NFOWF application. However, ECC considers that the physical elements of the Proposed Development, VEOWF, and EACN would overlap adding further complexity to the designs because each would be the subject of a separate Examination.
- 6.4.32. ECC confirmed that discussions have taken place between the Applicant and itself to ensure that the development complies with the Essex Design Guide and other good practice [\[REP1-065\]](#). The ExA, however, had initial concerns regarding the level and detail of design undertaken for the proposed OnSS. At ExQ1 [\[PD-009\]](#) Q8.1.3 and Q8.1.4, the ExA sought responses on the design principles, including how design mitigation measures such as bunds and fences had been addressed. ExQ1 8.1.10 also noted the rural setting of the proposed OnSS and queried how the design of the OnSS could minimise impact on the setting of the surrounding farms.
- 6.4.33. In its responses [\[REP2-020\]](#) the Applicant referred to the detailed process of site selection of the proposed OnSS which was underpinned by a set of Golden Rules [\[APP-091\]](#). These rules use best practice guidance for site selection of electrical transmission infrastructure for offshore wind, including:

- The Crown Estate's Cable Route Protocol (2017);
- the National Grid's Horlock Rules (for the siting of substations) (2006);
- the Holford Rules (for the siting of transmission infrastructure) (1992); and
- NPS EN-1, EN-3 and EN-5.

- 6.4.34. The golden rules set the parameters to inform the selection of a preferred option for the OnSS. Full details of the site selection process for the OnSS are provided in Section 4.8 of ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#).
- 6.4.35. During Open Floor Hearing 1 (OFH1) [\[EV1-002\]](#) the ExA heard from T & R Fairley Farming Partnership (as well as T Fairley and Sons Limited and Robert Fairley Limited) who set out that they would be affected by the proposed cable corridor, haul road and proposed OnSS including at Norman's Farm. Regarding the impact on Norman's Farm, they explained that their preferred form of landscaping would be that proposed for NFOWF, rather than VEOWF. They explained that they consider neither would be an optimal solution, but that overall, the strategy put forward by NFOWF was their preference.
- 6.4.36. The opposite preference was expressed by ECC. At ISH1 [\[EV-001\]](#) ECC re-confirmed its preference for the VEOWF proposed landscaping due to the additional screening ability from distant receptors [\[REP4-046\]](#). The Applicant commented that this disagreement between various parties highlights the need for mitigation measures to strike a balance [\[REP4-026\]](#). To allow a comparison, the ExA requested further information on the VEOWF outline landscape proposals, which are not being considered as part of this Examination. The Applicant submitted the final VEOWF Outline Landscape Environmental Management Plan for Examination into NFOWF Examination [\[REP4-046\]](#).
- 6.4.37. At Compulsory Acquisition Hearing 1 (CAH1) the executors of the late Charles Tabor raised a concern regarding detailed design of access points between the land at Holly Lodge Farm on Bromley Road to the east of the OnSS site, and the land to the west [\[EV7-003\]](#). Since the property has been in the current ownership, they explained that it has always used the land which is subject to potential acquisition. During CAH1 there was a disagreement between parties regarding the minimum size of right of way which would allow them to continue to access the farmland due to the size of farm machinery [\[REP6-093\]](#). The ExA posed questions on this in relation to design at ExQ3 [\[PD-016\]](#) Q8.0.4. The ExA notes that the DV [\[REP5-004\]](#) encourages reinstatement of historic field boundaries and considers that planting along existing layers of natural screening would do more to maintain the agrarian landscape. Q8.0.4(ii) and (iii) sought views on how a 12-metre minimum opening would affect the landscape, and whether this should be addressed in the JDG.
- 6.4.38. The Applicant confirmed its view that an access of 12m along the northern perimeter would effectively sterilise the zone. The minimum widths suggested would mean it could no longer form part of the proposed landscape and ecological mitigation and enhancement measures. It would also create severance between existing and proposed green infrastructure assets [\[REP7-051\]](#).
- 6.4.39. Through ExQ2 [\[PD-013\]](#) Q8.0.3 and Q8.0.4 and ExQ3 [\[PD-016\]](#) the ExA also explored various detailed matters of design including boundary treatment and security. The Applicant confirmed that the DV [\[REP5-004\]](#) was updated to provide further details of the considerations when selecting boundary treatments. It also set out likely boundary treatments, maintaining optionality for the secure boundary fencing, along with hedgerows and other specific boundary types [\[REP5-054\]](#). The

details of the OnSS boundaries would also be subject to detailed guidance set out within the JDG being developed by NFOWF and VEOWF. The JDG would identify the type, height, and colour of fencing and the relationship to other elements such as roads, ditches, planting, built form etc.

EXA'S CONSIDERATIONS

- 6.4.40. The ExA considers the design of the OnSS in the context of landscape mitigation outlined in the OLEMS to which good design principles have been applied [\[REP7-027\]](#). These include the screening of the proposed OnSS and creation of a woodland context for the OnSS and surrounding buildings. Beneficial outcomes include the restoration of historic landscape features such as hedgerows, and improvements to biodiversity. R7 of the dDCO [\[REP8-005\]](#) requires onshore landscape details to be submitted to the discharging authority and approved prior to commencement of the OnSS.
- 6.4.41. Regarding the landscape mitigation set out in the OLEMS [\[REP7-027\]](#), and the equivalent proposals for VEOWF [\[REP4-046\]](#), the ExA notes diverging opinions between parties. The ExA noted these submissions and has had regard to the outline indicative proposals for each. The ExA notes the VEOWF proposals and the level of screening within the proposed planting, as well as differences between it and that for the Proposed Development OnSS.
- 6.4.42. The landscape mitigation plan for the NFOWF Proposed Development is reproduced as Figure 44, below. Proposed screening of OnSS buildings and structures would be a minimum 20m width. The ExA concludes that the indicative scheme would afford an acceptable level of visual screening. This includes from the nearer receptors such as at Norman's Farm which is shown in section DD of Figure 43, where the ExA considers that this landscape screening would secure an acceptable level of screening.

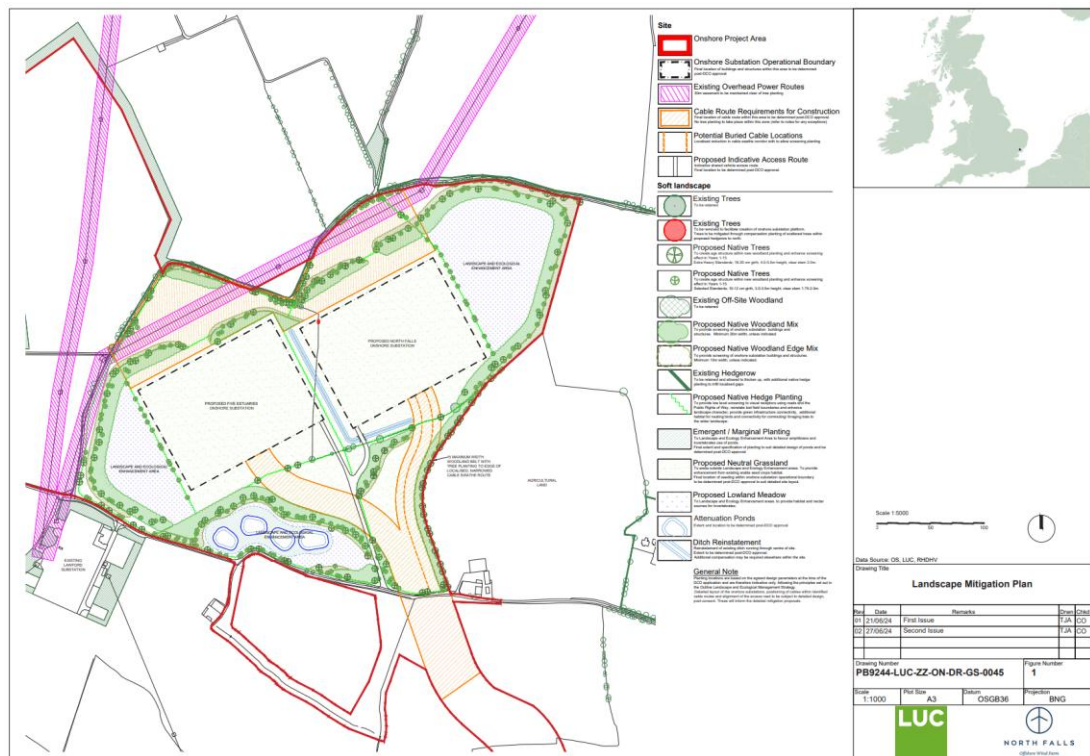


Figure 44: North Falls Outline Landscape Mitigation Plan – Revision 6 (Source: OLEMS [REP7-027])

- 6.4.43. The ExA also agrees with the Applicant that large gaps in hedges at a minimum of 10 or 12 metres would be likely to detract from the proposed landscape and ecological mitigation and enhancement measures. Narrower gaps, where they are required, supplemented with planting at the existing natural screening would do more to maintain the agrarian landscape.
- 6.4.44. For both NFOWF and VEOWF, the indicative landscape plans present two differing options. This results in some uncertainty, and it is disappointing that a joint scheme for consideration could not have been provided earlier. However, the ExA considers that the design of the Proposed Development would also offer a range of benefits and would accord with the principles set out in the DV [REP5-004]. The ExA is satisfied that R5 would adequately secure details of the OnSS to be approved by the discharging authority including layout, scale, external hard surfacing materials, security fencing. These details are required to be substantially in accordance with both the DV [REP5-004] and with any design guide, which includes the JDG. The JDG is appropriate for detailing aspects which would be incorporated into a final joint design. The DV commits to the JDG. It would also provide a mechanism for detailing the visual mitigation in the event that only one of the proposed developments were granted consent.
- 6.4.45. The OLEMS [REP7-027] sets out the landscape and ecology strategy for the onshore elements of the Proposed Development. It provides general principles and objectives for onshore mitigation, enhancement, monitoring and management of the landscape and ecology. Overall, the ExA is confident that a coordinated approach to the OnSS, would be achieved at the detailed design stage because ECC would be involved as discharging authority for both proposals if both schemes were to be consented.

POST-CONSENT DESIGN PROCESS, INCLUDING THE DESIGN CHAMPION AND OTHER STAKEHOLDERS

- 6.4.46. ECC and TDC's LIR [\[REP1-065\]](#) makes reference to Policy SP7 of the Tendring Local Plan which requires that all new development must meet high standards of urban and architectural design. The councils sought reassurance that all design would meet high standards and as part of this consideration, the ExA wanted to further explore the design champion appointment. At ExQ1 Q8.1.2 [\[PD-009\]](#) and ISH1 the ExA requested further clarity about the role of the design champion [\[EV5-003\]](#).
- 6.4.47. The Applicant confirmed that a design champion, whom they would appoint, would retain overarching responsibility for design quality [\[REP2-020\]](#) [\[EV5-003\]](#). The design champion would uphold the design vision principles, guide the production of the JDG, and ensure that design quality cascades through to the detailed design of the OnSS. Updates were also provided in the Applicant's response to ExQ2 [\[PD-013\]](#) Q8.0.2 [\[REP5-054\]](#). At D7, in response to ExQ3 [\[PD-016\]](#) the Applicant updated that good progress had been made. It stated that appointments, including the design champion, would be in place with sufficient time to assist with the discharging of Requirements of the DCO [\[REP7-060\]](#).
- 6.4.48. Regarding co-ordination between VEOWF and NFOWF proposed OnSSs, various IPs, including ECC and TDC, expressed concerns. The councils' view is that designs to screen the proposed OnSS should be considered in conjunction with the proposed VEOWF OnSS. Design considerations would be needed to include the type, heights and informed positioning of appropriate vegetation, to soften harsh visual interruption of large-scale national energy infrastructure [\[REP1-065\]](#). Through ExQ2 [\[PD-013\]](#) Q8.0.1 the ExA sought to understand how a design review panel would include ECC's landscape team, as well as other stakeholders, and to what extent this would help deliver a coordinated approach. ECC and TDC had stated that the coordinated approach should be clarified and made binding through the DCO [\[REP5-091\]](#).
- 6.4.49. The Applicant confirmed its view that R5 of the draft DCO requires written details of the construction of OnSS. These written details must be substantially in accordance with the design vision which would be a certified document in the draft DCO (Schedule 12, Part 3). The Applicant's view therefore, is that this approach would be sufficient to ensure coordination. It considers that the approach allows for a combination of scenarios where one, or other, proposal does not go ahead, or if they were constructed at different timelines.
- 6.4.50. ExQ2 [\[PD-013\]](#) Q8.0.2 was directed to the Applicant and local authorities to confirm whether or not parties have access to sufficient design expertise to ensure coordinated good design. The Applicant responded that the design champion would be appointed by the Applicant to provide technical input to the discharging process [\[REP5-054\]](#). ECC and TDC encouraged the Applicant to involve the Essex Quality Review Panel (EQRP). As an organisation providing local design expertise, the EQRP is considered by the Councils to be an appropriate way to offer such advice [\[REP5-091\]](#).
- 6.4.51. At D7 the Applicant updated on progress of the EQRP involvement and advised that a site visit took place with the EQRP followed by a review session of the first draft of the JDG [\[REP7-051\]](#). Representatives from ECC were also in attendance. Topic areas discussed included the environmental colour assessment, layout and materials guidance, and the EQRP would be reporting to ECC.

- 6.4.52. The ExA also specifically sought to understand how other stakeholders could contribute to the design process. The Applicant updated the DV at D5 [\[REP5-054\]](#) confirming stakeholder engagement in the post-consent stages. In response to ExQ3 Q8.0.1, the Applicant set out that dialogue between it and a working group comprising ECC and TDC was ongoing and had enabled an agreed approach to community engagement. This dialogue resulted in refinement of the engagement strategy which identifies two phases of engagement taking account of various Parish Council meeting dates [\[REP7-051\]](#).
- 6.4.53. At ExQ3 [\[PD-016\]](#) Q8.0.4 the ExA requested an update and timeline for the JDG as it would not be submitted into the Examination due to timescales and the timing of its conception. At D7, the Applicant confirmed that production of the JDG was underway. The Applicant explained that the JDG programme includes two rounds of stakeholder engagement, with finalisation expected in December 2025 [\[REP7-051\]](#).

EXA'S CONSIDERATIONS

- 6.4.54. Paragraph 4.7.5 of NPS EN-1 states that to ensure good design is embedded within the project development, a project board level design champion could be appointed. It also suggests that a representative design panel could be used to maximise the value provided by the infrastructure and that design principles should be established from the outset of the project to guide the development from conception to operation. Applicants should consider how their design principles can be applied. The Applicant's responses to ExQ3 [\[PD-017\]](#) Q8.0.3 at D7 (15 July 2025) confirmed that a design champion would be appointed within the next 4 to 6 weeks, and that a candidate had been identified [\[REP7-051\]](#).
- 6.4.55. The Applicant's explicit commitment in its DV to a design champion and internal design review panel is noted [\[REP5-004\]](#) as well as the fact that detailed design requirements would be secured by R5 of the DCO. This provides sufficient evidence that the ExA considers that the design champion would be appropriately qualified and appointed sufficiently early in the process to be embedded in it.
- 6.4.56. NPS EN-1, Paragraph 4.7.8 also states that applicants should consider taking independent professional advice on the design aspects of a proposal and also consider any design guidance developed by the local planning authority. The ExA is reassured that a suitably-qualified Design Review Panel comprising representatives of NFOWF and VEOWF would be appointed at commencement of the JDG. This internal panel would provide an informed review and guidance on design, based on in-depth knowledge of the technical requirements, the procurement and delivery process [\[REP2-020\]](#). Local authorities would also form part of a wider review team, as identified in the DV [\[REP5-004\]](#). ECC confirmed that expertise would also be recruited through the EQRP to provide engagement with the proposed project Design Review Panel. The DV confirms at para 1.5.2 that the JDG would be subject to review by the appointed design champion, external stakeholders and including the EQRP. Whilst the internal design review panel and EQRP are separate expert panels, the ExA is satisfied that the post-consent design process would allow sufficient engagement with the EQRP as set out in the DV.
- 6.4.57. The ExA agrees that there would be opportunity for coordination of design and stakeholder input, as set out in the Applicant's DV [\[REP5-004\]](#). R5 of the dDCO provides that the submitted details should be substantially in accordance with both the design vision and any design guide. The ExA considers that the JDG falls within the definition of a design guide and is referred to in the DV. Therefore, R5 would secure accordance with the DV, as well as any consultation outlined within the DV

and any design guides. The ExA therefore considers that the DV contains adequate information to satisfy it that the correct process would be secured post consent. The details within it would form part of the consideration by the local authorities when details relating to R5 are submitted.

- 6.4.58. In this respect, the ExA considers that the Proposed Development would be in accordance with NPS EN-3, paragraph 2.5.2. Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage.

CONCLUSIONS

- 6.4.59. Whilst the visual appearance of a building or infrastructure installation is often considered to be the most important aspect of good design, NPS EN-1 paragraph 4.7.1 states that functionality – including fitness for purpose and sustainability – is equally as important. The ExA considers that the Applicant's design principles allow for technical considerations and equipment choices to be finalised during detailed design. This demonstrates that the design process shows that the functionality and technical suitability has been considered throughout the design process. The Proposed Development would contribute to low-carbon electricity and reduction of greenhouse gas emissions which, in accordance with NPS EN-1, can be considered as contributing to sustainability. The ExA is therefore satisfied that the Proposed Development would be both sustainable and fit for purpose.
- 6.4.60. With regards to the purpose of good design principles summarised in NPS EN-1, paragraph 4.7.2 the Applicant demonstrates that it has considered the local landscape character. It has followed its golden rules for site selection and subsequently has outlined proposed landscaping appropriate to the surrounding agricultural landscape.
- 6.4.61. Regarding the proposed OnSS, the Applicant's design vision provides consideration of visual design through its design principles. As discussed above, without further detail that would be contained in the JDG at the post-consent stage, the ExA cannot conclude on the aesthetic detail of design at this stage. Notwithstanding this, the ExA does consider that the DV and principles therein provide sufficient detail such that the provisions of NPS EN-1 paragraphs 4.7.2, 5.10.29 and 5.10.30 are met. These would be secured in the following Requirements:
- R5 Substation works;
 - R6 Detailed design parameters onshore; and
 - R7 Provision of landscaping.
- 6.4.62. The ExA considers that the following aspects are in accordance with paragraphs NPS EN-1 4.7.5 to 4.7.9:
- The appointment of the Applicant's project design panel;
 - the appointment of a design champion;
 - consultation and engagement with EQRP and local authorities; and
 - the explanation of the siting process.
- 6.4.63. Local landform and existing vegetation has been considered within the DV and the OLEMS [\[REP7-027\]](#). However, the detail regarding the proposed OnSS is not contained in detail within that document, but the ExA is reassured that R7 ensures

that the OnSS would not commence until details have been submitted to the discharging authority.

6.4.64. On the basis that details to be submitted to discharge R5 of the dDCO would need to be substantially in accordance with the JDG and the DV [\[REP5-004\]](#), together with the OLEMS secured by R7, the ExA is satisfied that accordance with NPS EN-1, paragraphs 4.7.6 and 4.7.7, NPS EN-3 Section 2.5, and NPS EN-5 Section 2.4 has been demonstrated.

6.4.65. Overall, the ExA considers that the Applicant has demonstrated how the design process was conducted, how the proposed design has evolved, and how it has integrated good design principles into the overarching principles of the DV. In this respect, the Proposed Development accords with the good design provisions set out in NPS EN1, NPS EN-3 and NPS EN-5. This provides a narrative that explains how the approach to design has evolved, the reasons for the choices that have been, or will be, made, an explanation of the beneficial outcomes the project will achieve and how they would be secured, and demonstrates principles within the PINS Nationally Significant Infrastructure Projects: Advice on Good Design.

6.4.66. The ExA concludes that the Proposed Development would be compliant with relevant policy and guidance relating to design and therefore considers that there are no matters relating to design which would weigh for or against the Order being made.

6.5. HISTORIC ENVIRONMENT AND ARCHAEOLOGY

INTRODUCTION

6.5.1. This section considers the effects of the Proposed Development on onshore and offshore historic environment and archaeology.

POLICY BACKGROUND

6.5.2. In its consideration of historic environment effects below, the ExA has had regard to:

- The Overarching National Policy Statement (NPS) for Energy EN-1; (NPS EN-1) in particular Section 5.9;
- the NPS for Renewable Energy EN-3; (NPS EN-3), in particular Section 2.8;
- the Infrastructure Planning (Decisions) Regulations 2010;
- the relevant policies of the UK Marine Policy Statement (MPS);
- the Local Impact Reports (LIRs), to the extent that they are relevant to the topic;
- any matters prescribed in relation to the development; and
- any other important and relevant matters, including relevant policies in the NPPF and PPG.

THE APPLICATION

6.5.3. The Applicant's assessment of the potential impact of the Proposed Development on the historic environment and archaeology was presented in:

- Environmental Statement (ES) Chapter 16 Offshore and Intertidal Archaeology and Cultural Heritage [\[APP-030\]](#) and associated figures and supplementary appendices including:
 - ES Chapter 16 Figures [\[APP-061\]](#);

- ES Appendix 16.1 Archaeological Assessment of Geophysical Data [\[APP-109\]](#);
- Historic Environment Plan Onshore [\[APP-209\]](#); and
- Outline Offshore Written Scheme of Investigation WSI [\[APP-246\]](#) updated as [\[REP3-015\]](#)
- ES Chapter 25 Onshore Archaeology and Cultural Heritage [\[APP-039\]](#) and associated figures and supplementary appendices including:
 - ES Chapter 25 Figures [\[APP-072\]](#);
 - ES Appendix 25.1 Cable Landfall Search Area Historic Environment DBA [\[APP-144\]](#);
 - ES Appendix 25.2 Onshore Cable Corridors and Onshore Substation Zone Historic Environment DBA Parts 1 [\[APP-145\]](#) and Part 2 [\[APP-146\]](#);
 - ES Appendix 25.3 Onshore Infrastructure Settings Assessment Parts 1 [\[APP-148\]](#) and 2 [\[APP-149\]](#);
 - ES Appendix 25.4 Offshore Infrastructure Setting Assessment [\[APP-150\]](#);
 - ES Appendix 25.5 Heritage Walkover Survey [\[APP-151\]](#);
 - ES Appendix 25.6 Geoarchaeological DBA [\[APP-152\]](#);
 - ES Appendix 25.7 Onshore Historic Environment Gazetteers [\[APP-153\]](#);
 - ES Appendix 25.8 Archaeological Geophysical Survey Report Parts 1 [\[APP-154\]](#) and 2 [\[APP-155\]](#);
 - ES Appendix 25.9 Five Estuaries Archaeological and Geoarchaeological Monitoring of Ground Investigation Works Report [\[APP-156\]](#);
 - ES Appendix 25.10 Onshore Substation Area Archaeological Evaluation Report Phase 1 [\[APP-157\]](#) and Phase 2 [\[APP-158\]](#);
 - ES Appendix 25.12 Onshore Substation Area Palaeolithic Evaluation Report Phase 2 [\[APP-159\]](#);
 - Historic Environment Plan Onshore [\[APP-208\]](#); and
 - Outline Onshore Written Scheme of Investigation [\[APP-247\]](#), updated at Deadline (D) 5 in 3 parts as [\[REP5-016\]](#) [\[REP5-018\]](#) [\[REP5-020\]](#).

BASELINE - OFFSHORE

6.5.4. ES Chapter 16 [\[APP-030\]](#) sets out that, for offshore and intertidal archaeology and cultural heritage:

- The existing environment within the study area (defined as the footprint of the proposed offshore project area) covers seabed prehistory, maritime archaeology, aviation archaeology, historic seascape character, and buried archaeology (see figure 45 below);
- there are no known *in situ* seabed prehistoric sites within the study area. A number of finds of prehistoric material have been reported from the study area and the immediate vicinity of the offshore cable corridor;
- there would be potential for numerous channel deposits to contain archaeological material, and paleoenvironmental material. Well-preserved paleogeographic features were identified in the array area and the offshore cable corridor; and
- there are no known maritime and aviation archaeological sites within the study area that are subject to statutory protection. There are three modern wrecks within the proposed offshore project area. None are of archaeological interest due to their age.

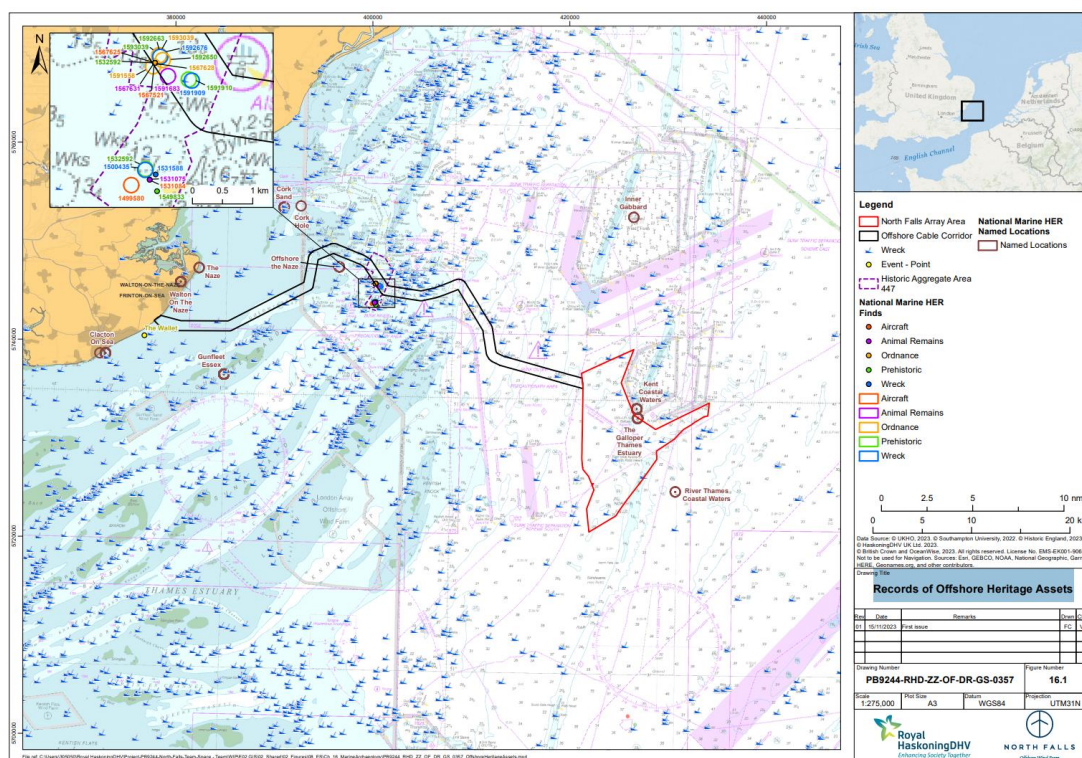


Figure 45: Records of Offshore Heritage Assets (Source: ES Figure 16.1 [APP-030])

6.5.5. Additionally, geophysical data demonstrates the presence of 1,514 seabed features of archaeological or potential archaeological interest reflecting historic maritime activity in the study area. The approach to the Thames has been a busy area for shipping, with significant military activity in the twentieth century.

6.5.6. ES Chapter 16 [APP-030] reports that the potential of undiscovered *in situ* archaeological sites within the intertidal zone is expected to be very low and there are no known extant heritage assets present within this zone. The use of horizontal directional drilling (HDD) to install the cable beneath the intertidal zone also reduces potential for buried remains and other interactions with heritage assets. Coastal erosion and coastal management regimes from the 18th century onwards have further reduced potential.

OFFSHORE MITIGATION

6.5.7. Proposed offshore embedded mitigation measures are set out in Table 16.3 of ES Chapter 16 [APP-030]. Mitigation includes the use of Archaeological Exclusion Zones (AEZ) around known wreck sites, marine geophysical anomalies of archaeological interest recorded in geophysical data and previously recorded sites that have not been seen in geophysical data.

6.5.8. To mitigate the impact on potential heritage assets the Applicant proposes micro-siting in order to preserve assets *in situ* at previously recorded sites where no prior geophysical data has been collected. Where avoidance by micro-siting could not be achieved, further investigation and mitigation measures would be introduced.

6.5.9. Details of the mitigation delivery approach and investigation into the final design are provided in an offshore Outline Written Scheme of Investigation (OWSI) [REP3-015]. The offshore OWSI would be secured by the Deemed Marine Licence (DML) within Schedule 8, Part 2 of the dDCO [REP8-005]. Sections 21(2) and 21(3)

address pre-construction plans and documentation, securing that the licensed activities or any relevant stage must not commence unless a marine written scheme of archaeological investigation has been submitted to and approved by the Marine Management Organisation (MMO) in writing. This would be required no later than six months prior to commencement in accordance with the offshore OWSI and industry good practice, and in consultation with the Historic England (HE).

ASSESSMENT OF OFFSHORE EFFECTS

- 6.5.10. ES Chapter 16 [\[APP-030\]](#) reports effects of the Proposed Development on offshore historic assets structured against 4 impacts, by phase:
- Impact 1: Direct (physical) impact to known heritage assets;
 - Impact 2: Direct (physical) impact to potential heritage assets;
 - Impact 3: Indirect impact to heritage assets from changes to physical processes; and
 - Impact 4: Changes to the setting of heritage assets.
- 6.5.11. The ES concludes that following the implementation of mitigation measures, the Proposed Development would be predicted to have no greater than minor adverse (not significant in EIA terms) effects on offshore and intertidal archaeology and cultural heritage during all phases.
- 6.5.12. During construction ES Chapter 16 concludes that there would be no residual effects on known heritage assets with respect to Impact 1, 3 or 4. As it is not possible to avoid undiscovered heritage assets, the ES concludes that with mitigation measures tailored to the significance of a discovery, the residual effects would be no higher than minor adverse significance.
- 6.5.13. During the operational phase, there would be no pathway for impacts to known heritage assets as they would be avoided through the retention of AEZs.
- 6.5.14. Regarding Impact 2 (Direct physical impact to potential heritage assets) ES Chapter 16 recognises these would be unlikely to occur as a result of intrusive maintenance because any impacts would already have occurred during construction. Additional mitigation would further reduce the potential for unintended impacts during operation. Any further features of archaeological interest identified would be subject to the same mitigation as described for known heritage assets. The ongoing implementation of a formal Protocol for Archaeological Discoveries (PAD) throughout the operational phase would allow for discoveries to be reported, advice to be provided and any further mitigation to be considered on a case-by-case basis. The PAD approach to the implementation of mitigation measures would be secured by the offshore OWSI. The implementation of appropriate additional mitigation measures means that the residual effects would be no higher than minor adverse significance.
- 6.5.15. For operational impacts relating to changes to the setting of heritage assets (impact 4), ES Chapter 16 concludes that the presence of permanent visible offshore infrastructure could have an ongoing impact on the setting of coastal heritage assets for the duration of the phase. Due to the distances between the assets and the Proposed Development, the significance of magnitude of impact would be low adverse. ES Appendix 25.4 [\[APP-150\]](#) provides a detailed setting assessment which concludes that two assets (Bawdsey Manor Registered Park and Gardens and Bawdsey Manor Pulhamite Cliffs) would be subject to effects of low adverse significance.

- 6.5.16. During the decommissioning phase, ES Chapter 16 recognises that direct impacts to potential heritage assets (impact 2) would be unlikely to occur as any impacts would already have occurred during construction. Additional mitigation through archaeological assessment of further geophysical data would reduce the potential for unintended impacts during this phase, including the implementation of a PAD. These mitigations would mean that the residual effects would be no higher than minor adverse significance.
- 6.5.17. There would be potential for cumulative effects to occur with other proposed or operational offshore windfarms (OWFs). Taking into account mitigation, the ES does not anticipate that cumulative effects would be likely to be significant in EIA terms. The Cumulative Effects Assessment concludes that potential impacts on a regional level could be mitigated by contribution to regional research initiatives and post-consent investigations in liaison with key stakeholders.
- 6.5.18. ES Chapter 16 [\[APP-030\]](#) identifies a number of potentially beneficial effects in relation to cumulative impacts, through the collation of mappable data for other proposals, and academic research where available. Table 16.27 summarises potential impacts on offshore archaeology and cultural heritage. This concludes that the residual effect would be up to minor adverse which is not significant in EIA terms.

BASELINE - ONSHORE

- 6.5.19. ES Chapter 25 [\[APP-039\]](#) sets out the baseline for assessment of onshore archaeology and cultural heritage. Data was collected from surveys including a historic environment walkover survey, desk-based assessment (including geoarchaeological desk-based assessment), archaeological geophysical survey, and archaeological evaluation trenching at the proposed onshore substation (OnSS) works area. Other data sources include the National Heritage List for England (NHLE) and the Essex Historic Environment Record (EHRC).
- 6.5.20. The ES defines two study areas for onshore archaeology and cultural heritage. These areas distinguish between designated and non-designated heritage assets, covering the project area for the proposed onshore cable route, and the area surrounding the proposed OnSS. Figure 46, below illustrates the study area at the proposed OnSS site, and the corridor route as an inset. The defined area comprises:
- Non-Designated Heritage Assets Study Area – known non-designated heritage assets, potential buried archaeological remains and previously unrecorded above ground heritage assets within 500m of the onshore project area; and
 - Designated Heritage Assets Study Area – designated heritage assets within 1km of the onshore project area and 5km of the OnSS, to inform a setting assessment of heritage assets identified as potentially being affected by the development through a change in their setting.

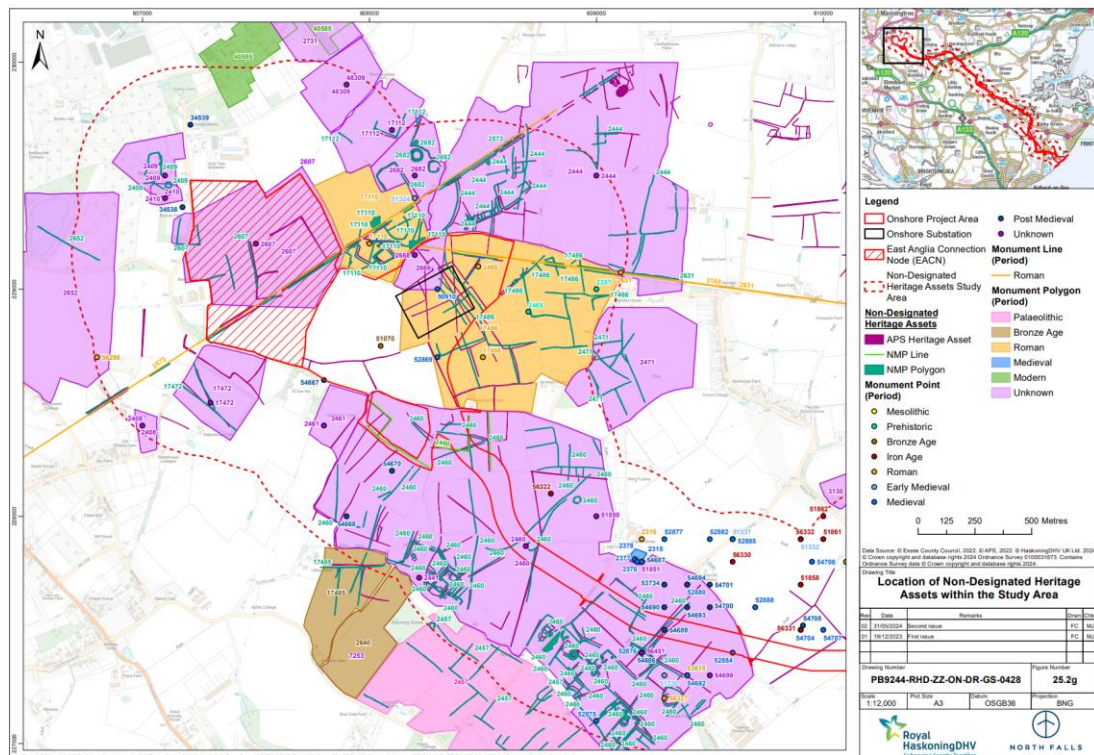


Figure 46: Historic Environment Study Area shown within inset (Source: Figure 25.2g – Location of Non-Designated Heritage Assets within Study Area [APP-072])

- 6.5.21. Within the designated heritage assets study area there are 449 designated heritage assets comprising:
- 7 Scheduled Monuments;
 - 2 Registered Parks and Gardens;
 - 432 Listed Buildings; and
 - 8 Conservation Areas.
- 6.5.22. Details of the designated assets within the designated heritage assets study area, are presented in ES Appendix 25.7 [APP-153]. Great Holland Conservation Area would be the only designated asset located within the onshore project area. Operation and maintenance access routes that would service the proposed landfall within the proposed onshore project area also extend into the southern part of Frinton Conservation Area. No other designated heritage assets would be located within the onshore project area.
- 6.5.23. The ES identifies 240 non-designated heritage assets within the non-designated heritage assets study area. Those which may potentially be subject to direct physical impacts are confined to the onshore project area, and would include potential subsurface archaeological remains and above ground heritage assets.
- 6.5.24. The Applicant states that evaluation trenching at the OnSS works area identified a number of archaeological features attributed to the Later Prehistoric period. One intense period of post-medieval activity was also recorded. The geoarchaeological evaluation identified deposits on site as being of generally low importance. An identified gully in the geoarchaeological evaluation may be of medium importance at the OnSS works area.

ONSHORE MITIGATION

- 6.5.25. ES Chapter 25, Table 25.3 sets out the mitigation measures embedded within the design of the Proposed Development. This includes mitigation by site selection, which is described in detail in ES Chapter 4 Site Selection, and avoidance of direct physical impacts on designated heritage assets, as well as all known non-designated heritage assets [\[APP-018\]](#).
- 6.5.26. At the OnSS, the ES considers that mitigation of impact on heritage assets would also be achieved through design: overall height and massing of associated structures would be reduced as far as practicable. Landscape proposals, in accordance with the outline Landscape and Ecology Mitigation Strategy (OLEMS) include measures for biodiversity enhancement during the operational phase of the OnSS. The OLEMS would be secured by Requirement (R)7 of the DCO. The strategy sets out landscape screening of the OnSS through hedgerow and woodland planting to help to integrate the onshore substation into the existing landscape of arable fields, boundary trees and hedgerows. Further detail on the landscape mitigation is set out in ES Chapter 30 Landscape and Visual Impact Assessment (LVIA) [\[APP-044\]](#).
- 6.5.27. ES Chapter 25 [\[APP-039\]](#) also sets out that an onshore OWSI would provide a strategy to undertake additional surveys and evaluation, post-consent. This includes a range of mitigation options and responses for various scenarios and has been prepared in accordance with industry good practice guidance. It would form the basis of the Written Scheme of Investigation following consent and would be secured by DCO R11.

ASSESSMENT OF ONSHORE EFFECTS

- 6.5.28. Impacts assessed for the construction and decommissioning phases include:
- Direct physical impact on (permanent change to) designated heritage assets;
 - direct physical impact on (permanent change to) non-designated heritage assets (including buried archaeological remains, historic earthworks and structures);
 - indirect physical impact on (permanent change to) designated and non-designated heritage assets; and
 - temporary change to the setting of designated and non-designated heritage assets which could affect their heritage significance.
- 6.5.29. For the operation and maintenance phase, impacts assessed include permanent change to the setting of designated and non-designated heritage assets which could affect their heritage significance. Table 8 below summarises the assessment of significance against 8 potential impacts. The Applicant concludes that the impacts identified from the Proposed Development on these heritage assets would give rise to a limited magnitude of less than substantial harm. The residual effects on non-designated heritage assets would no worse than minor adverse which is not significant in EIA terms.

Table 8: Summary of ES Chapter 25, Section 25.6 Assessment of significance pp134-168 (Source ES Chapter 25 [\[APP-039\]](#))

Potential impact	Designated heritage assets	Non-designated heritage assets
Impact 1: Direct physical impact on (permanent change to)	No direct physical impacts (and no likely significant effects) are anticipated to occur as there	

Potential impact	Designated heritage assets	Non-designated heritage assets
designated heritage assets.	would be no change to receptors. This includes the parts of Frinton Conservation Area and the eastern section of Church Lane of Great Holland Conservation Area where access tracks would be used for operation and maintenance with no physical works proposed.	
Impact 2: direct physical impact on (permanent change to) non-designated heritage assets (including buried archaeological remains, historic earthworks and structures)		The specific receptors, magnitude of impact and significance of effect are set out in Table 25.14 and Table 25.15 of ES Chapter 25 [APP-039], and are prior to site specific mitigation, based upon the realistic worst case. The impact on 2 Geoarchaeological Character Zones (GCZs) : GCZ1 and GCZ4 are reported as major adverse effects. The remaining 11 are reported as moderate adverse. Table 25.15 of ES Chapter 30 [APP-039] identifies 58 below ground archaeological assets, of which 31 would be up to major adversely effected. Following mitigation, residual effect on identified non-designated heritage assets during construction is considered to be no worse than minor adverse.
Impact 3 and 4: indirect physical impact on (permanent change to) designated and non-	The Applicant identifies no designated heritage assets that would be subject to an indirect physical effect.	The residual effect is reported as negligible to minor adverse.

Potential impact	Designated heritage assets	Non-designated heritage assets
designated heritage assets.		Table 25.9 of ES Chapter 25 [APP-039] concludes that, without mitigation, impacts to non-designated assets from changes to hydrological processes would likely be minor adverse. This is not significant in EIA terms. Should impacts to non-designated heritage assets occur from vibration effects, the significance of effect would be minor adverse (not significant in EIA terms) as a worst-case scenario. Some non-designated assets of low importance would suffer only a negligible effect.
Impact 5 and 6: temporary change to the setting of heritage assets (both designated and non-designated) which could affect their heritage significance	Without mitigation ES Chapter 25 concludes that the effects would be of minor adverse significance, as a worst-case scenario. Following the construction phase, the onshore cable route would be fully reinstated to its previous condition. No above-ground infrastructure would remain, other than manholes for link boxes located up to one every (approximately) 500m along the onshore cable route. The ES concludes that the reinstatement of the landscape would reverse the construction period effects. Therefore, there would be no lasting effects to the heritage assets.	No non-designated heritage assets were identified as being susceptible to a temporary change to their setting.
Impact 7 and 8: permanent change to the setting of heritage	ES Appendix 25.3 [APP-148] [APP-149] and ES Appendix 25.4 [APP-150] provide a	No non-designated heritage assets were identified.

Potential impact	Designated heritage assets	Non-designated heritage assets
assets (both designated and non-designated) which could affect their heritage significance.	settings assessment for proposed onshore and offshore infrastructure. ES Appendix 25.3 concludes that the presence of the OnSS would not detract from any of the heritage assets' archaeological, historic, and architectural interest. The detailed setting assessment provided in ES Appendix 25.4 concludes that two assets would be subject to any impacts: Bawdsey Manor Registered Park and Gardens and Bawdsey Manor Pulhamite Cliffs. Without mitigation, should impacts occur from changes to setting from the offshore infrastructure, these have the potential to be of minor adverse significance, and therefore not significant in EIA terms, as a worst-case scenario. The Applicant's assessment notes that the Proposed Development would be approximately 40km to the southeast of these heritage assets. The proposed WTGs in views out to sea would be apparent on days with excellent visibility. It therefore concludes that appreciation of the designated view from Pulhamite Cliffs and Bawdsey Manor Park would be affected to a limited degree. The Applicant concludes that the impacts identified from the Proposed Development on these heritage assets would give rise to a limited magnitude of less than substantial harm.	

Potential impact	Designated heritage assets	Non-designated heritage assets
DECOMMISSIONING		
During the decommissioning stage, changes to settings may occur as a result of visual and audible impacts associated. The Applicant considers any changes to the setting of heritage assets to be temporary in duration. As such, the worst-case scenario as outlined for the construction phase in relation to temporary changes to the setting of heritage assets is unlikely to be exceeded as a result of decommissioning activities.		

- 6.5.41. The Applicant's Addendum to ES Chapter 25 [REP4-035] submitted during the Examination also concludes that a low adverse magnitude of impact to Jennings Farmhouse - a grade II listed building, which is an asset of medium heritage importance, would result in a minor adverse effect. This is not significant in EIA terms and the Applicant's assessment concludes that it would equate to less than substantial harm at the lower end of the scale [REP4-035].

CUMULATIVE EFFECTS

- 6.5.42. Table 25.16 of ES Chapter 25 [APP-039] identifies which residual effects assessed for the Proposed Development have the potential to result in a cumulative effect with other plans, projects and activities. Only potential effects assessed as negligible adverse or above have been included. Those assessed as 'no impact' were not further assessed as there would be no potential for them to contribute to a cumulative impact. Table 25.16 of ES Chapter 25 concludes that in relation to onshore archaeology and cultural heritage, potential cumulative impacts would be likely to arise where:
- The construction phase for two or more projects overlap; or
 - where the extent of the archaeological resource intersects two or more projects; or
 - where intervisibility is shared between a heritage asset and two or more developments, should construction and operation run simultaneously.
- 6.5.43. A realistic worst-case scenario for likely cumulative effects has been scoped into the ES as shown in Table 25.19 of ES Chapter 25. It is based on there being a multi-year gap between constructions activities, without re-use of temporary works which would be likely to cause additional impacts to below and above ground heritage assets.
- 6.5.44. With mitigation measures in place, direct and indirect physical cumulative effects during construction are anticipated to be non-significant in EIA terms. No likely significant cumulative effects on heritage setting during construction are predicted over and above the effects of the Proposed Development. In consideration of the construction period, cumulative effects on heritage setting are anticipated to be non-significant in EIA terms.
- 6.5.45. Cumulative impacts may arise where structures within the proposed OnSS works area would be partly visible alongside Five Estuaries Offshore Windfarm (VEOWF) infrastructure from selected heritage assets. These comprise:

- Non-designated henge site (EHER 2460);
- Jennings Farmhouse (NHLE 1111459); and
- Church of St Mary (NHLE 1337175).

- 6.5.46. ES Chapter 25 concludes that the change in view of these assets is not considered to impact heritage significance. Therefore, the ES does not anticipate that these would contribute to any cumulative impact arising from the presence of VEOWF infrastructure. Overall, it would not be expected that any cumulative effects during the operation of the Proposed Development and VEOWF would be significant in EIA terms.
- 6.5.47. Onshore decommissioning would include removal or reuse of the OnSS with cables and jointing bays left *in situ* or removed. The ES considers that any potential damage to designated and non-designated heritage assets would have already occurred as part of the construction phase. Changes to setting may arise as a result of visual and audible impacts associated with decommissioning activities. However, these changes to the setting of heritage assets are considered to be temporary in duration. As such, the ES considers that decommissioning would not exceed the impact of the worst-case scenario as outlined for the construction phase.
- 6.5.48. ES Chapter 25 Table 25.24 considers the impacts relative to each development phase to assess multiple construction impacts affecting the same receptor and any resulting increase in the significance of effect upon that receptor. Following this, a lifetime assessment is undertaken which considers the potential for impacts to affect receptors across all development phases.
- 6.5.49. Table 25.26 ES Chapter 25 [\[APP-039\]](#) summarises the potential cumulative effects on onshore archaeology and cultural heritage, concluding that no additional mitigation is required as a result.

ASSESSMENT OF HARM TO HISTORIC ASSETS

- 6.5.50. As part of its assessment of effects on the historic environment, the Applicant considered the provisions and tests set out in paragraphs 5.9.29 to 5.9.33 of NPS EN-1 which deal with the level of harm to designated and non-designated historic assets as a separate consideration to the assessment of significance through the EIA process. The Applicant considers that all harm found would equate to less than substantial harm at the lower end of the scale.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.5.51. The main issues that were considered during the Examination in relation to the historic environment and archaeology were:
- Offshore matters: offshore archaeology; and
 - Onshore matters:
 - onshore archaeology;
 - assessment of potential harm to the significance of designated and non-designated heritage during construction and operation; and
 - effects on the settings of designated heritage assets

OFFSHORE MATTERS

OFFSHORE ARCHAEOLOGY

- 6.5.52. Historic England (HE) raised a number of concerns relating to offshore and intertidal archaeology [\[RR-130\]](#). HE acknowledged that the marine geophysical survey and desk-based assessments highlight potential for known and unknown heritage assets, however, marine geotechnical survey work had not been conducted. HE therefore considered that the offshore OWSI should provide for geoarchaeological analysis of geotechnical survey materials which would need to be appropriately secured through the DCO and draft DML [\[REP2-039\]](#). At D1, the Applicant responded that the approach to geoarchaeological assessment and analysis is set out in the offshore OWSI [\[APP-246\]](#) with the requirement for a final agreed, post-consent WSI included as a condition of the DML in the DCO [\[REP1-045\]](#).
- 6.5.53. The ExA queried these matters further through ExQ1 [\[PD-009\]](#) at Q12.1.12. In its response, the Applicant confirmed that it had updated the offshore OWSI to include the necessary marine geoarchaeological assessment [\[REP2-020\]](#). The specific approach for this assessment would be detailed in a separate method statement and agreed with HE before the geotechnical survey, once the timing and scope of surveys are known. The ExA posed further questions on this matter at ExQ2 [\[PD-013\]](#) Q12.0.10 to examine the adequacy of proposed archaeological mitigation. HE subsequently agreed that the necessary archaeological investigations and mitigation measures were appropriately provided for through the dDCO [\[REP4-076\]](#) [\[REP5-095\]](#).

EXA'S CONSIDERATIONS

- 6.5.54. The proposed mitigation measures are described within the offshore OWSI [\[REP3-015\]](#). In respect of offshore and intertidal archaeology, a final Statement of Common Ground (SoCG) with HE was signed with these matters agreed at D6 [\[REP6-076\]](#). The ExA agrees with HE, and is assured that the necessary mitigation, including geoarchaeological assessments, secured through the offshore OWSI would represent an appropriate approach towards monitoring, investigating and recording features of marine archaeological interest that might be encountered during the construction phase of the Proposed Development.
- 6.5.55. The ExA agrees with the assessment that minor harm to identified to marine archaeology assets would be likely. The ExA considers that the mitigation provided in the offshore OWSI [\[REP3-015\]](#) secured by the DML within Schedule 8, Part 2 of the dDCO [\[REP8-005\]](#) would minimise adverse effects, and as such equates to less than substantial harm at the lower end.

ONSHORE MATTERS

ONSHORE ARCHAEOLOGY

- 6.5.56. Both ECC and TDC submitted that the Proposed Development's impact on the historic environment, particularly archaeology, could not be effectively managed with the level of investigation and information provided [\[RR-093\]](#). In their LIR, ECC and TDC set out concerns regarding onshore archaeological mitigation because the extent, nature and significance of the archaeological remains have yet to be fully determined. The councils considered that it is uncertain that avoidance would be a practical option given the engineering requirements of the Proposed Development [\[REP1-065\]](#).

- 6.5.57. The onshore OWSI as submitted [\[APP-247\]](#) had not been agreed between parties. ECC considered that it did not provide details of the coverage of the trenching and locations, and that the level of trenching proposed is not appropriate for a project of this scale. ECC considered that R11 which secures the onshore OWSI, and the Outline Code of Construction Practice (OCoCP) secured by R8, do not provide sufficient measures to ensure that archaeological, geoarchaeological and paleoenvironmental remains would be appropriately addressed.
- 6.5.58. HE [\[RR-130\]](#) [\[REP2-039\]](#) also considered there to be a need for additional programmes of survey and evaluation. HE acknowledged the Applicant's commitment to mitigation, including preservation, excavation, monitoring and condition surveys, as well as a programme of geoarchaeological monitoring works set out in ES Chapter 25. HE set out the need for a range of techniques tailored to the specifics of each site including intrusive field evaluation at agreed locations along the length of the proposed cable route corridor. HE agreed with ECC and TDC that judgments applied to individual heritage assets is based on a partial assessment because of the limited locations of the field evaluation undertaken.
- 6.5.59. At ExQ1 Q12.1.5 [\[PD-009\]](#) the ExA asked the Applicant to confirm the extent of onshore trial trenching and geophysical surveys, and to justify why the submitted information should be considered sufficient for determining impacts on archaeological remains. In response, the Applicant reconfirmed its commitment to a further project-wide programme of trial trench evaluation and geoarchaeological assessment [\[REP2-020\]](#). This would be secured by R11 of the dDCO, and details are set out in the onshore OWSI [\[APP-247\]](#). In response to Q12.1.9 the Applicant confirmed that it commits to post-consent evaluation immediately after consent. This evaluation would involve a trial trenching and geoarchaeological assessment to inform the detailed design phase and guide mitigation measures, including preservation *in situ* (avoidance through design) or preservation by record (archaeological excavation) [\[REP2-020\]](#).
- 6.5.60. Regarding the trench plan, the Applicant confirmed that this would be prepared alongside the proposals for VEOWF and involve both ECC and HE to provide an agreed detailed post-consent trench plan. The Applicant also noted that geophysical surveys had already covered approximately 97% of the onshore area, and trial trenching had been completed at the OnSS and a section of the cable route. The Applicant considers that this, combined with desk-based assessments are sufficient to determine the impacts on archaeological remains [\[REP2-020\]](#).
- 6.5.61. In response to ExQ2, Q12.1.4, ECC submitted that the limited trial trench evaluations provide sufficient information in the areas where they were completed, but information is lacking from the remainder of the scheme. The lack of intrusive archaeological and geoarchaeological evaluation across the remainder of the scheme means there are gaps in the data. Insufficient information has been provided to determine the full impact of the scheme on the archaeological resource [\[REP2-036\]](#).
- 6.5.62. The Applicant submitted an Archaeological Mitigation Strategy (AMS) at D5 [\[REP5-046\]](#) [\[REP5-047\]](#) and [\[REP5-048\]](#). The AMS details the phased approach to further evaluation and subsequent mitigation including a programme of when the evaluation work would take place. The Applicant follows the approach discussed with VEOWF for the AMS. The proposed Trial Trench Plan was also included in updates to the onshore OWSI to reflect the AMS at D5 [\[REP5-016\]](#) [\[REP5-018\]](#) [\[REP5-020\]](#). The AMS and onshore OWSI would both be secured through DCO R11. Additionally, at D5, the Applicant made further changes to section 1.12 of the oCoCP [\[REP5-023\]](#) to

reflect the commitment to the phased approach detailed in the AMS and revised onshore OWSI.

- 6.5.63. HE confirmed its agreement with the wording and content of the AMS and onshore OWSI in its response to ExQ2 Q12.0.10 [\[REP5-095\]](#). In the agreed SoCG, HE welcomed the adoption of the VEOWF methodology, including bringing forward the AMS, trial trench plan and updated onshore OWSI which would be secured through the DCO [\[REP6-076\]](#).
- 6.5.64. ECC also confirmed agreement with the AMS and onshore OWSI in its response to ExQ2 Q12.0.1 [\[REP5-091\]](#), and in item 10 of the final SoCG these are agreed matters [\[REP8-060\]](#). However, there remains an area of disagreement at item 9: ECC maintains that the impact on the historic environment - specifically archaeology - cannot be effectively managed based on the level of investigation and information submitted. The scheme has potential to impact on both known and presently unknown heritage assets whose significance remains difficult to state with confidence. To determine the impact of the proposal on archaeological remains and provide an effective mitigation strategy, ECC's view is that further assessment would be required [\[REP8-060\]](#).

EXA'S CONSIDERATIONS

- 6.5.65. Taking into account the agreement reached on the above matters, the ExA considers that the onshore OWSI [\[REP6-031\]](#), which would be secured by R11 of the DCO, would be an appropriate approach for monitoring, investigating, and recording any archaeological features that may be encountered during the construction phase. The ExA notes the agreed position with both ECC and HE within respective SoCGs [\[REP8-060\]](#) and [\[REP6-076\]](#).
- 6.5.66. The ExA considers that the assessment within ES Chapter 25 [\[APP-039\]](#) which is informed by an archaeological desk-based assessment (DBA), an assessment of aerial photography and Lidar data, a geoarchaeological DBA, archaeological and geoarchaeological monitoring of ground investigation works and geophysical survey is sufficient. Additional mitigation has been submitted and would be secured through the DCO including the AMS [\[REP5-046\]](#) [\[REP5-047\]](#) and [\[REP5-048\]](#). Trial trench evaluation is included in the onshore OWSI which reflects the AMS [\[REP5-016\]](#) [\[REP5-018\]](#) [\[REP5-020\]](#). Overall, the ExA considers that these comprise a proportionate assessment to make an informed judgement on the impacts of the development upon the heritage significance of known and potential archaeological remains, and to inform an effective mitigation strategy. Whilst ECC's view is that additional assessment is required, the ExA considers that effective mitigation has been provided and further mitigation measures would be secured.
- 6.5.67. In reaching this conclusion, the ExA has carefully considered the agreements made with HE on this matter [\[REP6-076\]](#). The onshore OWSI provides a clear approach for monitoring, investigation, and recording of any features of archaeological interest that may be encountered. This proactive and planned strategy ensures that heritage assets are appropriately handled. The ExA also notes that ECC confirmed its agreement with the AMS, Trial Trench Plan and onshore OWSI in its response to ExQ3 Q12.0.1 [\[REP7-072\]](#) and SoCG [\[REP8-060\]](#).
- 6.5.68. Having regard to the onshore OWSI secured by R11 of the dDCO, the level of agreement between parties and the Applicant's assessment of effects, the ExA considers that there would be less than substantial harm to the significance of buried onshore archaeological remains.

ASSESSMENT OF POTENTIAL HARM TO THE SIGNIFICANCE OF DESIGNATED AND NON-DESIGNATED HERITAGE DURING CONSTRUCTION AND OPERATION

- 6.5.69. In its LIR [\[REP1-065\]](#) ECC set out its view that the Applicant's assessment does not conclude on the impact of the operational effects of the OnSS on the significance of two additional heritage assets: Jennings's Farmhouse (Grade II Listed Building) and Ash House (Grade II Listed Building). ECC's view is that these need to be explored to fully understand impacts and potential mitigation measures.
- 6.5.70. ECC also states that whilst construction activities would be temporary, they may create significant adverse effects which could harm the setting of heritage assets through construction. ECC concludes that temporary adverse effects may also cause harm to the heritage assets due to their close proximity to the Proposed Development and identifies assets which were not reported within ES Chapter 25. This list includes Barker's Farmhouse which is assessed in ES Chapter 25, as well as the following heritage assets:
- Thorpe Park Farmhouse NHLE 1307196 – Grade II Listed Building;
 - Landermere Cottage NHLE 1112116 – Grade II Listed Building;
 - Hannams Hall NHLE 1265148 – Grade II Listed Building;
 - Brocketts Hall NHLE 1112121 – Grade II Listed Building;
 - Hempstalls Farmhouse NHLE 1240504 – Grade II Listed Building;
 - Abbotts Hall NHLE 1261150 – Grade II Listed Building;
 - Grove Farmhouse NHLE 1337174 – Grade II Listed Building;
 - The Old Rectory NHLE 1111420 – Grade II Listed Building;
 - Jennings's Farm NHLE 1111459 – Grade II Listed Building;
 - Bounds Farm NHLE 1147743 – Grade II Listed Building; and
 - Hungerdowns Farmhouse NHLE 1112091 – Grade II Listed Building
- 6.5.71. ECC consider that the level of harm has not been explicitly stated, and the ES does not fully address construction effects on the significance of the identified heritage assets. It considers that this harm could result from both the construction and operational phases of the development.
- 6.5.72. In its response [\[REP2-023\]](#), the Applicant explains that that this is a result of how the assessment is presented and the language used. The Applicant refers to Section 25.6.1.4 of ES Chapter 25 [\[APP-039\]](#). This concludes that the significance of effect from changes to the setting of designated heritage assets during construction would be minor adverse which equates to less than substantial harm at the lower end of the scale.
- 6.5.73. The ES acknowledges that any change to settings during construction would be temporary. In respect of the onshore cable route it would also be reversible. Therefore, the magnitude of impact would be no greater than negligible adverse. Changes to setting during the operation phase are assessed in Section 25.6.2.1 of ES Chapter 25 [\[APP-039\]](#), which concludes that there would be no change to the designated heritage assets identified by the permanent presence of above ground onshore infrastructure.
- 6.5.74. The ExA sought further information on the impacts to heritage assets, including Jennings's Farmhouse through ExQ1 Q12.1.3, and at Issue Specific Hearing 1 (ISH1) [\[EV5-001\]](#) [\[EV5-003\]](#) [\[EV5-007\]](#). ECC considered that these appear to have been scoped out of the assessment based on the Zone of Theoretical Visibility (ZTV) for the OnSS and that the assessment should have fully considered their

significance, contribution of setting and any potential for construction effects to arise [REP4-072] [REP4-073].

- 6.5.75. At ISH1 the Applicant committed to provide an addendum to ES Chapter 25, outlining its rationale in terms of how it arrived at the conclusions identified within the ES [EV5-008].

Addendum to Environmental Statement Chapter 25 Onshore Archaeology and Cultural Heritage

- 6.5.76. The Applicant submitted an Addendum to Environmental Statement Chapter 25 at D4 [REP4-035]. The addendum includes the Applicant's rationale for its conclusions on the construction and operational effects on the setting of Jennings's Farmhouse and those other heritage assets identified by ECC.
- 6.5.77. Table 2.1 of the addendum includes those heritage assets screened out of the ES. These were not considered to be susceptible to a temporary change within their setting that would in turn affect heritage significance. The rationale for each asset is presented in Table 2.1 [REP4-035]. The addendum therefore provides further justification to the conclusions of ES Chapter 25 [APP-039] in respect of temporary changes to settings, and associated heritage significance, of the designated heritage assets which ECC' LIR had considered could be potentially affected by construction activities [REP1-065].

Jennings's Farmhouse

- 6.5.78. The addendum to ES Chapter 25 [REP4-035] gives consideration to Jennings's Farmhouse. It concludes that the effects of construction would not give rise to any additional adverse effect. Any material effects would arise from the lasting change to heritage setting as a result of the presence of the OnSS in the landscape during the operational phase. The Applicant considers that construction and decommissioning impacts, and associated effects, would not be of sufficient duration to merit fuller assessment in regard to heritage setting. Only changes in setting due to the operation would be of sufficient duration to merit fuller assessment.
- 6.5.79. The addendum considers that the presence of the OnSS would change the wider setting of Jennings's Farmhouse by introducing an industrial form into its surroundings. However, it concludes that the magnitude of impact would be low adverse in that the architectural interest of the asset would be unchanged and still appreciable. Whilst the contribution made by the wider rural setting would be reduced as a result of the partial erosion of the rural setting resulting from the final built form of the OnSS, the wider rural setting is not a primary contributor to the heritage significance. The assessment therefore concludes a low adverse magnitude of impact to Jennings's Farmhouse, which is an asset of medium heritage importance, would result in a minor adverse significance of effect. This is not significant in EIA terms and would equate to less than substantial harm at the lower end of the scale [REP4-035].

Ash House

- 6.5.80. Ash House is located approximately 780m to the east of the proposed OnSS. The addendum considers that the upper elements of the OnSS would be visible following the establishment of the mitigation planting. This would be set against a pre-existing backdrop of pylons within the view.

- 6.5.81. Within the formal garden and grounds of Ash House, visibility of the OnSS would be restricted as there would be limited views. The addendum concludes that the wider agricultural surroundings make a small contribution to the heritage significance of Ash House and therefore the presence of the OnSS would have a negligible magnitude of impact. This would not, therefore, affect the architectural interests or the limited historic interests of the asset. A negligible magnitude of impact to Ash House which is an asset of medium heritage importance would result in a minor adverse significance of effect, which is not significant in EIA terms. This would equate to no material change to its heritage significance. The addendum concludes that there would be no harm to the asset as a result of the Proposed Development [\[REP4-035\]](#).

Other heritage assets

- 6.5.82. The addendum concludes that the nine heritage assets listed at section 4.9.1.9 of ECC's LIR [\[REP1-065\]](#) (and listed above) were not considered to be susceptible to a temporary change within their setting that would in turn affect heritage significance. The rationale for this for each asset is presented in Table 2.1 of the addendum [\[REP4-035\]](#). The addendum concludes that a detailed setting assessment was therefore not carried out for the assets. The effects arising from construction activities would be temporary and relatively short-lived in nature. The magnitude of impact would therefore be no greater than negligible adverse resulting in a minor adverse significance of effect which is not significant in EIA terms. The addendum confirms that this equates to less than substantial harm at the lower end of the scale [\[REP4-035\]](#).
- 6.5.83. At ExQ2 [\[PD-013\]](#) Q12.0.8 the ExA further explored the effects on the setting of designated and non-designated heritage assets. In response, HE stated that construction effects could be harmful to the historic environment. HE highlights that historic environment receptors would experience effects and a degree of harm during construction. However, HE confirmed that, in its view, the Applicant has undertaken an assessment of known heritage receptors and that the ES is adequate for the purposes of the Examination [\[REP5-092\]](#).
- 6.5.84. ECC's response to ExQ2 set out further considerations to the temporary nature of effects on historic assets noting that construction works of the OnSS and cable would take up to 27 months. ECC agrees that 27 months would be temporary, but its temporary nature would not negate the short-term adverse effects. ECC therefore considers harm could result from both the construction and operational phases of the development [\[REP6-073\]](#) [\[REP6-081\]](#) [\[REP7-065\]](#).
- 6.5.85. In its response to ExQ2 Q12.0.8 the Applicant explains that the 27 months construction period is based on a worst-case scenario [\[REP5-054\]](#). All of the activities undertaken during this period would move along the onshore cable route. The maximum duration of construction-related activities taking place in any one location would be 8 months. Therefore, the impacts are considered slight as the agrarian landscape which forms part of the setting of the identified heritage assets would still be appreciated. The level of magnitude of impact was therefore assessed as negligible adverse as this change in setting would not materially affect its cultural significance, as set out in Table 25.8 ES Chapter 25 [\[APP-039\]](#).
- 6.5.86. At ExQ3, the ExA explored temporary effects on heritage assets further, including how other sources of mitigation have been considered. ExQ3 Q12.0.5 notes, for example, various mitigation measures are set out in the OCoCP which would be secured by DCO R8. ECC's view appears to take the effects before the application

of noise mitigation, which would be secured by the proposed DCO. ECC reviewed the mitigation measures secured by R8, in combination with other DCO supplemental powers including those conferred by article 18 (protective works to buildings). Following this, in response to ExQ3, ECC agreed that it is satisfied that temporary effects would be sufficiently mitigated [\[REP7-072\]](#). This is also an agreed matter in the final SOCG [\[REP8-060\]](#).

EXA'S CONSIDERATIONS

- 6.5.87. Having viewed Jennings's Farmhouse, the ExA considers that there would be harm to its setting due to its proximity to the proposed OnSS. Taking into consideration the Applicant's assessment and proposed mitigation, as well as the agreement of ECC, the ExA considers that the level of harm to the significance of Jennings's Farmhouse would be at the lower end of less than substantial. The ExA agrees that the rural setting of Jennings's Farmhouse is not the primary contributor to its heritage significance and that architectural features would remain appreciable despite some partial erosion of the rural setting resulting from the final built form of the OnSS. Construction effects would be of a temporary nature and the ExA considers that the mitigation outlined by the Applicant, set out in the oCoCP secured by R8, would be appropriate. Longer-term mitigation secured through the OLEMS (R11) would also contribute to longer term mitigation of harm to setting. The ExA considers that the Applicant's assessments of the residual effects on its setting are adequate and agrees that the effects would be minor adverse, which would equate to less than substantial harm at the lower end of the scale.
- 6.5.88. Regarding Ash House and its setting, which the ExA also viewed, the ExA agrees with the Applicant that the residual effects would be negligible when considered with mitigation measures that are set out in the OCoCP, secured by R8 in combination with other DCO supplemental powers including those conferred by article 18 (protective works to buildings). During the operational phase, the ExA agrees that visibility of the OnSS from Ash House would be restricted due to intervening woodland. The wider agricultural surroundings make a small contribution to the heritage significance of Ash House. The presence of the OnSS would have a negligible magnitude of impact and the ExA considers that this would, therefore, not affect the architectural interests or the historic interests of the asset.
- 6.5.89. By D8 there was agreement between ECC and the Applicant that temporary effects on other remaining heritage assets set out in ECC's LIR [\[REP1-065\]](#) would be sufficiently mitigated [\[REP7-072\]](#) [\[REP8-060\]](#). Having regard to the above, the ExA considers that there would be no harm to the significance to those assets.

CONCLUSIONS

- 6.5.90. For onshore designated assets where the ES identified any level of harm, the ExA has considered the provisions and tests outlined in paragraphs 5.9.29 to 5.9.33 of NPS EN-1 to determine whether the level of harm is considered substantial or less than substantial.
- 6.5.91. The ExA agrees that there would be no direct physical impacts, and no likely significant effects, to designated heritage assets as there would be no change to receptors. This includes the parts of Frinton Conservation Area and the eastern section of Church Lane of Great Holland Conservation Area where access tracks would be used for operation and maintenance with no physical works proposed. The ExA agrees with the Applicant's assessment of direct physical impacts on non-designated heritage assets as summarised in Table 9 above. Following mitigation, residual effects on non-designated heritage assets during construction is considered

to be no worse than minor adverse and the ExA considers these to be less than substantial.

- 6.5.92. With regards to the effect on the settings of the assets from the proposed offshore array, the ExA agrees with the detailed setting assessment provided in ES Appendix 25.4. Bawdsey Manor Registered Park and Gardens and Bawdsey Manor Pulhamite Cliffs would be subject to impacts. The ExA notes that given distance from the shore the Proposed Development, the Proposed Development would be noticeable on days of excellent visibility [\[REP1-065\]](#). Without mitigation, should impacts occur from changes to setting from the offshore infrastructure, these have potential to be of minor adverse significance and would therefore be not significant. The ExA concludes that the impacts identified from the Proposed Development on these heritage assets would give rise to less than substantial harm.
- 6.5.93. Cumulatively, the ExA considers that the change in view of the non-designated henge site (EHER 2460), Jennings's Farmhouse (NHLE 1111459), and Church of St Mary (NHLE 1337175) would not impact the heritage significance of these assets. The ExA concurs with the ES that views of these would not contribute to any cumulative impact arising from the presence of VEOWF infrastructure. Overall, any cumulative effects during the operation of the Proposed Development and other projects assessed, including VEOWF would give rise to less than substantial harm.
- 6.5.94. The Applicant has undertaken suitable desk-based and field-based survey work to determine the potential to encounter known and unknown archaeological assets (for onshore and offshore archaeology). A suitable assessment of direct and indirect onshore effects adequately assessed the potential effects on offshore archaeology has also been provided. Proposed suitable mitigation would be secured applying the mitigation hierarchy for onshore assets and offshore archaeology. Therefore, the ES also complies with the provisions of the UK MPS. The ES also complies with the requirements of NPS EN-1 Section 5.9 and NPS EN-3, Section 2.8. It adequately provides a description of the significance of the heritage assets affected by the Proposed Development and the contribution of their setting to that significance. The level of detail is proportionate to the importance of the heritage asset.
- 6.5.95. The Proposed Development would not lead to the substantial harm or total loss of significance of any designated historic asset either on its own or cumulatively. Less than substantial harm would be caused to Jennings's Farmhouse, Bawdsey Manor and Pulhamite Cliffs where minor adverse effects are predicted. Under the terms of NPS EN-1, the Proposed Development would cause less than substantial harm to these assets. The ExA considers that those assets subject to minor harm would be at the lower end of the scale of less than substantial harm.
- 6.5.96. Paragraph 5.9.28 of NPS EN-1 states that the Secretary of State should give considerable importance and weight to the desirability of preserving all heritage assets, and that any harm or loss of significance of a designated heritage asset from its alteration or destruction, or from development within its setting should require clear and convincing justification.
- 6.5.97. When taking all these aspects into consideration, the ExA concludes that the Proposed Development would have an adverse effect on the Historic Environment. Given that no greater than minor harm, which would be less than substantial to heritage assets, the ExA finds that matters related to historic environment carry a little weight against the Order being made.

- 6.5.98. Paragraph 5.9.32 of NPS EN-1 states that any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss. This judgement is carried out in the planning balance section of this report.

6.6. SOCIO-ECONOMIC EFFECTS

INTRODUCTION

- 6.6.1. This section considers the effects of the Proposed Development on socio-economics including the effects on tourism, recreation, accommodation, skills and jobs. The socio-economic effects relating to navigation and shipping and commercial fisheries are considered in Sections 5.3 and 5.1 of Chapter 5 of this Report respectively.

- 6.6.2. In its consideration of socio-economic effects, the Examining Authority (ExA) has had regard to:

- The Overarching National Policy Statement for Energy EN-1 (NPS EN-1), in particular Section 5.13;
- the relevant policies of the UK Marine Policy Statement (MPS);
- the Local Impact Reports (LIR);
- any other matters prescribed in relation to the Proposed Development; and
- any other important and relevant matters.

THE APPLICATION

SOCIO-ECONOMICS

- 6.6.3. The Applicant's assessment of the socio-economic effects is set out in the Environmental Statement (ES) Chapter 31 Socio-Economics [\[AS-010\]](#). Other relevant documents submitted with the application include:

- ES Chapter 31 Figures [\[APP-089\]](#),
- Socio-Economic Technical Baseline [\[APP-171\]](#),
- ES Chapter 32 Tourism and Recreation [\[APP-046\]](#),
- ES Chapter 32 Figures [\[APP-090\]](#),
- draft Outline Skills and Employment Plan (OSEP) [\[APP-253\]](#)
- Addendum to the Outline Skills and Employment Plan [\[REP7-057\]](#).

- 6.6.4. ES Chapter 31 [\[AS-010\]](#) comprises an assessment of the existing baseline environment for socio-economics and considers the likely significant effects related to socio-economics during the construction, operation and decommissioning phases of the Proposed Development. It also sets out the assessment methodology and the NPS assessment requirements in Table 31.6.

BASELINE FOR SOCIO-ECONOMICS

- 6.6.5. The Applicant has considered the baseline environment informed by a desk-top study of sources including datasets from the Office of National Statistics, Department for Education, ministry of Housing, Communities and Local Government, UK Property Data and the Land Registry. The baseline for socio-economics has been provided within Section 31.5 of ES Chapter 31 [\[AS-010\]](#) and a skills and employment focused baseline is set out in the OSEP [\[APP-253\]](#). The policies that relate to socio-economics that have been assessed are set out in Table 31.7 of ES Chapter 31 [\[AS-010\]](#).

6.6.6. The study areas for the socio-economics assessment have been defined on the basis of the socio-economic receptors and the geography over which the Proposed Development's likely significant effects will occur as set out in Table 31.3 [AS-010]. Table 31.3 [AS-010] sets out the study areas used for each type of impact. It shows the effect of the Proposed Development on economic receptors such as jobs and gross value added and is assessed at both the national (UK) and local levels (Essex and Suffolk). The 'LOCAL' is the study area used by the Applicants which is an area of 500m from the onshore elements of the Proposed Development used in the assessment of the potential disturbance to social and community infrastructure facilities.

6.6.7. The potential impacts of the Proposed Development assessed for the construction, operation and maintenance, and decommissioning phases include:

- Direct and indirect economic benefit:
 - supply chain onshore and offshore (economic value);
 - employment onshore and offshore.
- Potential adverse effects on socio-economic receptors:
 - pressure on local onshore infrastructure and services (housing and health); onshore disturbance (noise, air, visual and traffic) to social community infrastructure facilities;
 - wider economic effects from disruption to shipping and navigation;
 - wider economic effects from disruption to fishing; and
 - wider economic effects related to minerals.

THE PRESSURE ON LOCAL ONSHORE INFRASTRUCTURE AND SERVICES (HOUSING AND HEALTH)

6.6.8. ES Chapter 31 [AS-010] analysed the conditions in the housing market, focussing on the districts within Essex and Suffolk where the Applicant assessed there to be a potential demand for housing from workers involved in the construction and operation of the Proposed Development. The Applicant considered home ownership, rental sectors and tourist accommodation and the availability of houses for sale and rent. The Applicant noted an over supply of houses for sale and an under supply of rental properties. Tourist accommodation would be available in the area around the Proposed Development though this would be affected by seasons, in particular the higher demand in the summer season.

6.6.9. The Applicant assessed the provision of health services and noted the existing pressure on general practices and hospitals in the area.

LIKELY SIGNIFICANT EFFECT (LSE) DURING OPERATIONAL PHASE

6.6.10. The Applicant does not expect to undertake further operations on the land other than works connected to operations and maintenance. There would also be repairs and maintenance of the offshore infrastructure. The impact is assessed as minor beneficial at a UK level and negligible beneficial at the local level of Essex and Suffolk. The employment resulting from the operational phase is expected to be permanent and long term.

DECOMMISSIONING

6.6.11. The final decommissioning policy has not been determined, although the Applicant suggests the onshore cables would be pulled through the ducts and removed with the ducts being sealed, capped and left in-situ. No decision has been made in

respect of the decommissioning of the onshore substation. The offshore decommissioning would include removal of the wind turbine generators and offshore substation platform components and foundations above sea level. This is expected to be the reverse of the installation process and mirror the impacts of the construction phase with mainly negligible impacts.

MITIGATION

- 6.6.12. The Applicant has incorporated embedded mitigation into the design of the Proposed Development. The embedded mitigation measures are set out in Table 31.5 of ES Chapter 31 Socio Economics [\[AS-010\]](#) and in the OSEP [\[APP-253\]](#). The OSEP [\[APP-253\]](#) has been produced in close collaboration with Five Estuaries Offshore Wind Farm (VEOWF). The Applicant state that the key elements of the OSEP are in respect of the number and types of opportunities that will arise from the Proposed Development and VEOWF where the labour and supply chains can be shared during the construction phase. The Applicant has committed to the development of a final skills and employment plan (SEP) post consent, and this would be secured by Requirement (R) 18 of the dDCO [\[REP8-005\]](#).
- 6.6.13. An Addendum to the OSEP [\[REP7-057\]](#) brings together the comments that have been made by interested parties during the Examination in relation to the OSEP, together with skills and workforce requirements. The intention is to support the further consultation and development of the final SEP, taking account of the representations that have been made. The Applicant intends to discuss the representations and comments with VEOWF to ensure that the Proposed Development and VEOWF are coordinated and aligned in terms of socio-economics.
- 6.6.14. The OSEP [\[APP-253\]](#) notes that whilst there are existing supply chain sectors, there is evidence to show that there are already issues in respect of recruitment of employees with the skills required for the Proposed Development. The Applicant sets out the range of developments within the area that will also require skilled labour forces.
- 6.6.15. In the OSEP [\[APP-253\]](#), the Applicant sets out the principles to be developed and the key themes to be addressed in the final SEP, including:-
- Approach to the Local Supply Chain and Recruitment;
 - education;
 - transition from other sectors to the offshore wind industry; and
 - diversity.
- 6.6.16. The proposals are that the Applicant would develop these principles with key stakeholders and present outline commitments. The Applicant has provided example activities that it could implement to maximise the socio-economic benefits of the Proposed Development and to ensure that the skills capacity issues that have been identified are addressed. The example activities are set out in Table 8.3 of the OSEP [\[APP-253\]](#). In addition, the Applicant has provided case studies of existing employment and skills initiatives utilised by both SSE Renewables Offshore Windfarm Holdings Limited (SSER) and RWE Renewables UK Swindon Limited (RWE) in Section 9 of the OSEP [\[APP-253\]](#).

CUMULATIVE IMPACTS

- 6.6.17. The Applicant assessed a range of projects in relation to socio-economics and undertook a Cumulative Effects Assessment (CEA) [\[REP6-047\]](#) of:

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- Effects predicted to arise from the development of VEOWF and the Proposed Development; and
- Effects predicted to arise from the development of VEOWF, the Proposed Development and the other identified projects.

6.6.18. In terms of the cumulative effects on employment and economic value, if both the Proposed Development and VEOWF are constructed at the same time, the impact is assessed as negligible though the OSEP would look to ensure that the benefits of the projects could be maximised during construction and operation phases. The pressures on health and accommodation are assessed as a minor adverse impact during construction and operation phases.

6.6.19. The CEA undertaken with all other projects assessed the impacts on employment and economic value as major beneficial resulting from the significant potential for jobs across Essex and Suffolk. The cumulative effect on housing infrastructure is assessed as negligible and there would be a minor adverse impact on private rented accommodation and owner-occupied accommodation. A minor adverse effect was assessed on health infrastructure as a result of the cumulative effects.

ASSESSMENT OF EFFECTS

ASSESSMENT METHODOLOGY

6.6.20. The Applicant's assessment of socio-economic effects included direct, indirect and induced economic effects, with consideration of the impacts for both the offshore and onshore infrastructure. The assessment used the assumptions and results set out in ES Appendix 31.1 Socio-Economics Technical Baseline [\[APP-171\]](#). The assessment is based on the worst case scenario which for economic benefits is the offshore grid connection option with limited onshore infrastructure.

6.6.21. The Applicant has considered existing evidence gained from other operational offshore wind farms in the locality of the Proposed Development. As an example, the Applicant highlights the Greater Gabbard project representing a £1.5 billion investment and has created a significant number of construction jobs and 100 long term new jobs relating to operations and maintenance. Local businesses were used in the supply chain for that project.

6.6.22. Table 31.58 of ES Chapter 31 [\[AS-010\]](#) summarises the assessment of residual effects for socio-economics. The ES Chapter 31 concludes that there would be a potential for minor beneficial effects through increased employment opportunities and economic value in the Essex and Suffolk areas as well as the UK. However, there are also predicted effects of the predicted increases in local populations, and these are assessed as having minor adverse impacts, though the Applicant considers that neither of these are significant in EIA terms.

ASSESSMENT OUTCOMES

6.6.23. Table 31.58 of ES Chapter 31 [\[AS-010\]](#) sets out a summary of the potential impacts on Suffolk, Essex and the UK demonstrating that there is a potential for a minor beneficial effect through an increase in employment opportunities and economic value as a result of the Proposed Development though the Applicant states these are not significant in EIA terms.

DIRECT AND INDIRECT ECONOMIC BENEFIT:

SUPPLY CHAIN ONSHORE AND OFFSHORE (ECONOMIC VALUE)

- 6.6.24. The economic benefits predicted for the Proposed Development include increases in gross value added (GVA) (the value of goods and services of the local and national economy) and job creation. The Applicant estimates that the Proposed Development's total (direct and indirect) annual GVA contribution to the UK economy would be around £4.9 to £41.9 million during the construction phase and £17.9 to £19.6 million during the operational phase. The Applicant considers that the Proposed Development will have a minor beneficial impact on the supply chain.

EMPLOYMENT ONSHORE AND OFFSHORE

- 6.6.25. The total contribution to UK employment (direct and indirect jobs) is estimated by the Applicant to range from £50 to £730 million in terms of full-time equivalent jobs per annum during the onshore and offshore construction phase and £110 to £200 million for the operational phase. The Applicant considers that the Proposed Development will have a minor beneficial impact on employment.

POTENTIAL ADVERSE EFFECTS ON SOCIO-ECONOMIC RECEPTORS:

PRESSURE ON LOCAL ONSHORE INFRASTRUCTURE AND SERVICES (HOUSING AND HEALTH)

- 6.6.26. The Applicant's assessment that the worst case scenario for peak demand on housing is determined as 471 workers for the onshore construction phase and 91% of those workers would be expected to be non-local. The Applicant assumes that as non-local workers will travel up to 45 minutes to reach a construction site, the impacts would be spread over a wide area. The impacts of a reduction in the availability of tourist accommodation is assessed as negligible and it is anticipated that there would be low demand from workers for private rented or owner-occupied housing during the construction phase. The offshore construction workers are expected to be housed in offshore vessels.
- 6.6.27. The Applicant's assessment predicts an increase in local population levels as a result of the Proposed Development and this would lead to minor adverse impacts as a result of temporary workers moving to the area for the construction phase and some permanent workers relocating to the area for the operational phase. The Applicant assessed the impacts as not significant.
- 6.6.28. In terms of non-local construction workers using health services, the Applicant considers that given the temporary nature of the jobs, workers will not register with local general practices. The Applicant states that due to the scale of the workforce and the anticipated health profile of construction workers, they would not expect the workforce to generate a substantial demand for health services. The assessment concludes that the impact on health services is considered as negligible and not significant.

ONSHORE DISTURBANCE (NOISE, AIR, VISUAL AND TRAFFIC) TO SOCIAL COMMUNITY INFRASTRUCTURE FACILITIES

- 6.6.29. The Applicant assessed there would be a potential impact to social community infrastructure as a result of construction related traffic. The impact of construction related traffic is considered in more detail in Section 4.8 Traffic and Transport, Section 4.7 Noise and Vibration and Section 4.2 Air Quality of Chapter 4 of this

Report. The assessment of these impacts concludes that the effects would not be significant in Environmental Impact Assessment (EIA) terms.

WIDER ECONOMIC EFFECTS RELATED TO MINERALS

- 6.6.30. The Applicant assessed the impacts on minerals in ES Chapter 19 Ground Conditions and Contamination [[APP-033](#)] and this informed the potential for wider socio-economic effects related to minerals. The Applicant assessed the main impact to be the sterilisation of future mineral resources which could affect businesses wishing to develop them. The Applicant assessed the impact on minerals as negligible as there would be a minimal wider economic impact on minerals in terms of job losses or lost GVA resulting from the Proposed Development.

CUMULATIVE EFFECTS - SOCIO ECONOMICS

- 6.6.31. In consideration of the Proposed Development cumulatively with the other plans and projects identified by the Applicants, the following effects were identified:

- Major beneficial effects for socio economics during the construction phase and moderate beneficial effects during the operational phase in terms of economic value and employment. These are identified as significant;
- Minor adverse effects on the pressure on local infrastructure and services (health and housing) during both the construction and operational phases. These are identified as not significant; and
- Minor adverse effects on disturbance (noise, air, visual and traffic) to onshore social and community infrastructure facilities during the construction phase and a negligible effect during the operational phase. These are identified as not significant.

- 6.6.32. No potential for significant trans-boundary socio-economic effects were identified by the Applicants.

TOURISM

- 6.6.33. The effects of the Proposed Development on tourism and recreation is assessed in ES Chapter 32 Tourism and Recreation [[APP-046](#)]. The chapter presents the likely significant effects of the Proposed Development on existing tourism and recreational assets for the construction, operations and maintenance and decommissioning phases of the development.

- 6.6.34. ES Chapter 32 [[APP-046](#)] sets out the following:

- Existing baseline environment for tourism and recreation including the assumptions and limitations that affect the collation of baseline information;
- Key assets, tourist accommodation, trends and the potential effects of the Proposed Development on tourism and recreation during construction, operation and decommissioning; and
- The embedded mitigation incorporated into the design of the Proposed Development

- 6.6.35. ES Chapter 32 [[APP-046](#)] is supported by ES Chapter 32 Figures [[APP-090](#)] which maps the notable coastal tourism and recreation assets, public rights of way (PROW), open access land and camping and caravanning sites. The impact of the Proposed Development on PROW is dealt with in Section 4.8 Traffic and Transportation of Chapter 4 of this Report.

BASELINE FOR TOURISM AND RECREATION

6.6.36. Consideration of the baseline environment is informed by a desktop review together with existing studies, national and local surveys and data. The baseline considers:

- Tourism volume and value statistics;
- characteristics of visitors to Essex and Suffolk;
- tourism assets;
- accommodation in Essex and Suffolk;
- perceptions of offshore windfarms; and
- anticipated trends in baseline conditions.

6.6.37. In the assessment of the cumulative effects the Applicant sets out the potential cumulative effects during the construction and operational phases in Table 32.22 of ES Chapter 32 [\[APP-046\]](#). Table 32.23 identifies the other plans, projects and activities that may result in cumulative effects

ASSESSMENT METHODOLOGY FOR TOURISM AND RECREATION

6.6.38. The Applicant's assessment of economic effects used evidence from the existing offshore windfarm industry. Existing studies relating to the economic impact of tourism on the local economy were used. The public perception of offshore windfarms was reviewed along with visitor surveys. The 2016 Accommodation Stock Audit set out details of visitor accommodation though this is noted by the Applicant to be out of date.

ASSESSMENT OF EFFECTS

6.6.39. The potential impacts identified for the construction and decommissioning phases of the Proposed Development included:

- Impact on users' enjoyment of recreational and tourist assets due to construction of the onshore infrastructure;
- impact on enjoyment of marine and coastal recreational and tourism assets due to construction of the offshore infrastructure;
- reductions in tourist accommodation availability due to non-resident workforce; and
- impact on the volume and value of tourism due to construction.

6.6.40. For the operation and maintenance phase, the potential impacts identified included:

- Impact of operational activity of the offshore and the onshore infrastructure on the enjoyment of tourism and recreational assets;
- reductions in tourist accommodation availability due to a non-resident workforce; and
- impact on the volume and value of tourism during operations.

MITIGATION FOR TOURISM AND RECREATION

6.6.41. The Applicant has incorporated embedded mitigation into the design of the Proposed Development for tourism and recreation. Table 32.3 of ES Chapter 32 [\[APP-046\]](#) sets out the embedded mitigation. This includes the commitment to provide the Code of Construction Practice (COCP), Construction Traffic Management Plan (CTMP) and ecological management plan in accordance with the Landscape and Ecological Management Strategy (LEMS) to mitigate potential impacts of the Proposed Development on recreation and tourism. The management plans would be secured by R8, 9 and 12 respectively in the dDCO [\[REP8-005\]](#) and

the Applicant states that the proposed embedded mitigation would reduce potentially significant impacts on tourism and recreation to an acceptable level.

- 6.6.42. The outline Public Rights of Way Management Plan (PROWMP) [\[REP3-023\]](#) sets out measures that would mitigate the impact of the Proposed Development on users of public rights of way (PROW) and further details of this are set out in Section 4.8 Traffic and Transportation of Chapter 4 of this Report.

ASSESSMENT OUTCOMES

- 6.6.43. The Applicant assessed the impacts of the Proposed Development on tourism and recreation during the construction phase as being mainly localised, temporary and reversible. During the operational and maintenance phase, the impacts would be periodic, highly localised and of a lower magnitude than those associated with the construction phase. The long terms impacts predicted by the Applicant would be localised around the proposed onshore substation site.
- 6.6.44. The Applicant assessed that the long term effects of the offshore infrastructure would be over a wider area. The Applicant set out that the presence of existing offshore windfarms and the high levels of shipping activity off the Essex and Suffolk coastline would mean that it would be unlikely for significant effects to be seen.
- 6.6.45. The Applicant's assessment is that the Proposed Development is predicted to have a negligible or minor adverse effect on tourism and recreation during all of its phases which would not be significant in EIA terms. A summary of the LSE during all phases is set out in Table 32.31 of ES Chapter 32 [\[APP-046\]](#).
- 6.6.46. The Applicant assessed that there is a potential for cumulative effects resulting from the VEOWF and other projects in the area. The Applicant has assessed these as not significant in EIA terms and provided a summary of conclusions of the Cumulative Effects Assessment at Table 32.32 of ES Chapter 32 [\[APP-046\]](#).

CUMULATIVE EFFECTS-TOURISM AND RECREATION

- 6.6.47. The Applicant assessed the potential for cumulative effects occurring with VEOWF and other projects, including the impact on users' enjoyment of recreational and tourist assets due to the construction of the offshore and onshore infrastructure. The Applicant also considered the reduction in availability of tourist accommodation and the impact on the volume and value of tourism due to construction works.
- 6.6.48. The assessment concluded that when considering the mitigation measures put in place, the potential cumulative effects would not have a significant effect in EIA terms.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.6.49. The principal issues arising during the Examination related to:
- Discharge of the final SEP;
 - community benefits;
 - employment opportunities and employment benefits of local people;
 - the use of local suppliers;
 - a coordinated approach to education and training;
 - investment in research and development;
 - impact on tourism; and
 - cumulative impacts

- 6.6.50. These matters are considered in turn below.

DISCHARGE OF THE FINAL SEP

- 6.6.51. Suffolk County Council (SCC) requested in the Local Impact Report (LIR) [REP1-074] that it be named as a statutory consultee of the discharging authority in R18 of the dDCO [REP8-005], for the approval of the final SEP. This was also raised at ISH2 [REP4-034] by SCC who sought this to ensure that there would be a coordinated approach to the SEP and maximum benefits could be gained. SCC's concerns also relate to achieving procedural fairness in the consultation process for the final SEP.
- 6.6.52. The Applicant set out in its responses to Deadline 4 Submissions [REP5-056] that SCC has been consulted on and engaged in the development of the OSEP [APP-253]. As R18 of the dDCO [REP8-005] requires that the final SEP must be substantially in accordance with the OSEP [APP-253], the Applicant does not consider that it is necessary to amend R18 to include SCC as a statutory consultee.
- 6.6.53. At the end of the Examination this was a matter shown as not agreed in the final Statement of Common Ground [SOCG] with SCC [REP6-078]. In its closing statement SCC [REP8-091] reiterated its stance and provided suggested wording for R18.

EXA'S CONSIDERATIONS

- 6.6.54. At the close of the examination, the wording of R18 of the dDCO [REP8-005] had not been agreed with SCC. The ExA considers that it is reasonable and appropriate for SCC to be a consultee in respect of the final SEP as SCC has had significant input into the OSEP [APP-253] and continues to have specific interests in the final SEP to ensure that the maximum benefits can be achieved for the area. The ExA agrees with the SCC proposed changes and recommends that R18 of the dDCO be amended as follows (amendment shown in bold):

18.-(1) No stage of the authorised development may commence until a skills and employment plan, substantially in accordance with the outline skills and employment plan has been submitted to and approved by the discharging authority **after consultation with Suffolk County Council**.

EMPLOYMENT OPPORTUNITIES FOR THE LOCAL POPULATION AND EMPLOYMENT BENEFITS FOR THE LOCAL AREA

- 6.6.55. SCC submitted in its LIR [REP1-074] that it expects the Applicant to work collaboratively with Councils and to set targets for employment, with the means to monitor these and to provide support. The SEP should include specific outcomes and outputs and to be able to demonstrate social impact. SCC requires the Applicant to consider the impact of other major developments in the region and also to commit to engagement with the Regional Skills Coordination Function. In the SOCG with SCC [REP8-068], SCC is in agreement with the Applicant in respect of the commitment to co-develop the final SEP with Suffolk's Regional Skills Co-ordination Function and to incorporate specific local evidence and data into the final SEP, including KPI's, delivery mechanisms and monitoring arrangements. SCC is satisfied with the Addendum to the OSEP [REP7-057] provided that the commitments set out by the Applicants are carried out.
- 6.6.56. At D4, Essex County Council (ECC) indicated that it would wish to see a stronger commitment to the investment in a skills fund to support various functions including

skills infrastructure, research and development, training programmes and skills bootcamps. ECC also requires reference in the SEP to the innovation hub at Harwich. In the ECC and Tendring District Council (TDC) SOCG [\[REP8-060\]](#) the Councils do not agree that the Addendum to the OSEP [\[REP7-057\]](#) provides sufficient commitment from the Applicant to ensure that the mitigation proposed would be provided. In addition, minimum targets for employment are not set out. The Councils state that the Applicant has not provided definitive commitments to education, training and employment in the area. At the close of the Examination, this remained an ongoing point of disagreement between ECC and TDC and the Applicant and in the final ECC and TDC SOCG [\[REP8-060\]](#), the Council set out their ongoing concerns. The Applicant's position in [\[REP8-060\]](#) is that the detailed information and procurement for the Proposed Development is not available and the Applicant is unable to provide more granular forecasts of the workforce and labour demands. The Applicant states that these would be developed in the final SEP, using the comments and information in the Addendum to the OSEP [\[REP7-057\]](#).

EXA'S CONSIDERATIONS

- 6.6.57. The ExA considers that the Applicant has taken opportunities to promote local employment and skills development through the OSEP [\[APP-253\]](#) and the commitment to produce the SEP, in accordance with paragraph 5.13.12 of NPS EN-1. The SEP would be adequately secured by R18 of the dDCO [\[REP8-005\]](#). The Applicant has noted and documented the comments and concerns made in the course of the Examination in the Addendum to the OSEP [\[REP7-057\]](#) and this would be a key document in taking the OSEP [\[APP-253\]](#) into the final SEP. The Applicant provides for engagement with stakeholders and discharge of the SEP by ECC as the host authority. As set out above, the ExA also considers it appropriate for SCC to be a consultee in the approval of the final SEP. The ExA is satisfied that the concerns raised by ECC would be addressed by the Applicant in the development of the SEP. The ExA agrees that there would be a minor beneficial impact on employment opportunities and benefits in the local area

COMMUNITY BENEFITS

- 6.6.58. Various interested parties [IP] including Essex County Council [ECC], SCC and Ardleigh Parish Council raised the question of community benefits being made available for the communities affected by the Proposed Development. The Applicant's response to ExQ1 Q16.1.8 [\[REP2-20\]](#), states that it would be consulting on a community benefit fund post grant of the DCO and that this would be done through a community liaison officer.
- 6.6.59. The community benefit fund was discussed at ISH2 [\[REP4-034\]](#) and ECC, in its post hearing submission [\[REP4-072\]](#) put forward a range of initiatives and stated that the Applicant is in discussion with ECC. In the Tendring District Council (TDC) post hearing submission [\[REP4-093\]](#), TDC asked for compensation for tourism reliant businesses as part of the community benefits package. In response to ExQ2 Q9.1.5 [\[REP5-091\]](#), ECC refers to the publication of the recent guidance into Community Funds for Transmission Infrastructure: Guidance, published in 2025, which established guidance for Community Benefits and refers to the development of its own Community Benefits local policy. ECC also notes the recent consultation on 'Community Benefits and Shared Ownership for Low Carbon Energy Infrastructure' (DESNZ 2025). ECC submits that this shows a clear direction of travel on potentially making such community benefits necessary and mandatory in the consideration of NSIP proposals.

- 6.6.60. In response to responses to EXQ2 [\[REP6-061\]](#) the Applicant states that the community benefit fund will be progressed outside of the Examination. The Applicant refers to the Department for Energy Security and Net Zero [DESNZ] working paper 'Community Benefits and Shared Ownership for Low Carbon Energy Infrastructure' (DESNZ 2025) with specific reference to paragraph 3 on page 6 which says that: "...community benefits are legally immaterial to planning decisions and cannot be considered when deciding to grant planning consent". The Applicant's position is that whilst the community benefit fund will be progressed outside of the decision-making process, it should not be taken into account in the planning balance.
- 6.6.61. In the SOCG with ECC and TDC [\[REP7-065\]](#), ECC asks for the voluntary community benefit package to be provided and secured by way of a signed agreement. TDC states that as the district area is disproportionately affected by the negative impact of the Proposed Development it would welcome discussions relating to the community benefit package. In the SOCG with SCC [\[REP6-078\]](#), the position of the community fund being established with further consultation post consent is agreed. In the Applicant's response to D6 submissions [\[REP7-053\]](#) it indicates that it has no further updates on the community benefit fund and that it is working with ECC on its development.
- 6.6.62. The final SOCG with ECC and TDC [\[REP8-060\]](#) reflects the Applicant's position that it would establish a community benefit fund prior to operation of the Proposed Development. The discussions between the Applicant and ECC had begun before the end of the Examination. The Councils agreed that the community benefit package would be needed to recognise the role of the local communities in hosting nationally significant infrastructure projects and contributing to the government's commitment to Net Zero and energy security. The Councils accepted that this would not be secured as planning benefit and should be not taken as part of the material considerations when determining the application. They expect to continue to discuss the community benefits with the Applicant. This is recorded as an agreed matter in the SoCG.

EXA'S CONSIDERATIONS

- 6.6.63. Given the position as set out in the final SoCG, the ExA is satisfied that the Applicant and the Councils would be able to work together to develop a community benefit fund and that discussions would take place post consent to progress the package of benefits. The Applicant and the Councils have commenced the discussions and the ExA finds no reason to doubt that the parties would continue to discuss and bring forward a community benefit package post consent. However, the ExA agrees with the parties that the community benefits are not material to the decision and that those benefits would need to be agreed outside of the Examination of the Proposed Development. We have not attributed any weight to the provision of community benefits in making our recommendation.

USE OF LOCAL SUPPLIERS

- 6.6.64. In the post hearing submission made by SCC [\[REP4-094\]](#), SCC states that it expects the Applicant to support delivery of SCC's inclusive growth agenda so that local businesses can be better equipped to winning work. In the SCC SOCG [\[REP8-068\]](#), SCC agrees that with effective engagement between SCC and supply chain partners, with a commitment in the SEP to engagement with the SCC's Regional Skills Coordination Function, the opportunities for local business can be maximised.

- 6.6.65. At D4 ECC and TDC [\[REP4-073\]](#) submitted that the Applicant should have a coordinated approach with the other nationally significant infrastructure projects (NSIP's) in the region and to provide for a local supply chain, ensuring local businesses derive benefit from the Proposed Development. In the ECC and TDC SOCG [\[REP8-060\]](#), the Councils do not agree that the Applicant has provided sufficient commitments in the OSEP to a Skills and Innovation Fund to support a variety of functions. They state that the Addendum to the OSEP [\[REP7-057\]](#) is summarising the suggestions made by the Councils and does not ensure sufficient mitigations would be provided which would result in the claimed employment and business benefits. At the close of the Examination, this remained an ongoing point of disagreement between ECC and TDC and the Applicant.

EXA'S CONSIDERATIONS

- 6.6.66. The ExA notes the commitments given in the OSEP [\[APP-253\]](#) and whilst the Addendum to the OSEP [\[REP7-057\]](#) summarises the suggestions made by the Councils, the ExA considers that this provides the context for further discussions with the Councils post consent. The concerns that have been raised by ECC during the Examination have been documented in the Addendum to the OSEP [\[REP7-057\]](#) which would be used in the development of the SEP with ECC being the discharging authority. The ExA has recommended that R18 be amended so that SCC would be a consultee in respect of the final SEP. The ExA is satisfied that the SEP would provide a satisfactory means for the continued engagement with the local suppliers and to ensure that the existing supply chain catering to the energy sector in the area is given the opportunity to benefit from the Proposed Development. The ExA considers the SEP to be sufficiently secured in R18 of the dDCO [\[REP8-005\]](#) and that the SEP would provide for minor beneficial impacts on the supply chain.

COORDINATED APPROACH TO EDUCATION AND TRAINING

- 6.6.67. At D4, ECC and TDC [\[REP4-072\]](#) and [\[REP4-073\]](#) set out that they would like to see greater commitments toward education and training in the SEP. They are willing to work with the adjoining councils, education providers and relevant stakeholders. In the ECC comments at D5 [\[REP5-090\]](#), the Council refers to the need to take a coordinated approach to education and training to meet the skills gap. In response to the Councils, the Applicants provided the Addendum to the OSEP [\[REP7-057\]](#) which recorded the comments made during the Examination that would need to be taken into account in the development of the final SEP. In the document, the Applicant makes responses to the comments including that they would:
- Engage with education providers;
 - discuss the commitments toward education and training will take place as the SEP is developed;
 - work collaboratively with key stakeholders ensure alignment and maximise the impact of skills and employment initiatives;
 - obtain indicative information on workforce requirements and the Applicant would use this in discussions with the Councils on employment, skills and training needs when developing the SEP;
 - be willing to participate in a steering group for the Regional Skills Coordination Function; and
 - consider and further consult on measures to address the gap of roles required for the development and training of next generation.

- 6.6.68. In the ECC and TDC SOCG [\[REP8-060\]](#), the position is not agreed as the OSEP [\[APP-253\]](#) and Addendum to the OSEP [\[REP7-057\]](#) do not give the commitments

sought by the Councils. At the close of the Examination, this remained an ongoing point of disagreement between ECC and TDC and the Applicant.

EXA'S CONSIDERATIONS

- 6.6.69. The ExA has noted the Addendum to the OSEP [\[REP7-057\]](#) and the comments made by the Applicant to the concerns raised by the Councils. The ExA considers that the Applicant has set out how the concerns would be used to support the further discussions between the Applicant and the Councils post consent. Whilst the Addendum to the OSEP [\[REP7-057\]](#) would not offer commitments to the Councils, it would be used to prepare the final SEP for approval by ECC as the discharging authority. As set out earlier in this section, the ExA has recommended that SCC be a consultee in the preparation of the SEP. The ExA is satisfied that the comments made by the Council would be addressed by the Applicant in finalising the SEP which would need to be approved by ECC and would be secured by R18 of the dDCO [\[REP8-005\]](#).

INVESTMENT IN RESEARCH AND DEVELOPMENT

- 6.6.70. In the ECC Post hearing submission [\[REP4-072\]](#), ECC stated:

“Harwich is identified by University of Essex as a prime location for an innovation hub that will provide interim support for offshore wind activities whilst laying groundwork for future renewable energy initiatives. In 2024 TDC agreed plans for a green energy hub at Harwich, designed to increase the port capabilities to accommodate the rapidly growing offshore energy sectors.”

The Councils require this to be referenced in the OSEP [\[APP-253\]](#) and how the Proposed Development could contribute to the research and development of the construction, renewable and sustainable sectors.

- 6.6.71. In the Addendum to the OSEP [\[REP7-057\]](#), the Applicants provided a commentary on the comments made and confirmed that they would consider measures that align with regional initiatives including green energy hubs. They would also explore further in the SEP how the Proposed Development could contribute to research and development in the construction, renewable and sustainable sectors.
- 6.6.72. In the ECC and TDC SOCG [\[REP8-060\]](#), the referencing of the Harwich green hub is a point of disagreement, and the Councils maintain that the Applicant should explore ways that the Proposed Development can contribute to the research and development of the construction, renewable and sustainable sectors. This remains a point of disagreement at the close of the Examination.

EXA'S CONSIDERATIONS

- 6.6.73. The ExA notes the points raised by the Councils and that these have been logged in the Addendum to the OSEP [\[REP7-057\]](#) with the Applicant's comments. The Applicant has responded to the points raised by the Councils and explains that these would be explored further in the SEP. ECC would be the discharging authority and the ExA has recommended that SCC be a consultee in the final SEP. The Councils would continue to have the opportunity to develop the SEP with the Applicant. The ExA is satisfied that the Applicant has taken account of the points raised by the Councils and that it would incorporate these in the further discussions and preparation of the final SEP for approval by ECC and the SEP would be secured by R18 of the dDCO [\[REP8-005\]](#)

IMPACT ON TOURISM

- 6.6.74. ECC and TDC indicated in their post hearing submission [\[REP4-073\]](#) that they did not agree with the Applicant's assessment of tourism impacts. ES Chapter 32 [\[APP-046\]](#) concludes that there would be negligible impacts on volume and value of tourism during the construction and operation phases. ECC and TDC consider that the assessment is insufficient, and it is unclear as to how the Proposed Development would impact on tourism-based businesses and there needs to be a means to monitor the position and to provide some form of compensation. ECC suggested a range of compensation measures that could be put in place to mitigate impacts on tourism.
- 6.6.75. The Applicant did not agree with this and in its response [\[REP5-056\]](#), states that the assessment concludes that there would be negligible impacts and no additional mitigation is proposed. ECC in [\[REP6-081\]](#) reiterated their concerns and that the Applicant had not provided a comprehensive assessment of the Proposed Development on tourism and the impacts on a cumulative basis. ECC said that the data used was from 2022 and did not take account of changes to day trips and short trips reflecting changes to work patterns post pandemic. ECC considered that the works to highways would have an impact on visitors who may be deterred from visiting or returning to the area.
- 6.6.76. The Applicant in [\[REP7-053\]](#) asserts that the assessment has been comprehensive and used the data available at the time. It states that the assessment conclusions would not have changed if more up to date information was available. The impact of the Proposed Development in terms of traffic is dealt with in Section 4.8 of Chapter 4 of this Report. The Applicant submits that ECC has not provided evidence to support their assertions of the impacts on tourism. The Applicant does not propose any further compensation on the basis that it has not identified any significant harm to tourism as a result of the Proposed Development.
- 6.6.77. In the Applicants response to ExQ3 [\[REP7-051\]](#), the Applicant states that it would not be carrying out monitoring of the impact of the highway works on the A120 on tourism. It refers to the complexities of carrying out such monitoring and that as there was no evidence produced of potential significant effects, it would not be undertaken.
- 6.6.78. The impact to tourism remained a point of disagreement at the close of the Examination and the ECC and TDC SOCG [\[REP8-060\]](#) states that they consider there would be a potential significant impact on the area's attractiveness for tourism and that the Applicant should provide compensation measures.

EXA'S CONSIDERATIONS

- 6.6.79. The ExA notes the concerns raised by the Councils. However, we consider that the Councils have put forward limited evidence to support their assertions that the conclusions made by the Applicant are not correct. The Applicant concludes that the Proposed Development would be likely to have either a negligible or minor adverse impact on tourism and it does not identify a relationship between construction of the Proposed Development and an overall reduction in visitor numbers and spending. The ExA has taken account of paragraph 5.13.10 of EN-1 that limited weight is to be given to assertions of socio-economic impacts that are not supported by evidence. The ExA agrees with the Applicant that the impacts on tourism would be of a short-term nature and that the impact would be minor adverse.

CUMULATIVE EFFECTS

Socio-economics

- 6.6.80. SCC asked in [\[RR-318\]](#) for a full assessment of socio-economic impacts of the cumulative effects for the Proposed Development and other projects. The Applicant responded in replies to ExQ1 Q16.1.8 [\[REP2-020\]](#) that this is covered in the OSEP [\[APP-253\]](#). The Applicant submitted the Addendum to the OSEP [\[REP7-057\]](#) setting out the summary of comments made in respect of cumulative impacts and that this would form part of the further discussions with the Council in developing the final SEP.
- 6.6.81. In the SCC SOCG [\[REP8-068\]](#), SCC agreed that the Addendum to the OSEP [\[REP7-057\]](#) addressed their request for a cumulative workforce impact model and mitigation plan to be codeveloped with the Councils and the Regional Skills Coordination Function in the development of the SEP.

Tourism

- 6.6.82. ECC and TDC SOCG [\[REP8-060\]](#) sets out the ongoing concern of the cumulative effect of the various proposed developments in the area on the attractiveness of the district for tourism. The impact on local tourism-related businesses is unclear and the means to provide compensation or mitigation is not dealt with. The Councils do not agree with the Applicant's conclusions that there would be a negligible impact on tourism as a result of developments in the area. At the close of the Examination, this remained a point of disagreement with ECC and TDC.

EXA'S CONSIDERATIONS

- 6.6.83. For socio-economics, the ExA is satisfied that the Applicant has taken account of the concerns raised by the Councils and the comments are logged in the Addendum to the OSEP [\[REP7-057\]](#) for further discussion in the development of the final SEP. ECC would be the discharging authority of the SEP which would be secured by R18 of the dDCO [\[REP8-005\]](#). In addition, the ExA has recommended that SCC be a consultee on the SEP.
- 6.6.84. In respect of tourism, the ExA is satisfied that the Applicant has adequately assessed the potential for cumulative impacts on tourism arising from the Proposed Development, VEOWF and other projects in the area and the effects are assessed as not significant. Whilst we have had regard to the concerns raised by the Councils, we consider that the Applicant has demonstrated satisfactory forms of embedded mitigation which would satisfactorily respond to the potential cumulative effects on tourism.

CONCLUSIONS

- 6.6.85. The ExA is satisfied that the Applicant's assessment has fully addressed the potential socio-economic effects associated with the construction, operation and decommissioning of the Proposed Development in accordance with Section 5.13 of NPS EN-1. The ExA accepts the findings of the Applicant in the ES that the Proposed Development would have a potential for minor beneficial effects for Suffolk, Essex and the UK though an increase in employment opportunities and economic value. The ExA accepts the Applicant's findings that the Proposed Development, together with VEOWF and other projects, would have cumulative effects on employment and economic value though these will be of a beneficial nature and significant in EIA terms.

- 6.6.86. The ExA also agrees with the Applicant's prediction that the Proposed Development is anticipated to result in an increase in local population numbers due to a change in demographics. This would give rise to minor adverse effects on tourist related accommodation and housing resulting from an increase in non-local workers during the construction phase who would temporarily locate to the area and workers permanently moving to the area during the operational phase. The ExA agrees that the minor adverse impacts are not significant in EIA terms. It is further agreed that the effects on housing, tourist accommodation and health care will be minor adverse.
- 6.6.87. The ExA considers that the Applicant has taken opportunities to promote local employment and skills development through the OSEP [\[APP-253\]](#) and the commitment to produce the SEP, in accordance with paragraph 5.13.12 of NPS EN-1. The Addendum to the OSEP [\[REP7-057\]](#) sets out the comments made during the Examination and forms the basis for further discussions between the Applicant and the Councils in the preparation of the SEP. The SEP would be adequately secured by R18 of the dDCO [\[REP8-005\]](#) and this provides for engagement with stakeholders and discharge by ECC. The ExA has recommended that SCC be a consultee on the SEP and continue their involvement in the preparation of the SEP.
- 6.6.88. At the close of the examination, the wording of R18 of the dDCO [\[REP8-005\]](#) had not been agreed with SCC. The ExA considers that it is reasonable and appropriate for SCC to be a consultee in respect of the final SEP and the ExA is recommending that the rDCO be amended to include SCC as a consultee.
- 6.6.89. The ExA notes the proposals made by the Applicant for the community benefit fund and that whilst this has not been agreed during the Examination, the Applicant has commenced discussions with the Councils to move forward with the community benefit fund in the future. The ExA has not attributed any weight to this in making its recommendation as the community benefits are not material to the decision. This is a matter for the parties to agree outside of the Examination.
- 6.6.90. During the Examination, no cogent evidence was before the ExA to support the view that the Proposed Development would result in a significant adverse effect on the tourism economy. The ExA agrees that the effects on tourism and recreation would represent a minor adverse effect. We are content that the proposed mitigation measures would provide satisfactory and appropriate mitigation.
- 6.6.91. The ExA is also satisfied that there would be no transboundary effects in relation to socio-economic matters. The ExA recognises the potential for some beneficial effects as well as some minor adverse effects. In addition, the ExA notes that cumulatively, the Proposed Development and other projects would have major beneficial effects in terms of employment opportunities and economic value. Having regard to all of the matters reported above, the ExA concludes that, overall, as a result of the potential for beneficial effects, socio-economic effects should carry moderate weight in favour of the Order being made.

7. SUMMARY OF CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

7.1. INTRODUCTION

7.1.1. This Chapter sets out the Examining Authority's (ExA's) summary conclusions relevant to Habitats Regulations Assessment (HRA). This will assist the Secretary of State (SoS), as the Competent Authority, in performing their duties under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations). The ExA's full analysis of matters relevant to HRA is presented in Appendix C of this Report. HRA is a legislated process of assessment of the effects of the Proposed Development (if any) on defined sites which are subject to protection pursuant to relevant international obligations to which the UK has subscribed. These sites are referred to here as 'European Sites', and comprise:

- Special Areas of Conservation (SACs), candidate SACs and proposed SACs
- Special Protection Areas (SPAs) and potential SPAs
- Ramsar sites and proposed Ramsar sites,
- and any sites identified as compensatory measures for adverse effects on any of the above.

7.1.2. The Proposed Development was identified as giving rise to the potential for likely significant effects (LSE) on European sites and is therefore subject to an HRA.

7.2. SUMMARY OF MATTERS CONSIDERED DURING THE EXAMINATION

7.2.1. The main HRA matters raised by the ExA, Natural England (NE) and other examination parties included:

- For benthic ecology
 - Definition of the maximum design scenario (MDS) or worst-case scenario (WCS);
 - assessment of indirect effects on the Margate Long Sands Special Area of Conservation (MLS SAC) arising from sandwave levelling and placement of cable protection.
- For marine mammals
 - Reliance upon interim population consequences of disturbance modelling (iPCOD).
 - Use of noise abatement systems and Site Integrity Plans (SIPs).
 - Applicant's AEoI conclusions for the harbour porpoise qualifying feature of the SNS SAC.
- For ornithology
 - Applicant's AEoI conclusions for guillemot feature of the Farne Island SPA, guillemot, kittiwake, northern gannet and razorbill qualifying features of the Flamborough and Filey Coast (FFC) SPA and red throated diver (RTD) feature of the Outer Thames Estuary (OTE) SPA;
 - Applicable compensatory measures;
 - Approach and calculations determining the quantum of compensation;

- Feasibility, deliverability and likely success of proposed Compensatory Measures (CM) (against various criteria) for guillemot, kittiwake, Lesser Black Backed Gull (LBBG) and razorbill qualifying features;
- Availability of strategic compensation (Marine Recovery Fund (MRF)) for ornithological qualifying features.

7.3. REPORT ON THE IMPLICATIONS FOR EUROPEAN SITES AND CONSULTATION

- 7.3.1. The ExA produced a Report on the Implications for European Sites (RIES) [PD-20] which compiled, documented and signposted information relevant to the HRA provided in the Application and Examination representations (up to the close of the Examination). Consultation on the RIES took place between 1 July 2025 and 23 July 2025. The HRA in Appendix C of this Report considers all HRA representations made by IPs during the Examination, including those made after consultation on the RIES.

7.4. SUMMARY OF FINDINGS IN RELATION TO LIKELY SIGNIFICANT EFFECTS

- 7.4.1. The European sites and qualifying features that were considered in the Applicant's assessment of LSE for the main development proposed are presented in the HRA Screening Report [\[APP-174\]](#).
- 7.4.2. The European sites for which the Applicant concluded no LSE would occur from either the Proposed Development alone or in combination with other projects and plans are presented by receptor group in the HRA Screening Report [\[APP-174\]](#), in the tables as summarised at paragraph 1.2.2 of Appendix C and paragraph 2.4.2 of the RIES [\[PD-020\]](#).
- 7.4.3. NE [\[REP8-100\]](#), RIES Q1 raised an additional LSE pathway of ecological effects arising from sediment deposition during construction to Annex I sandbank of the MLS SAC, which has been assessed by the ExA. No other matters were raised in the examination by IPs in relation to the Applicant's screening assessment.
- 7.4.4. The ExA is satisfied, on the basis of the information provided and subject to the inclusion of the additional pathway of ecological implications from sediment deposition to the MLS SAC during construction, that the correct impact-effect pathways for each site have been properly assessed. The ExA is satisfied with the approach to the assessment of alone and in-combination likely significant effects.
- 7.4.5. Furthermore, because of the reasoning explained in Appendix C, the ExA considers that the Proposed Development is likely to have a significant effect from the impacts identified on the qualifying features of the European sites in tables A1 to A5 in Annex 1 of the RIES [\[PD-020\]](#) for the main development, and listed under 'HRA for LBBG compensation sites' for Lantern and Gedgrave Marshes compensation site, when considered alone, or in combination with other plans or projects. Other than outlined above for the MLS SAC, this was not disputed by NE during the Examination.

7.5. FINDINGS IN RELATION TO ADVERSE EFFECTS ON THE INTEGRITY (AEOI)

- 7.5.1. The European sites and qualifying features identified in Table 2 (and Annex 1, Tables A1 to A5 of the RIES [\[PD-020\]](#)) were further assessed by the Applicant to

determine if they could be subject to AEol from the Proposed Development, either alone or in-combination.

- 7.5.2. The assessment of AEol was made in light of the conservation objectives for the European sites, as described by receptor group in the RIAA Parts 2 to 5 [REP7-013] [APP-176] [APP-178] [APP-181], and LBBG compensation site assessments ([REP4-010] for Lantern Marshes and [REP5-072] for Gedgrave Marshes).
- 7.5.3. The outcome of the Applicant's assessment for the main development alone or in combination is summarised by receptor group in tables 6.1 to 6.5 of the RIAA Part 6 Summary [APP-182]. For the LBBG compensation sites, the assessment outcome is summarised in section 3.3.2 of [REP4-010] and [REP5-072] for the Proposed Development alone, and section 3.3.5 of [REP4-010] and section 3.3.4 of [REP5-072] for the Proposed Development in combination. The ExA is satisfied, based on the information provided, that the correct impacts have been assessed.

RELEVANT EUROPEAN SITES AND AEOL FINDINGS

- 7.5.4. The Applicant's RIAA Parts 4 and 6 [APP-178] [APP-182, table 6.3] concluded that the Proposed Development cannot exclude AEol on the Alde Ore Estuary (AOE) SPA and Ramsar site, owing to in combination effects to LBBG from collision risk during operation.
- 7.5.5. At Deadline 6 [REP6-007], the Applicant accepted that based on the competent authority's decision in the Rampion 2 DCO, it was likely that the SoS would not rule out AEol from the Proposed Development in-combination with other plans and projects to the guillemot feature of FFC SPA and Farne Islands SPA, and the kittiwake feature of the FFC SPA. It updated its Habitats Regulations Derogation Provision of Evidence [REP6-007] so that the proposed compensation measures for these features were no longer on a 'without prejudice' basis. As set out in [REP6-057].
- 7.5.6. CM for RTD of OTE and razorbill of FFC SPA continued to be provided for on a 'without prejudice' basis. The Applicant did not update the RIAA Parts 4 and 6 to reflect this change in its position. This is because the Applicant at Deadline 8 and subsequently at the close of the Examination maintains its RIAA findings are correct. The above European sites and features were therefore the subject of a derogation case submitted by the Applicant.

Alde-Ore Estuary SPA and Ramsar site / LBBG

- 7.5.7. In light of the conservation objective to restore the size of the breeding population whilst avoiding deterioration from its current level, the ExA agrees the Proposed Development in combination with other offshore wind farms will exert an AEol on the LBBG feature of the AOE SPA and Ramsar site. The ExA considers that the scale of the impact should be set at Applicant's preferred level. The technical analysis to this conclusion is within Appendix C.

FFC SPA – disturbance and displacement to guillemot and razorbill

- 7.5.8. In the RIAA Part 4 [APP-178] the Applicant concluded no AEol for the razorbill and guillemot features of FFC SPA, both alone and in-combination. NE disagreed with this conclusion, stating that the in-combination effects of offshore wind farms are already at a level where it cannot rule out adverse effects and that the Proposed Development would be adding to this impact. NE conceded that project alone impacts are relatively small, though it could still not rule out AEol.

- 7.5.9. The ExA finds that guillemot impacts would lead to AEol in accordance with NE submissions. Moreover, contrary to the Applicant's ES which assumes the findings of the supporting RIAA, NE did not conclude there would be no AEol of FFC SPA for seabird breeding assemblage. For FFC SPA Razorbill breeding implications from disturbance/displacement during operations and maintenance – whilst NE did rule out AEol when the project was considered alone, NE could not agree there would be no 'in-combination AEol', albeit the effect in their view would be small.
- 7.5.10. The ExA notes the SPA is some 297km away from North Falls. The mean maximum foraging range of Razorbill is said to be 73.8km to 48.4 km within Section 4.4.4.7.2.1 of the RIAA Part 4 [APP-178]. Moreover, tracking data referred to by the Applicant in NE's view implies the array area is at a considerable distance beyond the breeding season foraging range of razorbill from the FFC SPA.
- 7.5.11. For these reasons NE conclude there is no strong evidence to support that connectivity would be identified during breeding season. NE also concluded that any potential displacement effects to the SPA population would be limited to the non-breeding season.
- 7.5.12. Considering the recently consented Rampion 2 has similarly small and comparable predicted impact levels to North Falls, and that North Falls was included in the Rampion 2 in-combination assessment, the Applicant maintains there is substantial evidence and precedent from previous decisions of the SoS to support ruling out AEol beyond reasonable scientific doubt.
- 7.5.13. However, the information within the Applicant's updated offshore ornithology in-combination tables (Rev 0) [REP7-050] is relevant. It identifies the Applicant's approach of 50% displacement and 1% mortality of displaced birds, the predicted annual in combination displacement mortality per year for the FFC breeding population of razorbills is 115 individuals based on the Applicant's approach to apportioning at Outer Dowsing, and 129 individuals based on the NE advised apportioning for Outer Dowsing. The respective predicted increases in the baseline mortality rate of the FFC SPA breeding population are 1.8% and 2.0%.
- 7.5.14. Under the NE approach of 70% displacement and 2% mortality of displaced birds, the predicted annual in combination displacement mortality per year for the FFC breeding population of razorbills is 323 individuals based on the Outer Dowsing Applicant approach to apportioning, and 362 individuals based on the NE apportioning.
- 7.5.15. The respective predicted increases in the baseline mortality rate of the FFC SPA breeding population are 5.0% and 5.6%. These compare with predicted annual in-combination mortalities to the FFC SPA breeding population of razorbills, based on the in-combination totals in the RIAA ([APP-178], Table 4.57) of 84 at 50% displacement and 1% mortality, and 235 at 70% displacement and 2% mortality, respectively equivalent to increases of 1.3% and 3.7% in the baseline mortality.
- 7.5.16. It is acknowledged by the ExA that in consenting recent offshore wind farms in the southern north sea (Hornsea Project Four, Sheringham and Dudgeon Extension Projects and Rampion 2), the SoS has applied a more precautionary scenario of 70% displacement and 2% mortality in all cases.
- 7.5.17. The ExA is mindful the Applicant does make the argument the scenario of 70% displacement and 2% mortality is overly precautionary. However, the Applicant also seems to imply in its submissions that a crucial factor would be if similar

displacement and mortality rates were applied for North Falls by the ExA or SoS then this may alter the outcome of whether compensation would be required. The ExA appreciates that this is a finely balanced issue.

- 7.5.18. Although the Applicant relies on expert judgment and analysis that 50% displacement and 1% mortality of displaced birds would be appropriate, the overall submissions it made does not fully explain to the ExA why the other consented DCO's referred to do not bearing in mind the statutory responses of NE.
- 7.5.19. Thus, the ExA finds the use of 70% displacement and 2% mortality identified by NE and used by the SoS on other offshore windfarms is reasonable. It would not be overly precautionary in this case.
- 7.5.20. The conclusion of the ExA on this matter is that there is compelling evidence to support there would be an AEoI on Razorbill from FFC SPA in line with NE's and Royal Society for the Protection of Birds (RSPB) submissions.

FFC SPA / Kittiwake

- 7.5.21. The Applicant concluded no AEoI to the kittiwake feature of FFC SPA, however at Deadline 6 [\[REP6-007\]](#) the Applicant stated that in light of the Rampion 2 decision, it amended the without prejudice HRA DCO schedule [\[REP7-043\]](#) to remove reference to the kittiwake features of FFC SPA. Compensation measure for kittiwake of FFC SPA is secured in Schedule 15 Part 3 of the draft Development Consent Order (dDCO).
- 7.5.22. The ExA considers that the collective case made by NE and RSPB is more convincing than the Applicant's conclusions stated within its RIAA. This is because the Applicant has screened out breeding season collision impacts on the Kittiwake population of the FFC SPA, despite the colony being within the mean foraging range (300.6 km) and within the maximum range recorded at that colony (324 km).
- 7.5.23. The Applicant has argued that tracking studies have not shown any overlap with the array footprint and therefore there is no connectivity with the colony. However, while tracking studies are extremely valuable, they are of relatively few birds in a relatively short temporal window and so absence of evidence from these studies of a spatial overlap of foraging trips and the array should not be taken as evidence of no overlap. NE/RSPB commentary combined therefore considers that an AEoI on kittiwake from FFC SPA cannot be ruled out.
- 7.5.24. Thus, NE and RSPB's submissions combined alleging AoEI follows that of the Rampion 2 decision, where based on applicable data and evidence it was concluded that there was reasonable scientific doubt that there would be harm to the kittiwake of the SPA. The same reasoning applies to this case.

Farne Islands/ Guillemot

- 7.5.25. In its RIAA Part 4 [\[APP-178\]](#) the Applicant concluded that there would be no AEoI on the Farne Islands SPA, either alone or in-combination. It identified that in-combination mortality based on 50% displacement and 1% mortality would result in less than 0.1% deaths.
- 7.5.26. Nevertheless, NE's detailed technical comments on the HRA Shadow AA for Guillemot at the Farne Islands SPA [\[REP1-056\]](#) within [\[REP4-063\]](#) and the analysis of RSPB are important. NE conclude the AoEI of mortality arising from distributional change on the Guillemot population in-combination with other plans and projects.

- 7.5.27. Whilst the Applicant still concludes no AEol to the guillemot feature of the Farne Islands SPA, at Deadline 6 [REP-007] they have stated that in light of the Rampion 2 decision, it is now considered that AEol on this feature is likely to be the decision of the SoS. Consequently, it amended the without prejudice HRA DCO schedule [REP7-043] to remove reference to the guillemot feature of Farne Islands SPA. Compensation measures for guillemot of the Farne Islands SPA would be secured by Schedule 15 Part 2 of the dDCO.
- 7.5.28. Given the materiality of the Rampion 2 decision featuring scientific data and judgment already applied by the SoS to gauging relevant and comparable in combination impacts, the ExA finds that NE's and RSPB's combined justifications within [REP4-063] and [REP4-089] are therefore more convincing. We agree there would be AEol from guillemot impacts in combination with other projects. It is a further additional ecological impact above that already determined for Rampion 2.

Red-throated diver (RTD) of OTE SPA

- 7.5.29. The Applicant maintained at Deadline 8 there would be no AEol in respect to RTD from the OTE SPA. Nevertheless, a without prejudice derogation and compensatory measures case is available to the ExA and SoS via: RIAA [APP-178]; Habitats Regulations Derogation Provision of Evidence (Rev 2) [REP7-015]; Red Throated Diver Compensation Document (Rev 2) [REP6-015] and Appendix 5 Guillemot and Razorbill Compensation Document (Rev 2) [REP6-023]. The compensation referred to can be secured via applying the Applicant's without prejudice HRA/Marine Conservation Zone Assessment (MCZA) Schedules Rev 3 [REP8-050] to any final consented DCO.
- 7.5.30. The ExA acknowledges that the Applicant has already reduced the size of the array area during pre-application stages. That action directly sought to reduce potential for displacement effects to the species. The ExA accepts that provides a clear example of avoidance measures in designing the development. Subsequently, there is now some 4.5km between the OTE SPA and North Falls at the closest point.
- 7.5.31. The Applicant has assessed an overlap area of the 12km buffer of North Falls and the OTE SPA for RTD displacement [REP8-036]. The figures before the ExA indicate that the overall OTE SPA covers around 3924km². Within the assessed precautionary ES 12km buffer around North Falls there is a point of overlap with the OTE SPA which, according to the Applicant, equates to 2.8% of the SPA area.
- 7.5.32. The ExA notes that all of the 2.8% SPA area figure quoted by the Applicant is either already within 12 km of an existing offshore wind farm (such as London Array and Greater Gabbard) "and/or" overlaps with existing International Maritime Organisation (IMO) "shipping measures" (the ExA highlights the term "shipping measures" involves shipping routes). The ExA accepts these are well used shipping lanes running through the SPA and to the east of the SPA boundary. This is explained within [APP-178] and depicted in Figures 4.1 and 4.2 [APP-178], as shown below.

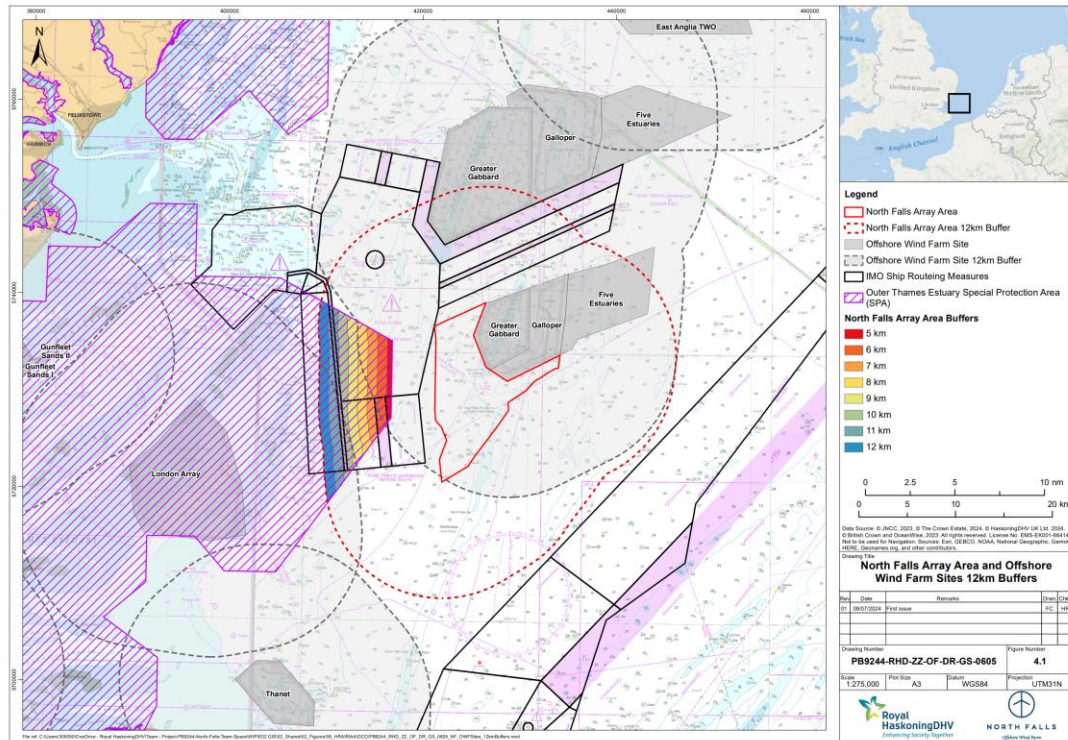


Figure 47: North Falls Array Areas and OWF sites 12km buffers (source: Figure 4. [APP-178])

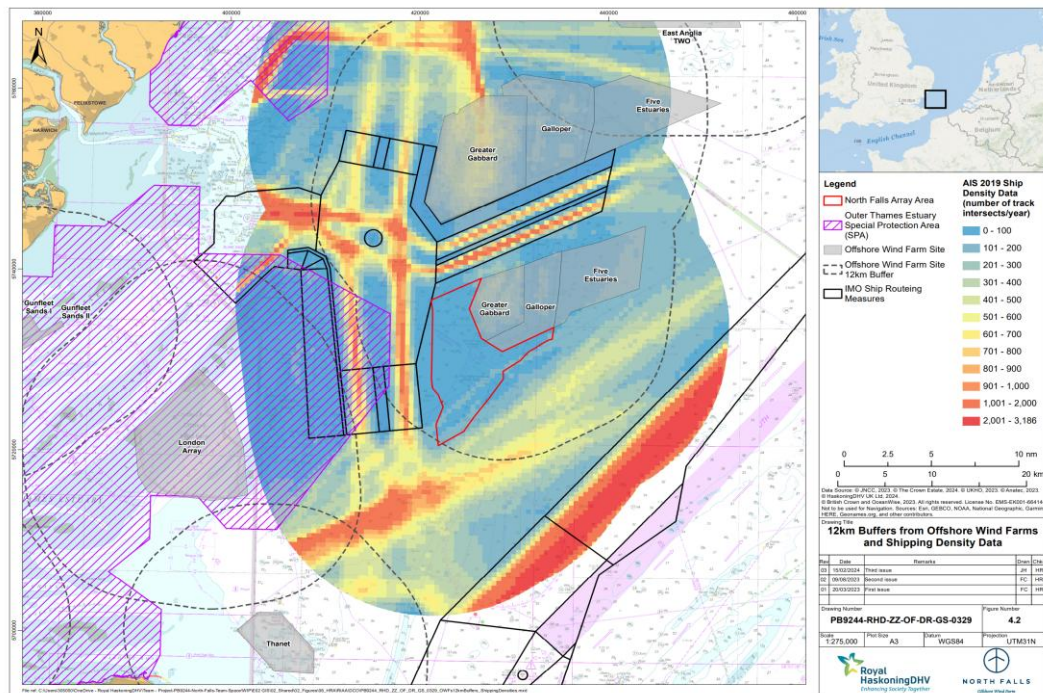


Figure 48: 12km buffers from OWFs and shipping density data (Source: Figure 4.2 from [APP-178])

7.5.33.

This means RTDs are already likely to be displaced by ships and shipping lanes in the overlap area within the SPA inside the 12km buffer. The ExA is therefore conscious that RTDs using this area are likely to be more tolerant to disturbance as

this is part of the existing baseline conditions. The species is recognised to be sensitive to environmental changes such as disturbance from human activity.

- 7.5.34. Consequently, the ExA shares the Applicant's view that RTDs would not be disturbed by the position of North Falls in these circumstances as there would be no material change to numbers or their distribution within the overall OTE SPA.
- 7.5.35. It is notable that the RTD feature of the OTE SPA is assessed by NE as being in an unfavourable condition. Nevertheless, NE's 2025 condition assessment does suggest non-breeding abundance of red-throated diver is meeting targets but rather it is supporting habitat attributes that are failing. Thus, as the precautionary 12km buffer around North Falls is already subject to sources of displacement for RTD, North Falls would not result in further material displacement of RTD over and above the existing sources of displacement.
- 7.5.36. Whilst the technical analysis of RSPB within [\[REP4-089\]](#) highlights RTD are sensitive to displacement effects it gives no strong reason why existing shipping lane activity corridors, and the presence of other existing windfarms would not be a crucial locational factor.
- 7.5.37. For those reasons, the ExA concludes that in accordance with the Applicant's assessments and technical information that AEoI of RTD within the SPA can be ruled out beyond reasonable scientific doubt for the project alone and in-combination. Therefore, contrary to NE's position [\[REP1-044\]](#), seeking a seasonal restriction on the installation of the export cable within the OTE SPA and a 2km buffer during construction would not be necessary, as there would not be an AEoI from the construction works within the cable corridor.
- 7.5.38. Given NE did maintain at Deadline 8 (risk register point P23) that a seasonal restriction to cable laying and associated activities within the SPA and a 2km buffer (between 1st November and 31st March inclusive) is a feasible mitigation option available to the Applicant, the SoS may wish to consider this point further.
- 7.5.39. Such mitigation measure according to NE has been used by other developers affecting the OTE SPA e.g. East Anglia One North and East Anglia Two OWF, and more recently Five Estuaries OWF have put a seasonal restriction in place for the SPA, with discussions ongoing regarding the 2km buffer. These commitments reflect broader practice elsewhere in the UK, with Outer Dowsing OWF, Mona OWF and the Morgan & Morecambe Transmission Assets proposals all committing to seasonal restrictions to avoid adverse effects on other RTD SPAs. All of these points are countered by the Applicant within closing submission [\[REP8-038\]](#).
- 7.5.40. The ExA has considered the scope for such a restriction, if AoEI was found to be the case contrary to the ExA's overall findings within Appendix C. We are aware it might make the construction phases more difficult to implement. It is also noted in [\[REP1-044\]](#) that a seasonal restriction within 2km of the SPA boundary would affect works within the export cable corridor in areas where it does not pass through the SPA, but close to the SPA. Nonetheless, the SoS could further consider applying such a restriction if an AEoI is found in any decision contrary to the ExA's assessment.
- 7.5.41. The ExA notes that at the close of examination, no scale of compensation or sites for RTD CM had been secured. There is a lack of clarity on these details. The ExA considers that there is insufficient information from the Applicant for the SoS to establish that appropriate compensatory measures could be implemented in order

to fulfil their duty under the requirements of the Habitats Regulations, as highlighted in Appendix C.

SITES WHERE AEOL CAN BE EXCLUDED

- 7.5.42. Aside from the AOE SPA and Ramsar site, FFC SPA and Farne Islands SPA, the Applicant's RIAA [APP-173] to [APP-195], and HRA for the LBBG compensation sites at Lantern Marshes [REP4-010] and Gedgrave Marshes [REP5-072] concluded that the Proposed Development would not result in AEol to all the remaining European sites and features considered. Although AEol could not be excluded for the LBBG feature of the AOE SPA and Ramsar site, the guillemot feature of the FFC SPA and Farne Islands SPA, and the kittiwake feature of the FFC SPA, the sites were assessed for other features for which the applicant did not conclude AEol.
- 7.5.43. The ExA is satisfied on the basis of the information provided that AEol on all these sites and their qualifying features can be excluded. The complete details of these sites is provided in Table 2 of ExA Appendix C. The Applicant also concluded no AEol for the following sites and qualifying features:
- AOE SPA (wetland invertebrate assemblage);
 - AOE Ramsar site (wetland invertebrate assemblage and wetland plant assemblage);
 - Farne Islands SPA (seabird assemblage);
 - FFC SPA (razorbill);
 - MLS SAC (sandbanks which are slightly covered by seawater all the time);
 - Orfordness – Shingle Street SAC (coastal lagoons and perennial vegetation of stony banks);
 - OTE SPA (RTD);
 - SNS SAC (harbour porpoise);
 - Stour and Orwell Estuaries SPA (avocet, black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, knot, pintail, redshank and waterbird assemblage).
- 7.5.44. However, several of the Applicant's conclusions of no AEol in relation to these European sites and their qualifying features were disputed by IPs and were discussed throughout the examination.

BENTHIC ECOLOGY

Consideration of Margate Long Sands SAC having regard to seabed effects including: array area activities; sediment movement; offshore cable and scour protection; suspended sediment concentrations (SSC); and other relevant issues
Examination issues

- 7.5.45. Based on the information submitted to the examination, the ExA is satisfied that the Hydrodynamic and Dispersion Modelling report [REP7-041] is an appropriate basis from which to undertake assessment of AEol to the MLS SAC. The ExA is also satisfied that there are no LSE pathways to the MLS SAC from activities associated with the array area during construction, operation and decommissioning.
- 7.5.46. The issues raised by NE with the MDS or WCS for seabed effects, including sediment deposition, seabed mobility and sandwave recovery, and cable protection, were considered in detail during the examination as summarised in the RIES [PD-020] and described above. Based on this information, and the advice of NE as the ANCB that it agrees that the parameters used in the modelling [REP7-041] represent the MDS or WCS, the ExA recommends that the MDS or WCS presented

in ES Chapter 5 [APP-019] and the RIAA Part 2 [REP7-013] provides a reasonable and realistic basis for the assessment of AEoI to the MLS SAC.

- 7.5.47. The ExA is satisfied that Deemed Marine Licence (DML) conditions in Schedule 9 of the dDCO [REP8-005] would control the placement of cable protection adjacent to the MLS SAC, in terms of location, maximum length and area, and 150m buffer, so that the modelled and assessed MDS could not be exceeded.
- 7.5.48. The ExA agrees that this includes a WCS of leaving the cable protection in situ at decommissioning. The ExA is also satisfied that there is a mechanism for NE to comment on the final cable installation and cable protection methods selected through a requirement to consult it before approval of a final Cable Specification and Installation Plan (CSIP) by the MMO, as required by DML Condition 22(1)(h) of Schedule 9 of the dDCO.
- 7.5.49. The ExA is also satisfied that the cable protection parameters used in the modelling [REP7-041] provide a reasonable and realistic basis for the assessment. Based on the evidence submitted and the advice of NE as ANCB, the ExA is satisfied that the applicant's RIAA Part 2 [REP7-013] has sufficiently assessed in-combination effects arising from placement of cable protection as part of the Proposed Development.
- 7.5.50. On the basis of evidence provided, including the advice of NE as ANCB that AEoI can be excluded (aside from smothering, which is addressed separately below), and subject to the proposed mitigation of a 150 metre buffer being adequately secured and implemented, the ExA is satisfied that this LSE pathway will not result in AEoI to the MLS SAC from the Proposed Development alone or in combination with other plans and projects.
- 7.5.51. Based on the evidence provided, and the advice of NE as ANCB [REP8-099], the ExA accepts that the 150m buffer between the cable installation and protection, and the MLS SAC, is appropriate to avoid AEoI of the MLS SAC and adequately secured in the Transmission Assets DML [REP8-005, Schedule 9].
- 7.5.52. The ExA notes NE's comments regarding a reburial hierarchy but is satisfied that the provisions in the outline CSIP [REP8-047, section 4.3] provide a commitment that burial is the primary method of cable protection. A final version of the CSIP would be submitted for approval under Transmission Asset DML Condition 22(1)(h) [REP8-005, Schedule 9] by the MMO in consultation with NE as the ANCB.
- 7.5.53. This would provide an opportunity to further detail steps to achieve burial before considering placement of cable protection in proximity to the MLS SAC (beyond the 150m buffer). NE's advice [REP8-096] at close of examination was that the Offshore In-principle Monitoring Plan (OIPMP) [REP8-009] should commit to monitoring of the benthic community at MLS SAC where monitoring of physical process change identifies significant effects, and this should be captured in table 5-1 of the OIPMP. NE had outstanding concerns about the potential ecological implications of smothering from sediment deposition to benthic communities but ultimately considered the risk of AEoI was low.
- 7.5.54. The ExA notes that the OIPMP is also in outline, and a final version would be submitted for approval in accordance with the Transmission Asset DML Conditions by the MMO in consultation with NE as the ANCB. The ExA is satisfied that commitments to monitoring could be clarified as needed through this process, which also provides for adaptive management in the unlikely event that monitoring shows a significant effect. The ExA recommends that the mitigation and monitoring

required to avoid AEol of the MLS SAC is adequately secured through the dDCO. No further changes to the dDCO are proposed by the ExA in this regard.

- 7.5.55. In line with the above and for the avoidance of any doubt the ExA also concludes there is adequate information for the SoS to reach a conclusion on all relevant benthic and intertidal ecological interests without further post examination consultation being necessary. This is because the Applicant's Deadline 8 correspondence is seeking to meet and directly respond to all of the known and stated Examination concerns of NE stated at Deadline 7 and Deadline 8 combined. And also because the responses received from NE at Deadline 8 are reflective of this general position, set against the areas of technical impasse which have resulted within the Examination period. Moreover, the ExA accepts greater clarity could have been provided by NE at Deadline 7 to assist a decision.

Outer Thames Estuary SPA as supporting benthic habitat

- 7.5.56. Based on the submissions from the Applicant and NE, and NE's view as ANCB that AEol can be ruled out, the ExA agrees with the conclusion that an AEol can be excluded for the 5 benthic habitat types that support the OTE SPA from all LSE pathways, both alone and in combination.

MARINE MAMMALS

- 7.5.57. The ExA is satisfied that AEol from all other LSE pathways assessed other than underwater noise can be excluded. Overall, the ExA is content that suitable mitigation would be able to be implemented to avoid AEol from underwater noise to the harbour porpoise qualifying feature of SNS SAC from the Proposed Development alone or in combination with other plans and projects. As a further precaution, the ExA consider Noise Abatement System (NAS) stipulation use to be warranted in line with Defra policy 'Reducing Marine Noise (January, 2025).
- 7.5.58. The final SNS SAC SIP provides a platform for the Applicant to demonstrate to NE that it has utilised best endeavours to deliver noise reduction associated with piling. The ExA appreciates this does not preclude the implementation of NAS if evidence shows this to be necessary.
- 7.5.59. The ExA is content that the 'outline' SNS SAC SIP provides a mechanism to further consider the use of NAS following any consent and could secure this if necessary. Whilst securing NAS at this stage under the DCO may preclude the exploration of avoidance and reduction of impacts prior to seeking to apply mitigation, the view of the ExA is that there is strong likelihood NAS would be required.
- 7.5.60. Given the likelihood, the ExA concludes that on a precautionary basis a DML Condition revision is necessary in Schedule 9 Part 2 of the DCO. Such change was recommended by the MMO in paragraph 6.1.4 of [\[REP7-080\]](#) and was agreed with NE. The revised DML Condition wording the ExA deems is required is the following:-
- 7.5.61. *Condition 22(1)(g) in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol (in accordance with the outline marine mammal mitigation protocol), the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant SNCB and which must include details of noise reduction methods through project design (primary measures) and/or, deployment of noise mitigation systems or noise abatement systems (secondary measures) that will be utilised to manage sounds*

from those piling activities and such protocol must include full details and justification for the mitigation chosen or excluded for deployment.

OFFSHORE ORNITHOLOGY

- 7.5.62. The RSPB [\[REP8-103\]](#) stated it had outstanding concerns including potential bias in survey methods utilised by the Applicant, with consideration of disturbance and autocorrelation not fully evaluated. But the ExA considers that the Applicant has applied a sufficiently robust methodology informing its conclusions within the RIAA.

ONSHORE ECOLOGY

- 7.5.63. The RIAA Screening Report [\[APP-174\]](#) identified the potential for LSE during construction and decommissioning on:
- direct impacts on functionally linked land (FLL) which supports qualifying features of the site due to habitat loss;
 - direct impacts on qualifying features from noise and visual disturbance in FFL;
 - indirect impacts on FLL which support qualifying features of the site due to air quality emissions or changes in supporting surface or groundwater resources.
- 7.5.64. The RIAA Part 5 [\[APP-181\]](#) concluded there would be no AEoI to either the Stour and Orwell Estuaries SPA or Ramsar site. However, a response from NE, [\[REP2-054\]](#) stated that ‘the features for which outstanding concerns remain are unknown as the impacts are yet to be assessed’.
- 7.5.65. The ExA [\[PD-013\]](#) asked NE to confirm if it agreed with the conclusions of the applicant as set out in [\[APP-181\]](#). The response provided by NE at Deadline 5 referred to detail in Appendix C5 however that document referred to benthic ecology matters. In response to RIES Question 24, NE [\[REP8-100\]](#) stated that it considers there would be a residual impact in terms of the loss of potential off-site foraging habitat that would need to be taken into account during future in-combination assessment.
- 7.5.66. Given scope for additional survey and mitigation are ensured by the dDCO, the ExA is satisfied that this LSE pathway would not result in AEoI to Stour and Orwell Estuaries SPA and Ramsar site from the Proposed Development alone/ or in-combination with other plans and projects. Similarly, AoEI can be ruled out for Orfordness-Shingle Street SAC and the AOE Ramsar Site as per 1.4.302-1.4.314 of Appendix C of this Report.

7.6. ALTERNATIVES

- 7.6.1. Considering the information submitted by the Applicant, the ExA is satisfied that no alternative design parameters are known to be implementable that would present a feasible alternative solution. The ExA considers that the alternatives assessed would not constitute an alternative solution to the objectives of the Proposed Development. The ExA is content that no alternative solutions exist which would deliver appreciable benefits in terms of adverse effects on the European site. The ExA accepts that the Applicant has presented a compelling case that would allow the SoS to conclude that there are no alternative solutions to the delivery of the Proposed Development.

7.7. IMPERATIVE REASONS OF OVERRIDING PUBLIC INTEREST (IROPI)

7.7.1. The need for the Proposed Development has already been discussed in Chapter 3 of this Report. The Applicant's case for IROPI under the HRA process is presented in [\[APP-183\]](#). Section 6 set out the applicant's reasoning that there is an imperative need for the Proposed Development, with reference to the urgent need to establish a secure energy supply and meet decarbonisation targets. The Applicant states that the Proposed Development would help meet the targets of the UK Government with an indicative capacity of 850MW. This would help to reduce the UK's reliance upon imported energy and generate enough clean energy to power over 400,000 typical UK households per year.

7.7.2. Section 6 of [\[APP-183\]](#) states that the use of low carbon renewable resources such as offshore wind, would substantially reduce carbon emissions, and the Proposed Development would make a significant contribution both to the achievement of UK decarbonisation targets and to global commitments mitigating climate change. The Applicant also states there is public interest in the Proposed Development proceeding in terms of:

- Increasing energy security will result in more stable energy prices, combatting climate change is in the public interest due to associated risks of flooding, water supply shortages, health impacts and food security;
- Furthermore, the applicant highlights the economic growth associated with the Proposed Development with regards to provision of investments and job opportunities.

7.7.3. Section 6.3 set out the case that the reasons are overriding and in the public interest. The Proposed Development would not affect any priority habitats or species (as identified in The Habitats Regulations) and therefore the IROPI is restricted to reasons of human health, public safety, or beneficial consequences of primary importance to the environment/can include consideration of social and economic reasons [\[APP-183\]](#).

7.7.4. As identified above, the case for Development Consent is addressed in Chapter 3 of this Report which concludes that there is a strong need for the Proposed Development owing to delivering low carbon energy within a reasonable timeframe. Because of the need for the Proposed Development, the public interests presented, the interests are overriding when measured against the adverse effects on the MLS SAC, AOE SPA and Ramsar site, OTE SPA, FFC SPA and the Farne Islands SPA. Thus, the ExA is of the opinion that IROPI for the Proposed Development could be established overriding when measured against the adverse effects on these sites.

7.8. COMPENSATORY MEASURES

7.8.1. Much of the Examination period has been used to assess potential HRA compensatory requirements submitted by the Applicant on without prejudice basis or otherwise. Section 1.7 of Appendix C to this Report gives the ExA's full and detailed analysis of compensatory measure provision relative to HRA legislation.

7.8.2. The Applicant submitted proposed compensation measures for the European sites and features listed below, in appendices 2 to 5 of its Habitats Regulations Derogation Provision of Evidence [\[REP7-015\]](#). It provided an overview in the Appendix 1 Compensatory Measures Overview [\[REP8-015\]](#). The following was referred to:

- Annex I sandbanks which are slightly covered by seawater all the time feature of the MLS SAC ('without prejudice');
- LBBG feature of the AOE SPA and Ramsar site;
- kittiwake feature of the FFC SPA;
- guillemot feature of the FFC SPA and Farne Islands SPA;
- razorbill feature of the FFC SPA ('without prejudice');
- RTD feature of OTE SPA ('without prejudice').

7.8.3. The compensation measures relied upon for LBBG, kittiwake and guillemot are secured by Schedule 15 of the dDCO [REP8-005]. The Applicant provided 'without prejudice' drafting in a form that could be inserted into Schedule 15 of the dDCO for razorbill, RTD and Annex I sandbanks [REP7-043] if deemed necessary by the ExA/SoS. The submitted wording provides for 'project-led proposals' or 'strategic compensation' through contribution to the MRF or other equivalent fund.

7.8.4. Overall, there are some technical shortfalls for the range of compensation measures evidenced. However, aside from RTD CM (which is not sought by the ExA and where there are far more serious and substantial shortfalls) the ExA considers that there is sufficient information for the SoS to establish that appropriate compensatory measures could be implemented, in order to fulfil their duty under the requirements of the Habitats Regulations.

7.8.5. In the event that the SoS decides that compensatory measures are required for RTD of the OTE SPA contrary to the ExA's findings, the Applicant's separate without prejudice HRA DCO schedule for RTD [REP8-049] could be inserted into Schedule 15 of the DCO. However, the SoS should first be satisfied the in-principle scale of compensatory measures is agreed between NE and the Applicant with other details then built on top of that.

7.8.6. This is because presently there is an absence of clarity in the information provided. Post consent agreement of further details incorporating relevant expert steering group/statutory advice secured by the DCO in other CM cases would not ensure ecological effectiveness of RTD CM if it was sought by the SoS at this point.

7.9. HRA CONCLUSIONS

7.9.1. The ExA is satisfied that the correct European sites and qualifying features have been identified for the purposes of assessment, and that all potential impacts which could give rise to significant effects have been identified. The ExA considers that there is sufficient information before the SoS to enable an appropriate assessment to be undertaken.

7.9.2. The ExA's findings are that, subject to the mitigation measures to be secured in the dDCO and DML, AEol from the Proposed Development when considered alone or in-combination with other plans or projects can be excluded from the impact-effect pathways assessed for the European sites listed in Table 2 of Appendix C together with the following that were disputed by NE and/or IP's for the reasons described in Section 1.4:

- AOE SPA (wetland invertebrate assemblage);
- AOE Ramsar site (wetland invertebrate assemblage and wetland plant assemblage);
- Farne Islands SPA (seabird assemblage);
- FFC SPA (razorbill, gannet and seabird assemblage);
- MLS SAC (sandbanks which are slightly covered by seawater all the time)

- Orfordness – Shingle Street SAC (coastal lagoons and perennial vegetation of stony banks);
- OTE SPA (RTD);
- SNS SAC (harbour porpoise).
- Stour and Orwell Estuaries SPA (avocet, black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, knot, pintail, redshank and waterbird assemblage).

7.9.3. Whilst the ExA cannot exclude LSE from these European sites, based on the evidence discussed in Section 1.4 of Appendix C, it is satisfied that there would be no AEoI from the Proposed Development alone and in-combination for the following qualifying features:

- Gannet of FFC SPA;
- RTD of OTE SPA;
- Avocet, black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, knot, pintail, redshank and waterbird assemblage of Stour and Orwell Estuaries SPA;
- Harbour porpoise of SNS SAC.

7.9.4. However, the ExA's findings are that AEoI cannot be excluded beyond reasonable scientific doubt on the following European sites and qualifying features from the Proposed Development:

- Razorbill of FFC SPA (in-combination);
- AOE SPA and Ramsar site – LBBG (in-combination);
- FFC SPA – kittiwake (collision risk, in-combination), guillemot (displacement, in-combination);
- Farne Islands SPA – guillemot (displacement, in-combination).

7.9.5. The Applicant submitted a formal derogation case [[REP7-015](#)] that included an assessment of alternative solutions, a case for IROPI, and proposed compensation on a without prejudice basis for razorbill of FFC SPA, RTD of OTE SPA and Annex I sandbank of MLS SAC. Compensation measures for the guillemot feature of the Farne Islands SPA is set out in the Guillemot and Razorbill Compensation document [[REP6-023](#)].

7.9.6. The subjects of alternative solutions, IROPI, and compensation were given substantial consideration during Examination. The ExA is satisfied that no feasible alternative solution exists that would represent a lesser adverse effect to the Proposed Development. Given the evidence available, with regards to the case for IROPI the ExA is of the opinion that IROPI for the Proposed Development could be established.

7.9.7. The findings of the Examination are that compensation packages required would be feasible and appropriate and is adequately secured in the dDCO/DML but only with further changes to be agreed, as highlighted.

7.9.8. The ExA recommends that Schedule 15 Part 2 of the Applicant's dDCO received at Deadline 8 [[REP8-005](#)] is further altered to include a revised collective schedule for guillemot and razorbill (as per the additional wording within [[REP7-043](#)]). Without such an alteration Part 2 would only secure compensation measures for guillemot. The ExA also recommends the other remaining parts of Schedule 15: Part 1 (LBBG) and Part 3 (kittiwake) should be included in the final DCO.

7.9.9. The ExA considers that there is sufficient information before the SoS to enable them to undertake an appropriate assessment and to apply the derogation tests of

alternative solutions, IROPI, and compensation in order to fulfil their duty under the requirements of The Habitats Regulations.

8. CONCLUSIONS ON THE CASE FOR DEVELOPMENT CONSENT

8.1. INTRODUCTION

- 8.1.1. This Chapter sets out the Examining Authority's (ExA) overall assessment and conclusions on whether there is a case for the making of a Development Consent Order (DCO) for the Proposed Development.
- 8.1.2. This is based on the provisions of the recommended Development Consent Order (rDCO) (Appendix D), the details of which are discussed in Chapter 10.
- 8.1.3. As set out in Chapter 2 of this Report the application falls to be considered under s104 PA2008. The Secretary of State (SoS) must therefore have regard to:
- Any national policy statement (NPS) which has effect in relation to development of the description to which the application relates;
 - any Local Impact Report (LIR) (within the meaning given by the s60(3) PA2008) submitted to the SoS before the deadline for submission;
 - any matters prescribed in relation to development of which the application relates; and
 - any other matters that the SoS thinks are both important and relevant to their decision.
- 8.1.4. The SoS must decide the application in accordance with any relevant NPS except to the extent that one or more of subsections (4) to (8) of s104 applies. S104(7) requires the adverse impacts of the Proposed Development to be weighed against any benefits.
- 8.1.5. In this case, the relevant NPS's are:
- The Overarching National Policy Statement for Energy (NPS EN-1);
 - the National Policy Statement for Renewable Energy Infrastructure (NPS EN-3); and
 - the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5).
- 8.1.6. NPS EN-1 states that given the level and urgency of need for the delivery of major energy infrastructure covered by the energy NPSs, including EN-3 and EN-5, the SoS will start with a presumption in favour of granting consent to applications for energy NSIPs. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused and is subject to the provisions of the PA2008.
- 8.1.7. The ExA's findings and conclusions in respect of the need for the Proposed Development and generic planning issues are set out in Chapters 3, 4, 5 and 6 and Chapter 7 provides a summary of the effects on European Sites and Habitats Regulations Assessment (HRA) with the HRA at Appendix C. In this Chapter of the Report we shall summarise the conclusions reached in relation to the need for the development set out in Section 3.1 of Chapter 3, and the benefits and adverse impacts identified under the different topic headings in Chapters 4, 5 and 6. We shall also have regard to any HRA matters identified in Chapter 7. We shall weigh the adverse impacts against the benefits, taking account of all relevant and important matters, in the light of the relevant legislative and policy background set out in Chapter 2 and Appendix A, before reaching a conclusion on the case for development consent.

- 8.1.8. In reaching our conclusions, we have considered all evidence presented to the Examination, including the application documents; the Environmental Statement (ES); the HRA Report; the LIRs; the Statements of Common Ground (SoCGs); Relevant Representations (RRs); Written Representations (WRs); oral submissions at Hearings; answers to our written questions; responses to requests for information; information gathered from our site inspections; and all matters which we consider to be both important and relevant to the SoS's decision.

8.2. THE PRINCIPLE OF AND NEED FOR THE DEVELOPMENT

- 8.2.1. It is Government policy, as outlined in NPS EN-1, paragraph 3.2.6, that when determining applications for offshore wind this should be done on the basis that the Government has demonstrated that there is a need for this type of infrastructure which is urgent. Paragraph 3.2.7 provides that substantial weight should be given to the contribution these types of projects would make towards satisfying this need.
- 8.2.2. NPS EN-1, paragraphs 3.3.62 and 4.2.4, state that the Government: "has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure." Paragraph 4.2.5 of EN-1 confirms that offshore wind constitutes low carbon CNP infrastructure. EN-3 Part 3 also confirms that the Government has concluded that there is a CNP for the provision of nationally significant new offshore wind development and supporting onshore and offshore network infrastructure.
- 8.2.3. Nevertheless, EN-1, paragraph 4.2.7, makes it clear that CNP policy does not create an additional or cumulative need case or weighting to that which is already outlined for each type of energy infrastructure. The policy applies following the normal consideration of the need case, the impacts of the project, and the application of the mitigation hierarchy.
- 8.2.4. NPS EN-1, paragraph 4.2.15, explains that where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. It sets out the exceptions to the presumption of consent which include residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk.
- 8.2.5. The ExA has considered the need for the development in the light of the policy background in Section 3.1 of Chapter 3 of this Report. The ExA believes that the Proposed Development would assist in the achievement of the relevant national and local policies and strategies relating to the provision of low carbon energy and the benefits associated with that. In our view, the Proposed Development would make a material contribution towards achieving Government's target of up to 50GW of offshore wind by 2030.
- 8.2.6. The ExA concludes that the NPSs establish the urgent need for offshore wind for both energy security and net zero. We are satisfied that there is a strong need case in favour of the grant of development consent, so as to meet the urgent need for low carbon energy within a reasonable timeframe. The overall need case carries very great positive weight in favour of the grant of development consent.

8.3. THE APPLICANT'S APPROACH TO THE POTENTIAL BENEFITS

- 8.3.1. The Applicant summarises its position in relation to the benefits of the Proposed Development in the Needs Case and Project Benefits Statement [\[REP2-004\]](#). The benefits identified include decarbonisation, cost of living impacts, energy security, local economy and social benefits to local communities. Paragraph 6.15 sets out the key benefits of offshore wind energy as a contributor to the renewable energy mix. Paragraph 6.16 states that in addition to meeting national and international targets, the Proposed Development would contribute to the economy by providing jobs during all phases of its lifetime.
- 8.3.2. The Applicant has provided additional information in relation to the benefit of local employment opportunities and social benefits to local communities in response to ExQ1 1.3.4 [\[REP2-020\]](#). In addition, the Applicant's response to ExQ1 1.1.8 [\[REP2-020\]](#) includes a table of residual adverse effects and residual beneficial effects. In response to ExQ2 1.0.4 [\[REP5-054\]](#), the Applicant confirms the weightings attributed the factors identified in that table still represents its position and provides a summary of residual beneficial and adverse effects for the Proposed Development as identified at the conclusion of each ES Chapter.

8.4. SUMMARY OF EXA'S FINDINGS IN RELATION TO THE MAIN PLANNING ISSUES

- 8.4.1. The ExA has considered the materiality of the various benefits put forward by the Applicant in support of its case and whether those benefits have been substantiated. The ExA has also made findings in relation to the various potential adverse effects that would occur during the construction and operation of the Proposed Development and its compliance against the relevant policy and legislation. The ExA's findings in relation to the positive and negative effects of the Proposed Development and overall weightings can be found in the relevant sections of Chapters 3, 4, 5 and 6 and are summarised in Table 9 below.
- 8.4.2. A HRA Report has been provided for the Proposed Development and is set out at Appendix C and the HRA Summary is provided at Chapter 7 to this Report. The ExA's findings are that AEoI from the proposed development cannot be excluded beyond reasonable scientific doubt on the European sites and qualifying features identified in the HRA Summary:
- Flamborough and Filey Coast (FFC) Special Protection Area (SPA) razorbill (in-combination);
 - Alde Ore Estuary (AOE) SPA and Ramsar site – Lesser Black Backed Gull (LBBG) (in-combination);
 - FFC SPA – kittiwake (collision risk, in-combination), guillemot (displacement, in-combination);
 - Farne Islands SPA – guillemot (displacement, in-combination).
- 8.4.3. The ExA is satisfied that no feasible alternative solution exists that would represent a lesser adverse effect to the Proposed Development. Given the evidence available, with regards to the case for IROPI the ExA is of the opinion that IROPI for the Proposed Development could be established.
- 8.4.4. The findings of the Examination are that compensation packages required would be feasible and appropriate and are adequately secured in the dDCO/DML but only with further changes to be agreed, and our recommended amendments to Schedule 15 of the final dDCO, as highlighted in the HRA Summary and Appendix C.

- 8.4.5. The SoS is the Competent Authority under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) and will make the definitive assessment. The ExA considers that there is sufficient information before the SoS to enable them to undertake an appropriate assessment and to apply the derogation tests of alternative solutions, IROPI, and compensation in order to fulfil their duty under the requirements of The Habitats Regulations.
- 8.4.6. However, in the event that the SoS should disagree with our finding of no AEoI on the Red Throated Diver (RTD) feature of the Outer Thames Estuary (OTE) SPA and decides that compensation is required, the ExA considers that substantial refinement would be required to the RTD compensation measures presently indicated by the Applicant. The ExA concludes that whilst the overall package of proposed compensation measures is possible, substantial additional information would be required, as set out in the HRA Summary and Appendix C.

Table 9: Summary of findings on main planning issues

Issue	Finding	Weighting	Section
Need	Positive	Very great (substantial)	3.1
Socio-Economic Effects	Positive	Moderate	6.6
Seascape and visual Effects	Negative	Moderate	5.4
Agriculture and other land uses, ground conditions and soils	Negative	Moderate	4.1
Ecology (offshore and intertidal ornithology)	Negative	Moderate	5.2
Landscape & Visual Effects	Negative	A little	4.6
Ecology (onshore ecology including migratory bats but excluding onshore birds)	Negative	A little	4.3
Ecology (onshore ornithology)	Negative	A little	4.3
Ecology (offshore benthic subtidal and intertidal)	Negative	A little	5.2
Ecology (offshore marine mammals)	Negative	A little	5.2
Air Quality	Negative	A little	4.2
Noise & Vibration	Negative	A little	4.7
Traffic & Transportation	Negative	A little	4.8
Commercial Fisheries	Negative	A little	5.1
Navigation & Shipping	Negative	A little	5.3
Historic Environment & Archaeology	Negative	A little	6.5
Alternatives	Neutral	-	3.2
Cumulative impacts	Neutral	-	6.3

Issue	Finding	Weighting	Section
Flood Risk, groundwater and surface water	Neutral	-	4.4
Human Health	Neutral	-	4.5
Aviation	Neutral	-	6.1
Climate Change and resilience	Neutral	-	6.2
Design	Neutral	-	6.4

8.5. THE OVERALL PLANNING BALANCE

- 8.5.1. This Section weighs the benefits and disbenefits of the Proposed Development to reach a recommendation as to whether or not the case is made for granting development consent.

MATTERS WEIGHING IN FAVOUR OF THE DCO BEING MADE

VERY GREAT POSITIVE WEIGHT

- 8.5.2. The NPSs establish the urgent need for offshore wind for both energy security and net zero. The Proposed Development would provide approximately 1GW of new renewable generating capacity. The ExA considers that the Proposed Development would make a meaningful contribution towards the Government's energy security and net zero ambitions including making a material contribution towards achieving the target of up to 50GW of offshore wind by 2030.
- 8.5.3. Given that background, the ExA is content that there is a strong need case in favour of the grant of development consent, so as to meet the urgent need for low carbon energy within a reasonable timeframe. We consider that the overall need case carries very great positive weight in favour of the grant of development consent. This is the fourth and highest level of weighting that we have ascribed to topics as set out in Chapter 1. We equate this to the 'substantial weight' referred to in NPS EN-1 paragraph 3.2.7.

GREAT POSITIVE WEIGHT

- 8.5.4. The ExA found there were no matters that attracted great weight in favour of the Order being made.

MODERATE POSITIVE WEIGHT

- 8.5.5. In relation to socio-economic effects, the ExA has noted the potential for some beneficial effects as well as some minor adverse effects. The potential beneficial effects associated with this topic relate to include an increase in employment opportunities and economic value and beneficial cumulative effects together with VEOWF and other projects, on employment and economic value. Whilst some minor adverse effects are also noted, we conclude that overall, as a result of the beneficial effects, socio-economic effects should carry moderate positive weight in favour of the Order being made.

LITTLE POSITIVE WEIGHT

- 8.5.6. The ExA found there were no matters that attracted a little weight in favour of the Order being made.

MATTERS WEIGHING AGAINST THE DCO BEING MADE

VERY GREAT NEGATIVE WEIGHT

- 8.5.7. The ExA found that there were no matters that attracted very great weight against the Order being made.

GREAT NEGATIVE WEIGHT

- 8.5.8. The ExA found that there were no matters that attracted great weight against the Order being made.

MODERATE NEGATIVE WEIGHT

- 8.5.9. The ExA has ascribed moderate negative weight in relation to seascape and visual effects due to the adverse effects that the Proposed Development would have on the special qualities of the Suffolk and Essex Coast and Heaths National Landscape (SECHNL) and the special character of the Suffolk Heritage Coast (SHC) against the Order being made. In reaching this overall conclusion, we have had regard to the longer-term benefits to the SECHNL and SHC that the landscape enhancement scheme could provide.
- 8.5.10. The ExA also finds that there would be residual adverse effects and cumulative effects arising from the permanent loss of BMV land that would result from the Proposed Development and the other proposed substations for VEOWF and the EACN. We consider that moderate negative weight should be attributed to the adverse effects on agriculture and other land uses, ground conditions and soils.
- 8.5.11. The ExA has also identified residual ecological adverse effects on offshore and intertidal ornithology, including NE's view of adverse impacts of significance from cumulative effects of NFOWF within the current round of offshore wind project consenting. The ExA has attributed moderate negative weight against the Order being made to those adverse effects.

A LITTLE NEGATIVE WEIGHT

- 8.5.12. The ExA finds in respect of landscape and visual impacts, whilst there would be residual adverse effects these would be limited and localised and therefore a little weight should be attributed to them. The ExA also considers that the Proposed Development would cause residual harm to air quality, noise and vibration, traffic and transportation, commercial fisheries, navigation and shipping, historic environment and archaeology and other onshore and offshore ecology concerns albeit to a lesser degree. Each of these matters attract a little weight against the making of the Order.

OTHER MATTERS

- 8.5.13. The ExA finds that the remaining matters considered in this Report do not weigh for or against the Order being made.

THE PLANNING BALANCE

- 8.5.14. Notwithstanding the adverse effects that the ExA has identified, we consider that those effects would generally be within the scope of the relevant policy provisions of NPS EN-1, EN-3 and EN-5. Where non-compliance has been identified under the various generic topic headings, those matters have been attributed negative weight in the planning balance.
- 8.5.15. The Proposed Development constitutes nationally significant low carbon infrastructure, for which the Government has identified that there is a CNP. However, in assessing all nationally significant energy infrastructure, the starting point is the overarching need case. As indicated above, the CNP policy only falls to be applied following the normal consideration of the need case, the impacts of the project, and the application of the mitigation hierarchy.
- 8.5.16. In accordance with paragraphs 3.2.6 to 3.2.8 of NPS EN-1 and the substantial weight that should be given to the overarching need case for the Proposed Development, the ExA has attributed very great positive weight to need in the planning balance. We have also found that moderate positive weight should be given to the positive socio-economic effects that would arise.
- 8.5.17. The ExA is satisfied that the Applicant's assessment has followed the mitigation hierarchy, noting the issue of securing project level mitigations for programme level impacts. However, following the application of the mitigation hierarchy, the ExA has identified that the Proposed Development would still result in adverse residual impacts, including cumulative effects. In summary, we have therefore attributed moderate (seascape and visual effects, agriculture and other land uses, ground conditions and soils, and ecological effects on seabirds) and a little (onshore landscape and visual effects air quality, noise and vibration, traffic and transportation, commercial fisheries, navigation and shipping, historic environment and archaeology and all other onshore and offshore ecology) negative weight to those considerations against the making of the Order.

8.6. CONCLUSIONS ON THE CASE FOR DEVELOPMENT CONSENT

- 8.6.1. S104(2) and s104(3) PA2008 require the SoS to have regard to and decide the application in accordance with the relevant NPSs, unless a relevant consideration arising from s104(4) to (8) applies.
- 8.6.2. In the light of NPS EN-1, paragraph 4.1.3, there is a presumption in favour of granting development consent for the Proposed Development unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused. The legal constraints set out in the PA2008 must also be taken into account. We have considered those detailed policies and protections and relevant legal constraints in Chapters 4, 5 and 6 of this Report and our findings and conclusions are set out above. We find that there are no other NPS policies that clearly indicate that consent should be refused.
- 8.6.3. NPS EN-1, paragraph 4.1.5, requires the SoS when weighing the adverse impacts against the benefits of the Proposed Development to take into account:
- Its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits;

- its potential adverse impacts, including on the environment, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy.
- 8.6.4. NPS EN-1, paragraph 4.1.6, explains that in this context, the SoS should take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels.
- 8.6.5. In addition, the Proposed Development is CNP infrastructure. For such development, NPS EN-1 paragraph 4.2.15 provides that where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, those residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused based on these residual impacts. The ExA does not consider that the residual impacts identified would present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats, or unacceptable risk to the achievement of net zero, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk.
- 8.6.6. The SoS is the competent authority for the Habitats Regulations and Chapter 7 summarises the considerations of the shadow AA set out in Appendix C. The additional requirements for mitigation and the compensation elements of the IROPI case as set out there and identified in the dDCO are considered in Chapter 10.
- 8.6.7. In accordance with its duties under the PA2008, the ExA has had regard to the submitted LIR, to prescribed matters and to all other important and relevant policies including the Development Plans. The ExA has also considered whether the determination of this application in accordance with the NPSs would lead to the UK being in breach of any of its international obligations, be in breach of any statutory duty, be unlawful, or be contrary to regulations about how decisions are to be taken. The ExA is satisfied that in all respects, this would not be the case, including in relation to the Galloper recommended shipping route, as explained in the Section 5.3 Navigation and Shipping of Chapter 5.
- 8.6.8. S245 Levelling-up and Regeneration Act 2023 amended s85 Countryside and Rights of Way Act (CRoWA) 2000. The amended duty now requires that a relevant authority “must seek to further” the statutory purpose of conserving and enhancing the natural beauty of protected landscapes. We have considered the implications of this duty in relation to the SECNL in Section 5.4 of Chapter 5 of this Report. We conclude that subject to the inclusion of a requirement to secure a Landscape Enhancement Scheme this would be sufficient to comply with the duty.
- 8.6.9. As regards the Dedham Vale National Landscape (DVNL), the implications of the duty in relation to this protected landscape are considered in Section 4.6 of Chapter 4 of this Report. We consider that the onshore elements of the proposed onshore substation would accord with the purpose of conserving the natural beauty of the DVNL and that the mitigation accords with the mitigation hierarchy. Therefore, in relation to the DVNL, it would not be reasonable or appropriate to impose additional compensation measures. However, as indicated above, the residual adverse effects identified fall to be weighed in the balance.
- 8.6.10. On the planning balance, the ExA has assessed the potential adverse impacts, including any long-term and cumulative adverse impacts. In so doing, we have taken into account the mitigation proposed to avoid, reduce, or compensate for any

such impacts which would be secured by the rDCO. We have considered all the matters raised by the LIRs. Likewise, the benefits of the Proposed Development have been assessed including any long-term or wider benefits.

- 8.6.11. In conclusion, there is a well-established need for the Proposed Development and very great benefits would arise from the contribution that it would make towards meeting that need and assisting in achieving the strategic Government policy objectives set out in NPS EN-1, EN-3 and EN-5. In addition, the Proposed Development would result in socioeconomic benefits. The ExA finds that the harms, including the less than substantial harm to designated heritage assets, even when taken cumulatively, would not be capable of outweighing the benefits identified. Taking all the above into account both individually and cumulatively, we find that the matters in favour of the DCO being made clearly outweigh those against. The overall balance of benefits and adverse impacts falls strongly in favour of the grant of development consent.
- 8.6.12. The ExA therefore concludes that for the reasons set out and incorporating the provisions of the rDCO (Appendix D), that the case for the making of the DCO for the Proposed Development has been made. Since we find that the Proposed Development would be acceptable in planning terms, we do not find the question of alternatives to be a matter that demands further consideration.
- 8.6.13. The ExA has identified, in Table 13 in Chapter 11, matters which were dealt with on the basis of evidence available at the close of the Examination which the SoS may wish to consider further for the purpose of assisting the SoS to reach a final decision on the application for development consent.

9. LAND RIGHTS AND RELATED MATTERS

9.1. INTRODUCTION

- 9.1.1. This Chapter of the Report deals with the compulsory acquisition (CA) of land and rights over land, and related matters including temporary possession (TP), human rights and the Public Sector Equality Duty (PSED).
- 9.1.2. The full extent of the land which would be subject to powers of CA and required to enable the Applicant to construct the Proposed Development, as described in the Statement of Reasons (SoR) [REP7-011] is shown on the Land Plans [AS-018], Crown Land Plan [REP7-006], Special Category Land Plan [APP-200], and the Works Plans Onshore and Offshore [AS-019 and AS-020]. It is further described in the Book of Reference (BoR) [REP7-009], the Explanatory Memorandum (EM) [REP8-007] and in the documents comprising the Environmental Statement (ES).
- 9.1.3. In addition, in response to the ExA's procedural decisions [PD-005 and PD-007], the Applicant provided regular updates on the progress of negotiations with Affected Persons (APs) and Statutory Undertakers (SUs) by means of a Land Rights Tracker (LRT). This document superseded the Schedule of Negotiations [APP-010] and the Statutory Undertaker's Schedule [APP-011]. The LRT delivers an audit trail for all parties, and relevant and outstanding matters can be more readily and easily referenced. It provides the ExA and the Secretary of State (SoS) with a useful reference table setting out the positions of the APs and plots involved. The LRT was last updated at Deadline (D) 8 [REP8-032]. It should be considered in conjunction with the final version of the BoR [REP7-009].
- 9.1.4. The final version of the Guide to the Application [REP8-001] charts the submission of these documents and provides a guide to the structure of the application and its principal contents.

CROWN LAND

- 9.1.5. The Order Land does not include any Crown Land. The SoR [REP7-011] explains that the Applicant originally included Crown Land in the Order Land on a conservative basis (see Crown Land Plan [APP-199]). However, following diligent enquiries by the Applicant and consultation with the Crown Estate, the Crown Estate confirmed by letter to the Applicant dated 13 June 2025 that the Crown Estate Commissioners do not consider that there is any 'land' forming part of the Crown Estate within the Order Land and that consent pursuant to s135 of the Planning Act 2008 (PA2008) is not required.

SPECIAL CATEGORY LAND

- 9.1.6. The Order Land includes open space land at landfall, being Holland Haven Country Park (Plot 01-006). Land at Frinton Golf Course (Plot 01-005) has been marked as Safeguarded Open Space by Tendring District Council (TDC) but is not considered to form open space as it is not open to 'public recreation' as required by the definition of open space. A further area of open space is the foreshore (Plots 01-001, 01-002, 01-003, 01-004) which is used by members of the public for recreational purposes.
- 9.1.7. It is not proposed to acquire the freehold title to any part of the open space land identified above. The Applicant proposes to acquire permanent rights to enable Work Nos. 4B and 4C, in accordance with Article 24 (CA of rights) and Schedule 5 (Land in which only new rights etc., may be acquired); and temporary rights to

enable Work Nos. 4B and 4C in accordance with Article 31 (Temporary use of land for carrying out the authorised development) and Schedule 7 (Land of which TP may be taken).

9.2. THE REQUEST FOR CA AND TP POWERS

9.2.1. The application for development consent seeks powers for the CA of land and rights over land and for the TP of land for construction, and operation (including maintenance) purposes.

9.2.2. The application was accompanied by the following documents and plans relevant to this topic which have been revised and updated, as necessary, during the Examination:

- SoR [\[REP7-011\]](#);
- Funding Statement [\[APP-008\]](#);
- BoR in five parts [\[REP7-009\]](#);
- EM [\[REP8-007\]](#);
- Land Plans [\[AS-018\]](#);
- Works Plans Onshore and Offshore [\[AS-019\]](#) and [\[AS-020\]](#);
- Crown Land Plan [\[REP7-006\]](#);
- Special Category Land Plan [\[APP-200\]](#);
- Public Rights of Way Plan [\[REP-006\]](#); and
- Access to Works Plan [\[AS-021\]](#).

9.2.3. The Applicant also provided a BoR Schedule of Changes, which was updated during the course of the Examination, with the final version submitted at D7 [\[REP7-038\]](#).

9.2.4. The final BoR Part 1, contains the names and addresses of each person within Categories 1 and 2, as set out in s57 PA2008, along with the area of each plot of land in which the development would be carried out [\[REP7-009\]](#). The description of each plot also includes reference to the extent of the acquisition or use sought in the draft Development Consent Order (dDCO) in respect of that particular plot.

9.2.5. The BoR Part 2, contains the names and addresses of each person within Category 3, as defined by s57 PA2008. A person is within Category 3 if the Applicant believes that, if the dDCO were to be made and fully implemented, they would or might be entitled to make a relevant claim as defined in s57(6) PA2008.

9.2.6. The BoR Part 3, contains the names of all those entitled to enjoy easements or other private rights over land which it is proposed shall be extinguished, suspended, or interfered with pursuant to the exercise of powers in the dDCO.

9.2.7. The BoR Part 4 lists Crown interests in the Order Land that have been identified, and the relevant plots shown on the Crown Land Plan [\[REP7-006\]](#) to signify that it is Crown land. The final BoR has been amended to show no such plots being listed.

9.2.8. The BoR Part 5 lists Special Category Land and the location of any land which is Special Category Land to be used either permanently or temporarily is shown in the Special Category Land Plan [\[APP-200\]](#).

9.2.9. The Applicant's response to the ExA's first questions (ExQ1) Q6.1.13 [\[REP2-020\]](#) confirms that the BoR has a total of 334 plots in Part 1 (Category 1 and 2 persons) and 227 plots plus 47 Category 3 properties identified without plots on the Land Plans [\[AS-018\]](#) in Part 2 with 274 plots in Part 3, 2 plots in Part 4 and 5 plots in Part 5.

- 9.2.10. The details of the powers sought in order to implement the required CA of land, and the other powers sought are set out in the final dDCO [\[REP8-005\]](#). The main powers authorising the CA of land, or interests in, or rights over land, are contained in Article 21 (CA of land), Article 22 (CA of land: minerals), Article 24 (CA of rights and the compulsory imposition of restrictive covenants), Article 27 (Statutory authority to override rights and other easements), Article 28 (Acquisition of subsoil only), and Article 33 (SUs) of the dDCO.
- 9.2.11. The powers sought in relation to the TP of land do not constitute CA and are provided for in separate articles in the dDCO, albeit within the Powers of Acquisition section. The main TP powers are set out in Article 31 (Temporary use of land for carrying out the authorised development) and Article 32 (Temporary use of land for maintaining the authorised development).
- 9.2.12. The final SoR [\[REP7-011\]](#) sets out the dDCO articles which relate to CA, or the interference with third party rights and additional powers.
- 9.2.13. The other rights and powers that the dDCO would confer on the Applicant that may interfere with property rights and private interests are set out in Article 11 (Temporary closure of Public Rights of Way), Article 12 (Temporary restriction of use of streets), Article 13 (Access to Works), Article 16 (Power to alter layout etc of streets), Article 30 (Rights under or over streets), Article 39 (Felling or lopping of trees or hedgerows), and Article 40 (Trees subject to Tree Preservation Orders (TPOs)).
- 9.2.14. The final SoR [\[REP7-011\]](#), Section 6, sets out the purpose of the powers sought including the need for the Proposed Development and policy support and a statement of the justification for CA including reference to funding is included in Section 7. The final EM [\[REP8-007\]](#), Section 4.5, explains the purpose and effect of the dDCO Part 5, powers of acquisition and possession of land.

9.3. THE PURPOSES FOR WHICH LAND IS REQUIRED

- 9.3.1. The SoR [\[REP7-011\]](#), sets out the purposes for which CA and TP powers are necessary and the interest to be acquired in relation to each individual plot of land.
- 9.3.2. Section 5.3.1 of the SoR explains that areas of the Order Land over which CA powers are sought in respect of all interests (including freehold) are shown shaded pink on the Land Plans [\[AS-018\]](#). This land is described in more detail in the BoR [\[REP7-009\]](#). A list of plots over which freehold acquisition is required, with the relevant Work Number, is set out in Appendix A of the SoR. In summary, the areas in which freehold acquisition is sought are for part of Work Nos. 9, 11 and 12. Article 21 of the dDCO is relied upon for this purpose.
- 9.3.3. The land over which CA powers are sought for rights, and the creation of new rights (including imposing restrictive covenants) is shown shaded blue on the Land Plans [\[AS-018\]](#). This land is described in more detail in the BoR [\[REP7-009\]](#). A list of plots over which new rights and restrictions are required, and the purpose, is set out in Appendix A. In summary, these are the areas required for Work Nos. 4 and 6, being the export cable corridor, Work No. 10 to facilitate permanent maintenance accesses, and Work Nos. 13 and 14. Article 24 of the dDCO is relied upon for this purpose.
- 9.3.4. The land over which rights of TP only are sought is shown shaded yellow on the Land Plans [\[AS-018\]](#). The Applicant is also seeking temporary use powers over all other land within the Order Land, in order to allow it to take TP ahead of acquiring

land or rights permanently. The land over which these rights are sought is shown shaded pink and blue on the Land Plans. Articles 31 and 32 of the dDCO are relied upon in respect of all land within the Order Land.

9.4. LEGISLATIVE REQUIREMENTS

- 9.4.1. The CA powers can only be granted if the conditions set out in s122 and s123 PA2008 are met.
- 9.4.2. S122(2) requires that the land must be required for the development to which the development consent relates or is required to facilitate or is incidental to the development. In respect of land required for the development, the land to be taken must be no more than is reasonably required and be proportionate, as set out in the PA2008: Guidance related to procedures for the CA of land, former Department for Communities and Local Government, September 2014 (CA Guidance).
- 9.4.3. S122(3) requires that there must be a compelling case in the public interest which means that the public benefit derived from the CA must outweigh the private loss that would be suffered by those whose land is affected. In balancing public interest against private loss, CA must be justified in its own right. That does not mean that the CA proposal can be considered in isolation from the wider consideration of the merits of the project. There must be a need for the project to be carried out and there must be consistency and coherency in the decision-making process.
- 9.4.4. S123 requires that one of three conditions is met by the proposal. The ExA is satisfied that the condition in s123(2) is met because the application for the DCO includes a request for CA of the land to be authorised.
- 9.4.5. S127 PA2008 applies to land acquired by a SU for the purpose of their undertaking where a representation is made about the application for the DCO and not withdrawn and as a result of that representation the SoS is satisfied that the land is used for the purposes of carrying on the SUs' undertaking, or an interest in the land is held for those purposes. S127(5) states that an order granting development consent may include provision authorising the creation of a new right over SUs' land providing that it can be done without serious detriment to the carrying out of the undertaking or any detriment can be made good by the undertaker by the use of other land belonging to or available for acquisition by the SU.
- 9.4.6. S138 PA2008 provides for an order to include provision for the extinguishment of the relevant rights, or the removal of the relevant apparatus of SUs only if the SoS is satisfied that such actions are necessary for the purposes of carrying out the development to which the order relates.
- 9.4.7. S132 PA 2008 applies to the CA of rights over land forming part Open Space. It makes provision for Special Parliamentary Procedure (SPP) to apply where a DCO authorises the CA of rights over such land. This means that the Order will be subject to SPP unless the SoS is satisfied that s132(3) or (4) applies.
- 9.4.8. S132(3) applies if the Open Space Land, when burdened with the Order right, will be no less advantageous than it was before to the persons in whom it is vested, other persons (if any) entitled to rights of common or other rights, and the public.
- 9.4.9. S135(1) PA2008 directs that an interest in Crown land may only be acquired where (a) it is not held by or on behalf of the Crown, and (b) the consent of the appropriate

Crown authority has been secured. The expression 'appropriate crown authority' is defined in s227(5) of PA2008.

- 9.4.10. A number of general considerations also have to be addressed either as a result of following applicable guidance or in accordance with legal duties on decision-makers:
- All reasonable alternatives to CA must be explored;
 - the proposed interference with the rights of those with an interest in the land is for a legitimate purpose and is necessary and proportionate;
 - the Applicant must have a clear idea of how it intends to use the land;
 - the Applicant must be able to demonstrate that there is a reasonable prospect of the requisite funds becoming available; and
 - the decision-maker must be satisfied that the purposes stated for the acquisition are legitimate and sufficiently justify the inevitable interference with the human rights of those affected.
- 9.4.11. The Applicant considers the statutory conditions for the exercise of CA powers and the CA guidance in the SoR [\[REP7-011\]](#). There is also guidance in relation to CA in the Ministry of Housing, Communities and Local Government publication on the Crichel Down Rules dated September 2024.

9.5. OTHER MATTERS

- 9.5.1. Article 26 of the dDCO provides for the application of the Compulsory Purchase (Vesting Declarations) Act 1981 ("the 1981 Act"), containing the vesting procedures for land subject to compulsory purchase. It allows the undertaker to choose between the notice to treat procedure, or the general vesting declaration procedure set out in the 1981 Act. This article has been updated to incorporate and reflect the changes brought about by the Housing and Planning Act 2016.
- 9.5.2. Article 29 of the dDCO amends the provisions of Part 1 the Compulsory Purchase Act 1965 as applied to the Order by s25 PA 2008 Act, so they are consistent with the terms of the dDCO.
- 9.5.3. S120(5)(a) PA2008 provides that a DCO may apply, modify, or exclude a statutory provision which relates to any matter for which provision may be made in the DCO and s117(4) PA2008 provides that, if the DCO includes such provisions, it must be in the form of a statutory instrument. Since in certain instances the dDCO seeks to apply s120(5)(a), it is in the form of a statutory instrument.
- 9.5.4. The dDCO [\[REP8-005\]](#) Article 23 imposes a time limit for the exercise of CA powers of seven years, confirming this to be the 'applicable period' for the purposes of the 1965 and 1981 Acts (as amended by the Levelling Up and Regeneration Act 2023). These Acts both provide for the time limit for the exercise of compulsory purchase powers to be extended in the event of an application to the Court challenging the making of an Order granting CA. Article 23 (3) expands the scope of this time limit to cover the power to take TP of land to construct the authorised development.
- 9.5.5. The EM [\[REP8-007\]](#) explains that the time limit is extended in the event of a challenge to the making of the DCO, aligning the powers of TP and CA, mirroring the drafting in the 1965 and 1981 Acts. This means that, in the event of any delay to the Authorised Development being constructed due to legal challenge, the undertaker retains the full intended ability to use TP powers where the acquisition of rights or land is not required over that land or the whole of that land. There were no

objections raised to the inclusion of this provision during the Examination. In the particular circumstances of this case, and the desirability of co-ordination with the proposed Five Estuaries Offshore Windfarm (VEOWF) in relation to the common aspects with that project, we consider it to be reasonable to allow for such flexibility and hence for such provision to be made.

9.6. EXAMINATION OF THE CA AND TP CASE

9.6.1. The ExA asked 49 first questions (ExQ1) [\[PD-009\]](#), 20 second questions (ExQ2) [\[PD-013\]](#) and 3 third written questions (ExQ3) [\[PD-016\]](#) in relation to the request for CA and TP powers which reflected the requirements of the PA2008, and matters raised by parties in their representations. The questions cover a range of issues including:

- The scope and purpose of the CA powers sought;
- whether there is a compelling case in the public interest for the CA of the land, rights and powers sought;
- whether all reasonable alternatives to CA have been explored;
- whether adequate funding is likely to be available;
- whether the purposes of the proposed CA justify interfering with the human rights of those with an interest in the land affected;
- the accuracy of the BoR, Land Plans and points of clarification;
- the acquisition of SUs' land – s127 and 138 PA2008;
- potential risks or impediments to the Proposed Development; and
- objections to the grant of powers of CA and TP.

9.6.2. At D2, D5, D6 and D7, CA and TP related submissions and responses to ExQ1, ExQ2 and ExQ3 respectively were provided by the Applicant, APs and SUs. An Accompanied Site Inspection (ASI) was held on 1 April 2025. USIs were also undertaken on 4 and 5 December 2024, 28 January 2025, 22 and 23 June 2025.

9.6.3. There was one request to be heard at a Compulsory Acquisition Hearing (CAH) made by an AP [\[REP1-083\]](#). A virtual CAH was therefore held on 17 June 2025.

9.7. THE OBJECTIONS RECEIVED TO THE CA PROPOSALS

9.7.1. The ExA's Procedural Decision dated 28 November 2024 [\[PD-005\]](#) referred to the Applicant's submission of the Schedule of Negotiations [\[APP-010\]](#) and the Statutory Undertakers Schedule [\[APP-011\]](#) but nevertheless sought the submission of two LRTs, one for APs who are not SUs and a second tracker for SUs. The trackers were required to include the information listed in the Procedural Decision in a tabular form for each land interest which had not already been acquired at the date of the application's submission and to be completed on the basis that for so long as there is non-agreement that will amount to an objection by an AP.

9.7.2. The subsequent Procedural Decision [\[PD-007\]](#) made by the ExA following the submission of the Applicant's draft LRT agrees that the Applicant should provide clarifications and make the certain modifications to the tracker as originally required and that the submission of the LRT would provide us with the required information. It would supersede the Schedule of Negotiations [\[APP-010\]](#) and the Statutory Undertaker's Schedule [\[APP-011\]](#). The LRT is in three parts:

- Part 1 - Category 1 interests (owners)
- Part 2 – Category 1 interests (occupiers, lessees or tenants) and Category 2 interests
- Part 3 – Statutory Undertakers

- 9.7.3. The latest version of the LRT [\[REP8-032\]](#) identifies the APs, the category and type of land interest held, the relevant plot number and also provides a summary update of the status of the objection and/ or negotiations. It sets out the current position on negotiations, and identifies those objections which remain outstanding, and those where agreement has been reached or is expected to be reached.
- 9.7.4. The SoR Section 8 [\[REP7-011\]](#), outlines the process by which the Applicant identified those persons falling within Categories 1, 2 and 3, as defined in s42 and s44 PA 2008. This explains that the Applicant's land agents prepared a methodology for undertaking diligent inquiry of persons with an interest in the land. This methodology is included as Appendix B.1 to the Consultation Report [\[APP-216\]](#) and was applied and followed for the Proposed Development. All land that could potentially be affected by the Proposed Development was identified, and the landownership within this area was initially identified through title searches with HM Land Registry (HMLR). The parties identified through the HMLR searches were sent project introduction letters and landowner questionnaires.
- 9.7.5. Unregistered land interests were identified where possible by utilising public sources of information, erection of site notices, site visits and discussions with adjoining land interests to enquire whether they could offer any information on the ownership of unregistered land parcels.
- 9.7.6. In response to ExQ1 6.1.34 [\[REP2-020\]](#), the Applicant confirmed that there are 104 land plots where ownership still remains unknown. Of these, 61 plots are classified as being adopted highway following diligent enquiry with Essex County Council (ECC) as the Highway Authority. Where it has not been possible to determine ownership, an "unknown" interest has been added as a reputed owner against the relevant unregistered plot within the BoR. All such unregistered plots where ownership is unknown are marked within the BoR. The Applicant continues to undertake diligent inquiry to identify any inaccuracies or changes to interests within the BoR including to ascertain ownership of unregistered plots. For example, the Applicant erected and maintained site notices on or near to all unregistered parcels of land along with a plan of that unregistered parcel under s56 PA2008 and the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.
- 9.7.7. The location of adopted highways, public rights of way, common land and pending planning applications was requested from the relevant local authority, and public databases were consulted to identify land which could be classed as Special Category Land. Utility searches have been used to identify SUs with interests in the Order Land.
- 9.7.8. In response to ExQ1 6.1.29 [\[REP2-020\]](#), the Applicant confirms that it continues to carry out diligent inquiry to identify any inaccuracies or changes to APs including regular refreshes of the HMLR data as well as engagement with APs and their appointed representatives. This is evidenced in updates to the BoR [\[AS-026\]](#) and Land Plans [\[AS-018\]](#) following s51 PA2008 advice and again to the BoR at D1 [\[REP1-013\]](#), and D2 [\[REP2-009\]](#).
- 9.7.9. In response to ExQ1 6.1.30 [\[REP2-020\]](#), the Applicant sets out further details of the process for identifying Category 3 persons including the multidisciplinary approach, the identification of potential noise receptor locations that could be affected by noise from the works and the qualitative assessment. In the light of that response, the ExA is satisfied that the process should be regarded as a satisfactory and robust approach towards identifying Category 3 persons.

- 9.7.10. Since the majority of the unregistered land in the project is public highway, the ExA accepts that the likelihood is that the 'owner' will be the local authority as Highway Authority. The ExA is content that diligent inquiry to identify all relevant persons with an interest in land has been undertaken including for those plots which remain categorised as unknown.
- 9.7.11. The details of the initial objections raised are set out in the RRs, and WRs for those persons listed in the LRT and in their further oral and written responses made during the Examination. For full details of those objections reference should be made to the submissions of the relevant parties set out in the Examination Library. The objections are considered here in the context of the application for the grant of CA powers.
- 9.7.12. The LRT [\[REP8-032\]](#) explains that the Applicant continues to negotiate with Category 1 interests affected by the Proposed Development in order to reach voluntary agreements where possible and engage on the CA powers sought. Where Heads of Terms (HoTs) have been issued, the LRT confirms that agreement has not yet been reached with 10 Category 1 interests.
- 9.7.13. In respect of the cable easement, 29 HoTs have been agreed with three remaining outstanding. These being National Highways Limited, Strutt & Parker (Farms) Limited and TDC.
- 9.7.14. Negotiations remain ongoing in respect of the two voluntary agreements for the proposed substation site, namely, Michael Hughes and Rebecca Mason as Executors of the Estate of The Late Charles James Tabor and T. Fairley & Sons Limited. The Applicant has sought to address the outstanding concerns raised by both interests through amendments to the voluntary agreements and providing written and oral submissions throughout examination, most recently at D7 (Applicant's Response to D 6 Submissions [\[REP7-053\]](#)).
- 9.7.15. The Applicant continues to progress HoTs for the rights relating to the Bentley Road improvement works. Negotiations remain ongoing with three interests with only one interest electing not to engage with the Applicant.
- 9.7.16. The Applicant has agreed the principle of a licence for TP with two interests (being Eastern Power Networks and Richard Harrison Osborne & Sara Carol Harrison-Osborne). These licence agreements would be progressed post-consent and nearer to the point they were required.
- 9.7.17. In respect of the rights relating to the onward cable connection from the Applicant's substation to that of National Grid, three agreements would be progressed in respect of Elizabeth Harris, Elizabeth Harris and Peter Harris and Timothy Ecott. In the absence of further details regarding the location of the National Grid substation, the Applicant is currently unable to progress discussions on voluntary agreements. Once further details materialise the Applicant would issue populated HoTs.
- 9.7.18. The APs listed within the LRT include those where no substantive objection has been made. We shall now summarise the cases for those APs who have raised substantive objections to the grant of CA powers that have not yet been formally withdrawn, followed by the Applicant's response, before setting out our considerations for each outstanding objection.

- 9.7.19. This will include the consideration of objections made by persons within Categories 1 and 2 and those who also fall within Category 3. The ExA then considers the position in relation to SUs and whether any outstanding objections remain.
- 9.7.20. We set out later in this Chapter our approach to the consideration of CA issues which also forms the basis of our considerations and conclusions drawn in relation to all the objections made and related matters which now follow. These objections have therefore all been considered against the tests set out in the PA2008, in the light of the CA Guidance and the provisions of the Human Rights Act 1998 and the Equality Act 2010. The ExA has also considered those issues which raise important and relevant matters relating to the merits of the application under the various topic headings under Chapters 4, 5 and 6 of this Report.

OBJECTORS FALLING WITHIN PARTS 1, 2 AND 3 OF THE BOR

- 9.7.21. As indicated above, these are listed together with other APs who have not raised objection, in the LRT [\[REP8-032\]](#) which also identifies the type of interest held by them, the relevant plots which are being sought, and the rights and/or powers to which they would be subject. The substantive individual site-specific issues raised during the course of the Examination by those APs with CA objections that have not been formally withdrawn are as follows:

MICHAEL HUGHES AND REBECCA MASON AS EXECUTORS OF THE ESTATE OF THE LATE CHARLES TABOR REPRESENTED BY GWYN CHURCH OF BROOKS LENEY (AP REFERENCE NUMBERS 145694, 295371)

- 9.7.22. A Relevant Representation (RR) [\[RR-334\]](#) that is not land interest specific was submitted by the landowner's representative for all their clients. The objection raises issues such as consultation, potential impact on farming businesses and residential properties, soil and water quality, screening and visual mitigation, irrigation and drainage, compensation and the alignment of the substations.
- 9.7.23. The RR [\[RR-335\]](#) submitted by the Executors of the Estate for the late Charles Tabor objects to the potential CA of land within the Order Limits of the application and argues that there is no justification for the CA of such a large proportion of their land. The objection also covers the impact on farming operation.
- 9.7.24. At the CAH, the APs' representative explained that although they have engaged with the Applicant for a number of years they are now at a 'sticking point' with regards to the substation HoTs, specifically on the matter of a retained right of way [\[REP6-093\]](#). Since the property has been in this ownership, the farm has always used the land for which CA powers are sought as an access point between the land at Holly Lodge Farm (to the east) and the land to the west. This is because of the difficulties in moving the combine harvester to the off-lying land via the public road network due to restrictions in width and height. This would also apply to other specialist farm machinery such as root crop harvesters when the land is let to a third-party grower, as it has been recently.
- 9.7.25. Whilst the Applicant has offered a 5m width right of way as a minimum, the APs need a minimum of 10m to allow them to continue to access the farmland in that way. A 5m width would cause unnecessary inefficiencies through the need to take off the combine harvester header and re-attaching it over such short distances. Furthermore, it would also require them to drive over standing crop when entering the field being accessed to the west, to then re-attach the header, as opposed to entering a field and commencing harvesting on entry.

- 9.7.26. The length of the right of way is approximately 390 m long. For the 5m right of way, this would equate to an area extending to 0.48 acres (0.19 hectares). Therefore, they are ultimately in disagreement over the additional 0.48 acres (0.19 hectares) required for the right of way be 10m wide. When reviewing the Applicant's Design Vision document [\[REP5-004\]](#) and specifically figure 20 titled "Outline Landscape Strategy Master Plan", it would appear to them that the most suitable area for a right of way would be along the northern boundary of the landscape area. They submit that if it is sufficient for a 5m right of way as a minimum then it would be perfectly sufficient for a 10m right of way.
- 9.7.27. They disagree with the Applicants comment that it: "cannot provide a wider right of way than 5m because of the land required for landscaping and ecological enhancement". They submit that there is certainly sufficient area to allocate an additional 0.48 acres of ecological enhancement area, if required.

THE APPLICANT'S RESPONSE

- 9.7.28. The Applicant's response is set out in its Response to Relevant Representations Received from Parties with Land Interests [\[REP1-047\]](#), and its Response to D6 Submissions [\[REP7-053\]](#).
- 9.7.29. In addition, the Applicant's Written Summary of Oral Submissions at CAH [\[REP6-064\]](#) confirms that the remaining key issue remains relates to the need for a wider right of way to access 100 acres of retained farmland. In response to the APs submissions, the Applicant is willing to grant a right of way but states that it cannot accommodate the requested width due to potential adverse implications on the substation landscaping design. A 5m access width has been offered, which exceeds the standards general traffic lane width of 3.65m as set out in the National Highways' Design Manual for Road and Bridges document. The Applicant considers this width to be sufficient for agricultural access, although it might require the combine harvester header to be removed and towed separately.
- 9.7.30. At the CAH, the Applicant clarified that the 5m offer is a minimum and could potentially be increased, but a final commitment could not be made until the landscaping design is finalised and approved. The Applicant is currently developing a Design Guide in consultation with stakeholders including these APs that would inform the final layout. The proposed 12.5m right of way originally sought would conflict with the evolving landscaping design, which must balance visual screening, ecological connectivity, and landscape character. A wider access route could reduce space available for these functions and risk an unacceptable design outcome. The Applicant is therefore only able to commit to a minimum 5m width at this stage, which it considers sufficient for agricultural access if the header is towed separately. As regards the prospect of intermediate widths being accommodated, the Applicant stated that anything between 5m and 10m would still not allow the combine harvester to pass with the header attached and would not eliminate the need to detach it.
- 9.7.31. The Applicant's Response to Actions List for CAH1 [\[REP6-069\]](#) confirms that while the commitment to a minimum width is less than the landowner's desired width, it considers the 5m width to offer a reasonable and practical compromise. The Applicant considers the 5m width appropriate and a 12m width to be unsuitable for the following reasons.
- The creation of a 12m wide access route to the south of the Barn Lane boundary would require the screening planting to be moved further into the

onshore substation works area, which would affect the mitigation to views, as experienced by visual receptors using the PRow (Viewpoint 2) (see Figure 30.2.2, ES Chapter 30 Figures Part 2 [APP-084]). It would also reduce the extent of the landscape and ecological mitigation area beyond the screening belt.

- The outline landscape design shown in Figure 1 of the Outline Landscape and Ecological Management Strategy (OLEMS) [REP5-024] has been designed to maximise integration of the design within the wider landscape, creating networks of hedgerows that not only support the local landscape character, but also support Essex's green infrastructure ambitions by providing a network of integrated habitat across the site
- The increase of a 5m gap to a 12m gap would have an appreciable effect on aspects of design; for example, gaps in hedgerows / woodland of 12m across may prevent certain bat species from using these features for commuting / navigation (JNCC, 2001).
- In addition, the inclusion of the 12m wide access route would necessitate a wider zone to accommodate turning around the 132kV overhead line tower located within the onshore substation works area. Inclusion of this turning area would result in the loss of grassland area and potentially screening planting and hedgerow planting beyond.

9.7.32. In response to ExQ3 6.0.2 [REP-051], the Applicant states that the proposed minimum 5m wide reserved access offered to the landowner exceeds the maximum widths permitted under current legislation on the public highway, including for special type agricultural vehicles. The Applicant submits that the process of detaching and reattaching the combine harvester header is a routine agricultural operation particularly when moving between fields, navigating narrow access routes or travelling along the public highway. While the procedure and time taken will vary between make and model of combine harvester and the skill level and experience of the operatives performing the task, the whole process would require two personnel (one operating the combine the other the tractor) and typically takes no more than 40 minutes for reasonably competent operatives.

9.7.33. The Applicant contends that in most cases, minimal standing crop would be driven over or suffer damage from detaching/reattaching the combine header. If the header is detached/reattached within the standing crop it would be common for only a narrow strip (typically circa 2m wide) to be affected. In this instance it is still possible to harvest any crop that has been knocked over by either lowering the header or operating at a slower speed which allows the header to gather the crop more effectively.

9.7.34. The Applicant's Response to Actions List for CAH1 Item 3.6 [REP6-069], provides further details as to why a reserved access width greater than 5 m could not be accommodated at this time.

9.7.35. The LRT D8 update [REP8-032] confirms that the Applicant is unable to agree to the landowner's request for a 12m wide access. While agreement on the HoTs is unlikely to be reached before the close of Examination, the Applicant remains committed to securing the necessary rights through voluntary agreement and will continue to engage with the landowner thereafter.

EXA'S CONSIDERATIONS

9.7.36. As indicated above, the ExA has considered those issues which raise important and relevant considerations such as the potential impact on agricultural and residential

properties and farming operations under the relevant generic sections of Chapter 4 of this Report and our conclusions on those matters are set out therein.

- 9.7.37. In relation to the general objection raised as to the justification for the CA of such a large proportion of this farm's land, we deliberate upon the location and proposed use of the Order Land and the purposes for which the powers of CA are sought in our consideration of the Applicant's general case for the CA of land within the Order Limits of the application set out below.
- 9.7.38. As regards the specific matter of the width of the right of way proposed to be retained, we have given careful consideration to the concerns raised by these APs including the inconvenience and unnecessary inefficiencies that would be caused by needing to take off the header and re-attaching it and the damage caused by requiring them to drive over the standing crop when entering the field being accessed to the west.
- 9.7.39. However, we also recognise the need for flexibility at this stage of the process that is relied upon by the Applicant in rejecting the APs case for a wider right of way than the 5m offered. We consider that the Applicant in seeking to balance the landowner's access requirements with the need to deliver a compliant and effective landscaping and ecological scheme that is acceptable to the relevant planning authority, represents a legitimate basis for not securing a wider access width at this time. We note that the Applicant's position is that the 5m width proposed represents a minimum and that it might be possible for possible to accommodate a wider access at a later stage, provided this would not compromise the overall landscaping and ecological mitigation strategy. We consider that the extent of flexibility sought for that purpose to be entirely appropriate and proportionate for a project of this type.
- 9.7.40. In the light of the Applicant's submissions, the ExA is satisfied that reasonable access arrangements to the relevant retained part of the land holding would be maintained. We consider the 5m width to offer a reasonable and practical compromise affording continued agricultural access, including the passage of a combine harvester with the header towed behind. The proposed CA powers sought by the Applicant in respect of these plots would be necessary in order to implement the Proposed Development and it would be reasonable and proportionate for those powers to be exercised. We do not find that the matters raised by these objectors would preclude the exercise of those CA powers should the SoS decide to grant development consent for the Proposed Development.

T. FAIRLEY AND SONS LIMITED REPRESENTED BY GWYN CHURCH OF BROOKS LENEY (AP REFERENCE NUMBER 159915)

- 9.7.41. The AP's case is set out in RR [\[RR-325\]](#) and [\[RR-326\]](#), WR [\[REP1-082\]](#) and in [\[REP4-099\]](#) and [\[REP6-095\]](#).
- 9.7.42. Their post hearing submissions [\[REP6-095\]](#) raise objections to the inclusion within the HoTs of the land immediately adjoining the boundary of the residential property, yard, and buildings. They submit that the exercise of the option over the area shaded pink around the residential property would have a detrimental impact on the enjoyment of the residential property; restrict future change of use opportunities and have implications for the retained farmland, caused by the tree belts along Ardleigh Road. Furthermore, should the option be exercised, it would be impossible to access and maintain the ditch to the east of the land at Normans Farm which is fundamental for land drainage. This, in turn, would have a long-term impact on the farming of the land.

- 9.7.43. They also contend that it is unreasonable that they should be put in a position where they are unable to claim injurious affection for the devaluation on the retained residential property, which would be within close proximity of the substations. They own the residential property, yard and buildings and which has been in the family and business ownership for a significant period and has enjoyed its situation, being integral to the wider farm. Should the Applicant's and VEOWF's proposals be approved, the enjoyment of living in the property would be diminished, thus affecting its value. The current drafting of the HoTs suggests that they would not be able to claim injurious affection if entering into a voluntary agreement.
- 9.7.44. They accept that this would be available to them should CA powers be exercised, but it is their intention to avoid the CA route and enter into a voluntary agreement, subject to the terms being fair and reasonable. They submit that while they are in negotiations for a voluntary agreement, they should not be in a position where part of the sale proceeds of the land is used to mitigate the devaluation of their retained residential property, yard, and buildings.

THE APPLICANT'S RESPONSE

- 9.7.45. The Applicant's response is set out in various submissions [[REP1-047](#)], [[REP5-056](#)], [[REP7-053](#)]. The initial objection raises issues such as consultation, potential impact on farming businesses and residential properties, soil and water quality, screening and visual mitigation, irrigation and drainage, compensation and the alignment of the substations.
- 9.7.46. The Applicant's Written Summary of Oral Submissions at CAH [[REP6-064](#)] notes that two key issues remain regarding the voluntary disposal of the substation site:
- The potential claim for injurious affection to the AP's adjoining residential property, yard and buildings; and
 - the Applicant's landscaping plans differ significantly from VEOWF's specifically in relation to the tree planting that would enclose the property.
- 9.7.47. At the CAH, the Applicant confirmed that the area in question falls within the VEOWF Order Limits and is not part of the NFOWF Order Limits or landscaping proposal. The disconnect between the two plans was acknowledged and the evolving joint design would be finalised post-DCO. On injurious affection, the Applicant clarified that it is not denying the right to make a claim in a CA scenario, but discussions around a one-off payment are part of voluntary negotiations.
- 9.7.48. The Applicant provided further details at D6 in its Response to Actions List for CAH1 [[REP6-069](#)]. This explains that on 20 June 2025 updated HoTs were issued with revisions seeking to address the landowner's outstanding concerns and to progress negotiations toward voluntary agreement. In relation to the concerns raised regarding the ability to make a claim for injurious affection, the Applicant wishes to clarify that in the absence of voluntary agreement, the landowner would retain the right to make a claim under this head of claim in a CA scenario in line with the compensation code.
- 9.7.49. In response to ExQ3 6.0.3 [[REP7-051](#)], the Applicant confirms that the land to the north and east of the residential property known as Norman's Farm, described by the landowner in their submission at D 6 following CAH Part 2 [[REP6-095](#)] does not form part of the Proposed Development, and no powers of CA are being sought. For clarity, the land falling to the west of Norman's Farm does fall within the Proposed Development's Order Land and powers of CA are being sought over the land identified as Plot 15-016 of the Applicant's Land Plans [[AS-018](#)].

- 9.7.50. The Applicant has set out the justification for the land and rights required to deliver the Proposed Development in the SoR [\[AS-028\]](#). The Applicant's position is that all the land included within the Order Land including Plot 15-016 as identified in the Applicant's Land Plans [\[AS-018\]](#) is needed to achieve the identified purpose of delivering the Proposed Development (see Appendix A of the SoR [\[AS-028\]](#)).
- 9.7.51. The Applicant also refers to the Needs Case and Project Benefits Statement [\[REP2-004\]](#), which details the case underpinning the need for the Proposed Development. The land surrounding the proposed onshore substation is required for cabling, access, landscaping, to mitigate local landscape and visual effects to an acceptable level, drainage and for environmental mitigation works related to the onshore substation, as shown on Figure 30.1.6 Landscape Mitigation Plan, 3.2.26 ES Chapter 30 Figures Part 1 of 6 [\[APP-083\]](#).

EXA'S CONSIDERATIONS

- 9.7.52. The ExA has considered those planning issues which raise important and relevant considerations including the potential impact on farming businesses and residential properties, soil and water quality, landscaping, irrigation and drainage under the relevant generic sections of Chapter 4 of this Report and our conclusions on those matters are set out therein.
- 9.7.53. In response to the ExA's request, the parties have agreed and submitted a plan identifying the precise area in question at Norman's Farm together with the NFOWF Order Limits. The plan is included within the Appendix to Applicant's Response to ExQ3 [REP7-060](#).
- 9.7.54. In relation to the extent of the land sought, the Applicant explains that the land surrounding the proposed onshore substation, including the area identified on this plan, is required for cabling, access, landscaping, to mitigate local landscape and visual effects to an acceptable level, drainage and for environmental mitigation works related to the onshore substation. The ExA considers that the Applicant has provided a reasonable explanation of the need for and the extent of the land within the scope of the CA powers sought. We are content that the proposed CA powers in relation to this land are necessary for the achievement of the Applicant's reasonable objectives.
- 9.7.55. Whilst it seems that both parties would prefer to achieve a voluntary agreement in respect of the land, in the absence of that being achieved, we note that the landowner would retain the right to make a claim under this head of claim in a CA scenario in line with the compensation code. The precise terms of any voluntary agreement are a matter for negotiation between the parties, and we recognise that the Applicant's approach of making the application for powers of CA in the application and, in parallel, conducting negotiations to acquire land by agreement, accords with paragraph 26 of the CA Guidance.
- 9.7.56. In the light of the Applicant's submissions in response to this objection, the ExA is content that the powers sought would be necessary in order to implement the Proposed Development and that it would be reasonable and proportionate for those powers to be exercised. We do not find the matters raised by this AP preclude the exercise of those CA powers should the SoS decide to grant development consent for the Proposed Development.

**STRUTT AND PARKER (FARMS) LIMITED AND LIANNA ENTERPRISES
LIMITED REPRESENTED BY LOUIS FELL (AP REFERENCE NUMBERS 154521
AND 154482)**

- 9.7.57. The APs' case is set out in their RR [\[AS-034\]](#) and WR [\[REP4-091\]](#) and the additional submission [\[AS-034\]](#) and [\[AS-050\]](#). There were also oral submissions made on their behalf at ISH 1 and 2 [\[REP4-091\]](#). The objection of these Category 1 and 2 landowners highlights concerns over the need for the proposed land take, the impact on their own proposed development scheme, and the impact on their farming operations. They also request coordination with the VEOWF project to ensure disruption during construction is minimised and for alternative routes for the onshore cable corridor to be explored.
- 9.7.58. They question the ability of the ExA to make a decision on the NFOWF application in isolation when it also includes necessary land rights over their land that also facilitates the VEOWF development. They point out that the Proposed Development on its own would have much less land take and impact on their interests. They challenge the DCO process on the basis that the land rights requested are much wider and greater than required by the NFOWF project.
- 9.7.59. They submit that the Applicant has not considered alternative routes across their land holding. They are concerned that the Proposed Development would conflict with their own development scheme. They have put forward alternative proposals and suggested alternative routes, but they have been discounted each time. They are disappointed that the Applicant has not sought to enter into meaningful discussions to avoid the conflict.
- 9.7.60. Their own proposals for a residential and social development scheme are being split into two phases of development. During negotiations with the Applicant's agent, it would appear that they are able to potentially build out their Phase 1 development alongside the Proposed Development, subject to agreeing the routes of temporary land take and access for maintenance routes in the future.
- 9.7.61. However, they contend that the second phase of development, which would include potential build of a new bypass, play areas, green space for amenity and social well-being, would be significantly impacted by the Proposed Development. Their suggested alternative routes are within their land ownership and have been included within the survey area by VEOWF and NFOWF. They would be happy to promote this alternative land within their boundaries and within the survey boundary area.
- 9.7.62. They contend that it appears that the Applicant is seeking the most cost-effective cable route which would mean significant impact to their proposals and to the local community with a potential loss of a new school, new road schemes, amenity areas etc. They submit that cost should not be the underlying decision on the cable route, especially when there are other such cost alternatives. In their opinion, the route of the cable has been fixed for some time now and the Applicant is just not willing to consider any alternatives.
- 9.7.63. They assert that the Applicant is seeking a very large cable corridor to give them flexibility to locate the cable route as they state that they are not at a stage that they can decide where to place it. They do not feel that is fair and reasonable when they are requesting such large land rights. Their preference is for the developer to go further north (outside the current cable corridor land) and should cross over their land in a location that would minimise the impact on their future development proposals. There is also an option for the developer to go under their water bodies.

THE APPLICANT'S RESPONSE

- 9.7.64. The Applicant's response is set out in its written submissions and in response to questions on this topic at various deadlines [\[REP1-047\]](#), [\[REP4-027\]](#), [\[REP5-054\]](#) and [\[REP5-056\]](#). Further points were made at the CAH and are contained in the Applicant's Written Summary of Oral Submissions at CAH1 [\[REP6-064\]](#).
- 9.7.65. At the CAH, the ExA referred to the Applicant's response to ExQ2 6.0.19 [\[REP5-054\]](#) and asked the Applicant to summarise its position regarding objections raised on behalf of Strutt & Parker (Farms) Limited and Liana Enterprises Limited, particularly in relation to alternative cable routing options proposed by the landowner and whether the scheme should be modified to accommodate these options.
- 9.7.66. The Applicant referred to the plan submitted on behalf of the APs at D4 [\[REP4-091\]](#) which shows a slight overlap between their proposed development site boundary and the NFOWF and VEOWF cable corridor. The Applicant contends that the overlap is minimal and located at the corners of the site boundary, near existing vegetation. The Applicant considers that the APs proposed development, and the cable corridor could coexist at the relevant location.
- 9.7.67. The Applicant points out that the APs proposed housing development is at an early stage and has not yet been submitted for planning permission. Any housing development would be required to include open space, biodiversity net gain, and landscaping, which could be located and designed to accommodate the cable route. Regarding Phase 2 of the development, no details have been provided, making it difficult to assess potential interactions with the NFOWF project. However, any future development would need to be designed to coexist with the cable infrastructure installed for the NFOWF project.
- 9.7.68. As regards the suggestions made to re-route the cable further north or beneath existing reservoirs, the Applicant indicates that drilling under the reservoirs would be technically challenging due to depth, rock strata, and maintenance concerns. Routing further north would require crossing an Affinity Water Limited water main at a shallow angle, increasing the risk of interference with that apparatus, such as galvanic corrosion to the water pipe, causing much larger impacts on other stakeholders. The current route is proposed to cross the pipe perpendicularly to minimise these risks.
- 9.7.69. The Applicant's Response to Actions List for CAH1 [\[REP6-069\]](#) provides further detailed information on this matter. The Phase 1 proposals as set out on plans submitted at D4 [\[REP4-091\]](#) shows that the Proposed Development's only interaction with Phase 1's Option B proposals is over Plots 05-026 and 06 003 as shown in the Land Plans [\[AS-018\]](#). The landowner's Phase 1 proposed land use over these plots is public open space and landscaping, which could include some planting. The BoR [\[REP7-009\]](#) confirms that Plot 05-026 is subject to Rights – C (Cable Route Onshore) and Plot 06-003 is subject to Rights – D (Operational and Maintenance Access). The full rights and restrictions for Rights C and D are set out in Table 1.1 Categories of new rights and restrictive covenants within the Book of Reference [\[REP5-010\]](#). The Applicant is confident that the reasonableness test within the rights restriction would not result in a scenario whereby Phase 1 would not be able to coexist with the project. It suggests other adjustments that could be made once more detailed plans have been developed to avoid interaction with the APs development scheme.

- 9.7.70. This is based on Phase 1 proceeding in accordance with the proposals set out within the “Proposed Development” section of [REP4-091](#). The Applicant points out that as this development has not yet been consented, there remains the opportunity for Strutt & Parker (Farms) Limited to amend the proposals in order to remove the minor existing interactions with NFOWF.

EXA’S CONSIDERATIONS

- 9.7.71. The ExA has already considered the specific alternative routes for the cable corridor proposed on behalf of Strutt & Parker (Farms) Limited and Liana Enterprises Limited in the ‘Alternatives’ Section 3.2 of Chapter 3 of this Report. As indicated in that section, we find no reason to question the Applicant’s submission that Phase 1 of the APs’ development scheme and the Proposed Development could reasonably co-exist together, and that any small degree of interaction would not be insurmountable. Furthermore, there is no substantial evidence to suggest that any future Phase 2 development could not also be designed to coexist with the cable infrastructure installed for the Proposed Development.
- 9.7.72. We are mindful that the CA Guidance, paragraph 8, states that: “The applicant should be able to demonstrate to the satisfaction of the Secretary of State that all reasonable alternatives to compulsory acquisition (including modifications to the scheme) have been explored”. In that respect, the LRT [\[REP8-032\]](#) confirms that the Applicant has sought to engage with the landowner with a view to addressing their concerns and will continue to do so.
- 9.7.73. The LRT [\[REP8-032\]](#) D5 update points out that whilst the landowner submitted high level draft plans for Phase 1 of their proposed development at D4, no details have been provided regarding Phase 2 of the landowner’s proposed development. In addition, no details of any planning consent or information regarding discussions toward obtaining such consent have been disclosed to the Applicant. It states that while the Applicant remains committed to engaging with the landowner to mitigate potential impacts, it can only do so where substantive feedback and detailed plans are provided.
- 9.7.74. The ExA is content that the Applicant has had regard to the APs concerns and the route modifications proposed by them. Furthermore, we find that it has provided sound and reasonable reasons for rejecting their suggested alternatives to re-route the cable further north or beneath existing reservoirs. The ExA is satisfied that Applicant has complied with the CA Guidance in that respect and that that all reasonable alternatives to CA have been explored.
- 9.7.75. The ExA considers that the Applicant has provided a reasonable explanation of the need for and the extent of the land within the scope of the CA powers sought. The proposed CA powers in relation to this land are necessary for the achievement of the Applicant’s reasonable objectives and this represents a reasonable and proportionate approach. The ExA concludes that the matters raised would not preclude the exercise of the relevant CA powers should the SoST decide to grant development consent for the Proposed Development.

**HOLLY MARIE FLORENCE JOHNSON, JOHN PAUL JEFFREY TRAVELLER,
RACHEL DONNA THACKERY AND RUSSELL ALBERT JOHNSON (AP
REFERENCE NUMBERS 275386, 275390, 275391, 275392)**

- 9.7.76. The LRT [\[REP8-032\]](#) records these APs as Category 1 owners of Plot 13-015 for which freehold acquisition is sought for the purposes of the Bentley Road Works No 9. The concerns of these APs are set out in their RR [\[RR-168\]](#) and [\[RR-274\]](#) which

raise matters relating to impacts to natural habitats, wildlife and ecosystems, mental health, increased traffic resulting in increased pollution and noise, changes to the character of the local environment, the effect on residents wellbeing and quality of life and a preference for an alternative solution such as an offshore grid connection.

THE APPLICANT'S RESPONSE

- 9.7.77. The Applicant has provided a response to the planning matters raised in the RRs [\[REP1-047\]](#). It has considered wildlife and habitats through the design process and has included a number of amendments to the design to minimise the impacts upon habitats and species. It has also taken the potential mental health effects which could arise from the development of the construction of the Proposed Development into consideration and has undertaken an assessment of effects upon mental health as part of ES Chapter 28 Human Health [\[APP-042\]](#).
- 9.7.78. The LRT [\[REP8-032\]](#), confirms that the Applicant issued populated HoTs relating to the widening of Bentley Road on 12 July 2024. The Applicant states that it will continue correspondence with the landowner and offer meetings to discuss the HoTs. However, no substantive feedback or engagement on the HoTs has been received. As set out in the LRT, the position at D6 was that the Applicant had visited the property on 6 June 2025. While the landowners did not want to discuss the Proposed Development at that time, they indicated a willingness to meet at a later date requesting a follow-up via email. The Applicant sent a follow-up on 10 June 2025 with proposed meeting dates and was awaiting a response. At D8, the Applicant's position was that it had continued attempts to engage with the landowner, most recently via email and telephone on 14 July 2025, but has not received a response. Without engagement from the landowner, no further progress could be made.
- 9.7.79. In response to ExQ2 6.0.8 [\[REP5-054\]](#), the Applicant reaffirms that it has made concerted attempts to engage with the landowners and progress a voluntary agreement and provides details of those attempts including a table which sets out a summary of all meetings with the landowners along with correspondence since HoTs were issued on 12 July 2024.

EXA'S CONSIDERATIONS

- 9.7.80. The ExA has considered those planning issues which raise important and relevant considerations including matters relating to ecology, traffic, noise, and health and wellbeing under the relevant generic sections of Chapter 4 of this Report and our conclusions on those matters are set out therein.
- 9.7.81. The CA objection relates to the proposed freehold acquisition of 73 sqm of garden land for the purposes of Work No 9, the Bentley Road works. The SoR [\[REP7-011\]](#), paragraph 5.3.2, explains that the Applicant has only included powers to CA the freehold interest in land where other powers (such as to acquire new rights, impose restrictions or take TP) would not be sufficient or appropriate to enable the construction, operation or maintenance of the Proposed Development. Works to widen Bentley Road (Work No. 9) require freehold acquisition of land outside the highway so that the widened sections can be designated as public highway once complete.
- 9.7.82. The ExA considers that the Applicant has provided a reasonable explanation of the need for and the extent of the land within the scope of the CA powers sought. The proposed CA of this land would be necessary for the achievement of the Applicant's reasonable objectives, and this represents a reasonable and proportionate

approach. The ExA concludes that the matters raised by these APs would not preclude the exercise of the relevant CA powers should the SoS decide to grant development consent for the Proposed Development.

TDC (AP REFERENCE NUMBER 154527)

- 9.7.83. The TDC submissions are set out in their RR [\[RR-327\]](#), WR [\[REP4-093\]](#), and other relevant documents [\[REP2-036\]](#), [\[REP5-082\]](#), [\[REP5-090\]](#), [\[REP5-091\]](#), REP5- 092, [\[REP5-093\]](#), [\[REP6-081\]](#), REP7- 072, [\[REP7-073\]](#), [\[REP7-074\]](#), REP7- 075, [\[REP7-076\]](#).
- 9.7.84. In response to ExQ2 6.0.20 [\[REP5-091\]](#), TDC state that they remain unable to accept the proposed terms, which continue to be wholly unsatisfactory, particularly in relation to financial compensation and the legal obligations set out in the draft documents. They question the Applicant's assertion that "concerted efforts" have been made to expedite matters. They consider that there has been minimal engagement with their concerns, and no meaningful attempts have been made to resolve them. In summary, TDC's position is that the proposed financial compensation is entirely inadequate, and the associated legal and administrative burdens on them are unacceptable. The cumulative cost and resource implications to them through monitoring, compliance, and dispute resolution are considerable and unjustifiable
- 9.7.85. The LRT [\[REP8-032\]](#) D8 update notes that TDC supports the expansion of offshore wind generation but has concerns owing to the National Grid's unconsented East Anglian Connection Node (EACN). TDC advocates an integrated offshore approach. Further concerns raised include potential cumulative impacts of multiple projects and visual and tourism impacts during construction.
- 9.7.86. The TDC Closing Statement [\[REP8-092\]](#) identifies a number of outstanding issues including cumulative impacts and lack of integration, landscape and agricultural concerns, disproportionate burden and community benefit, economic inclusion and tourism impact and the proposed noise complaints protocol. However, no specific CA related issues are mentioned.

THE APPLICANT'S RESPONSE

- 9.7.87. The Applicant has provided various responses to the TDC submissions [\[REP1-046\]](#), [\[REP3-036\]](#), [\[REP5-056\]](#), [\[REP6-060\]](#), [\[REP6-061\]](#), [\[REP6-073\]](#), [\[REP6-074\]](#), REP7- 065, and [\[REP7-066\]](#).
- 9.7.88. The LRT [\[REP8-032\]](#) confirms that the Applicant sent a substantive response to TDC on 25 June 2025, seeking to address their concerns and offering a further meeting to progress discussions on the HoTs. No response was received and the Applicant followed up with the landowner via email on 16 July 2025. A reply was received confirming that the landowner intends to respond by 25 July 2025. While it was acknowledged that agreement was unlikely to be reached before the close of the Examination, the Applicant's position is that it remains committed to securing the necessary rights through voluntary agreement and will continue to engage with the landowner beyond the close of the Examination.

EXA'S CONSIDERATIONS

- 9.7.89. The BoR [\[REP7-009\]](#) confirms that TDC are Category 1 owners or occupiers of Plot numbers 01-001, 01-002, 01-003, 01-004, 01-006. They are also Category 2 qualifying persons for Plot 01-008. The Applicant seeks CA of rights either falling within Category A and/or B for these various plots. The scope of the new rights or

covenants sought are set out in Table 1.1 of the BoR. The related works are for the purpose of Work No. 4B - Intertidal Zone, and Work No. 4C – Landfall and Onshore Connection Works.

- 9.7.90. The SoR [\[REP7-011\]](#) explains that the rights sought over these areas are for the export cable corridor. It cannot yet be confirmed exactly where within the onshore cable route the export cables would be laid, or where only TP would be sufficient, as the exact alignment would be determined following the detailed design of the Proposed Development. The Applicant therefore seeks CA powers over the entire onshore cable route to enable it to carry out the cable installation works following detailed design and to allow construction to proceed within the programme and with the minimum of disruption to landowners and the wider community. There is also a need to impose restrictive covenants in relation to new rights required in connection with the construction, operation, maintenance and decommissioning of the Proposed Development.
- 9.7.91. The ExA considers that the Applicant has provided a reasonable explanation of the need for and the extent of the land within the scope of the CA powers sought. Furthermore, we are satisfied that the Applicant has taken reasonable steps to engage with this AP and to reach a voluntary agreement in accordance with the CA Guidance. The quantum of compensation for CA of land or an interest in or right over land is not, or course, a matter for us to consider. The proposed CA of this land would be necessary for the achievement of the Applicant's reasonable objectives, and this represents a reasonable and proportionate approach. The ExA concludes that the matters raised by TDC would not preclude the exercise of the relevant CA powers should the SoS decide to grant development consent for the Proposed Development.

9.8. STATUTORY UNDERTAKERS LAND

SECTIONS 127 AND 138 PA2008

THE APPLICANT'S GENERAL CASE IN RELATION TO SU'S LAND

- 9.8.1. The full extent of SUs' land and interests affected by the Proposed Development is set out in section 10.3 of the SoR [\[REP7-011\]](#). The SoR confirms that the dDCO, if made, will authorise the CA of SUs' rights on land comprising of plots as described in the BoR [\[REP7-009\]](#) and shown on the Land Plans [\[AS-018\]](#).
- 9.8.2. The SoR explains that various SUs undertakers and owners of apparatus have a right to keep equipment (in connection with their undertaking) on, in or over the Order Land. SUs and other apparatus owners that are known to have interest in or equipment on, in or over the Order Land are included in the BoR and are listed at paragraph 10.3.5 of the SoR.
- 9.8.3. The land rights are held by SUs for the purposes of carrying out their statutory undertaking. Schedule 14 contains PPs for their benefit. The Applicant contends that the PPs would provide adequate protection for SUs' assets. The Applicant therefore considers that the SUs will not suffer serious detriment to the carrying on of the undertaking as a result of the CA powers sought over the Order Land being granted. The Applicant submits that the tests set out in s127(3) and 127(6) PA2008 are therefore satisfied.
- 9.8.4. For s138 PA2008, the SoR states that the exercise of such powers will be carried out in accordance with the PPs contained in Schedule 14 to the DCO. The PPs set out constraints on the exercise of the powers in the DCO, with a view to safeguarding the statutory undertakers' and electronic communications apparatus

owners' interests, whilst enabling the Proposed Development to proceed. The Applicant therefore considers that the test set out in s138 PA 2008 is satisfied.

THE OBJECTIONS RAISED BY SUs TO THE CA POWERS SOUGHT

- 9.8.5. We shall now consider the substantive individual site-specific issues raised by SUs that remained outstanding at the close of the Examination to the CA powers sought. This will be followed by those SUs who initially raised objection but for whom PPs were agreed during the course of the Examination. Finally, we shall set out those SUs that have not made any written or oral submissions to the Examination and have raised no formal objection to the CA and TP powers sought over their land interests.

AFFINITY WATER LIMITED (AP REFERENCE NUMBER 127941)

- 9.8.6. The Affinity Water Limited's D2 response [\[REP2-029\]](#) explains that the bespoke provisions in relation to right of access to the Affinity site at East Clacton Reservoir and Pumping Station have not yet been agreed and highlights other areas of concern. In response to ExQ1 6.1.40 [\[REP2-029\]](#), additional information which set out in detail Affinity Water Limited's specific issues in relation to the Proposed Development, in particular the issues relating to the Horsley Cross 21" Cast Iron water main during construction and operation; access to Affinity Water Limited's site at East Clacton Reservoir; together with a copy of their bespoke protective provisions (PPs). Further details were provided in responses to comments on WR and ExQ1 [\[REP4-068\]](#).
- 9.8.7. In response to ExQ2 [\[REP5-085\]](#) 6.0.12, Affinity Water Limited identified and explained the drafting issues in relation to PPs that remained outstanding, namely, paragraph 6(1)(b)(ii) (Acquisition of land), sub-paragraphs 7(2) and 7(10) (Removal of apparatus), paragraph 10 (Expenses and costs) and paragraph 11 (Indemnity). At that time, Affinity Water Limited was awaiting comments from the Applicant in relation to its most recently proposed drafting.

THE APPLICANT'S RESPONSE

- 9.8.8. The Applicant's Comments on Responses to ExQ2 [\[REP6-061\]](#) refers to the update on negotiations contained in the updated Applicant's LRT submitted at D 6. This states that the form of the PPs was agreed between the parties on 17 June 2025 and the Applicant has updated the PPs in the dDCO submitted at D 6 [\[REP6-005\]](#).
- 9.8.9. The LRT D8 update [\[REP8-032\]](#) indicates that the Applicant and Affinity Water Limited were currently negotiating a short agreement related to the agreed PPs. The Applicant considered that this agreement would be finalised before the end of Examination or shortly afterwards.
- 9.8.10. The LRT also confirms that the Applicant considers that Affinity Water Limited's statutory operations would not be detrimentally impacted by the Proposed Development and the justification for the acquisition of rights in land is set out in the SoR [\[APP-009\]](#).

EXA'S CONCLUSIONS ON THE AFFINITY WATER LIMITED OBJECTION

- 9.8.11. The LRT [\[REP8-032\]](#) identifies Affinity Water Limited as both a Category 1 owner of land over which the CA of rights are sought and having a Category 2 interest for apparatus/rights in other land over which the acquisition of rights and TP is sought.

- 9.8.12. The ExA notes that the form of the PPs has been agreed between the parties, and these are contained in the dDCO. At the close of the Examination there had been no withdrawal of Affinity Water Limited's objection, and the D8 position was that the parties were still negotiating a side agreement relating to those agreed PPs. Nevertheless, the ExA considers that adequate protection for this SU's assets is included in the PPs in Schedule 14 Part 10 to the dDCO. We conclude that the proposed PPs are appropriate, and the SoS can be satisfied that the prescribed tests set out in s127 would be met.
- 9.8.13. In relation to s138, the ExA considers that the extinguishment of rights and removal of apparatus sought by the Applicant in relation to the Affinity Water Limited's land interests is necessary for the purpose of carrying out of the Proposed Development. In the event that development consent is granted, the DCO should include provision authorising the CA powers sought over this SU's land.

NETWORK RAIL INFRASTRUCTURE LIMITED (AP REFERENCE NUMBER 7310)

- 9.8.14. Network Rail Infrastructure Limited (NRIL) provided its Written Representations and Responses to the Examining Authority's Written Question (EXQ1) at D2 [\[REP2-055\]](#). NRIL submitted its preferred form of PPs at D 3 [\[REP3-066\]](#).
- 9.8.15. In response to ExQ1 6.1.46 [\[REP2-055\]](#) NRIL submits that there is no compelling case in the public interest for the CA of rights over its land and the Applicant should negotiate matters by private agreement to secure the necessary powers. NRIL states that the current PPs do not adequately safeguard its rights or operational land and that various agreements are sought along with its standard form of PPs.
- 9.8.16. In relation to the CA of rights only, s127 (5) and (6) PA2008 apply. The CA of rights over SU's land can only be acquired if the SoS is satisfied there would not be any serious detriment to the SU's carrying on of its undertaking. NRIL strongly maintains that the works proposed to install 6 permanent ducts with 4 carrying a single-phase cable and the other 2 ducts carrying a single and 2 additional optic cables under the railway would impede its ability to ensure the continued safe, efficient and economical operation of the operational railway, if the works are carried out without the necessary procedures in place. As such NRIL seeks robust PPs and protections in additional agreements.
- 9.8.17. Under s138 PA2008, CA powers over NRIL's rights or apparatus can only be granted where the SoS is satisfied that the removal or relocation will not impair NRIL from carrying out its statutory functions. NRIL contends that the current PPs do not provide for sufficient safeguards to be put in place before such rights are extinguished. Given the national significance of the railway network, NRIL requires its standard provisions to ensure compliance with its licence conditions. Without the relevant provisions, NRIL does not consider that the dDCO as currently drafted satisfies the requirements of s127 and 138 PA 2008, and consequently, CA powers should not be exercised without further safeguards being incorporated.
- 9.8.18. The additional submission of NRIL [\[AS-053\]](#) dated 16 June 2025 explains that the Applicant seeks to acquire new rights over Plots 4-010, 4-011, 4-013 and 4-014. NRIL is the unregistered freehold owner of Plot 4-010 upon which railway tracks sit. NRIL takes access from Plot 4-011 (arable land) to maintain and renew lineside fencing for the benefit of this plot (pursuant to section 68 of Railways Clauses Consolidation Act 1845). These plots therefore form part of the operational railway.

- 9.8.19. In respect of the other two plots, NRIL is the freehold owner of Plot 4-013, which consists of an accommodation overbridge which is 12ft wide. NRIL (or its contractors) use this bridge annually to conduct a visual inspection and at risk-based frequency, a detailed exam. NRIL has a right over Plot 4-014 which is an access track which leads to the accommodation bridge situated on Plot 4-013.
- 9.8.20. Plots 4-013 and 4-014 would be used for the purposes of the construction, installation, operation, maintenance and decommissioning of the Proposed Development as set out in schedule 5 of the dDCO. In addition, under schedule 7 of the dDCO, the Applicant may take TP over these two plots
- 9.8.21. In principle, NRIL does not object to the Proposed Development, but it does object to acquisition of land and new rights without relevant agreements in place, to ensure there is no detrimental impact on the Accommodation Bridge or the operation of the railway and that the safety of the railway is maintained during the construction, operational and decommissioning phases of the Proposed Development.
- 9.8.22. The position was that NRIL, and the Applicant were negotiating the PPs and framework agreement. NRIL was hopeful that an agreement could be reached with the Applicant but until such time, to safeguard NRIL's interests and the safety and integrity of the operational railway, the objection was maintained

THE APPLICANT'S RESPONSE

- 9.8.23. In the Applicant's response to action points at the CAH [\[REP6-069\]](#), reference is made to the PPs contained in Schedule 14, Part 5 of the dDCO and NRIL's preferred PPs submitted at D 3 [\[REP3-066\]](#). The Applicant inserted updated PPs in favour of NRIL into the dDCO at D 5 including the requested paragraphs relating to electromagnetic interference [\[REP5-008\]](#).
- 9.8.24. The Applicant states that the material elements of the PPs are agreed save in respect of paragraph 46 as shown in [\[REP3-066\]](#). The Applicant submits that these agreed provisions would ensure that NRIL's approval is required for any works that may affect the railway or any of NRIL's apparatus or property.
- 9.8.25. In respect of paragraph 46, NRIL has requested provisions that place a restriction on a significant number of powers in the dDCO (including the power to maintain the authorised development, CA of land and the power to temporarily use land to carry out the authorised development) in respect to any railway property (as defined within the PPs) without the prior consent of NRIL. There is also a proposed restriction on the Applicant's ability to acquire, use, acquire new rights over or seek to impose any restrictive covenants over any railway property or extinguish any existing rights of NRIL over third party property without the consent of NRIL. These restrictions are in addition to the requirement for the Applicant to obtain approval from NRIL on the technical aspects of any works.
- 9.8.26. Whilst discussions are ongoing, the Applicant and NRIL have not yet agreed the terms of a voluntary property agreement for the necessary rights to construct, use and maintain the Proposed Development on, or in respect of, railway property (see the update on negotiations contained in the Applicant's LRT submitted at D6 [\[REP6-042\]](#)). In the absence of voluntary agreement, the Applicant contends that any restriction on the use of the CA powers and other powers under the dDCO would result in a material impediment to the delivery of the Proposed Development.

- 9.8.27. The Applicant's Closing Statement [\[REP8-036\]](#), confirms that the material elements of the PPs are agreed save in respect of paragraph 46 as shown in [\[REP3-066\]](#).
- 9.8.28. The SoS has previously determined that the use of CA powers in respect of SUs' land and rights can be acceptable to ensure the deliverability of a NSIP where it has not been possible to reach agreement on the terms of a voluntary property agreement provided that the technical details of any works are approved by the statutory undertaker (see, for example, paragraphs 6.6 to 6.23 of the SoS's decision letter for the Immingham Open Cycle Gas Turbine Order 2020).
- 9.8.29. The Applicant states that the PPs contained in Schedule 14, Part 5 of the dDCO require the technical details to be approved by NRIL prior to carrying out any works that may affect railway property. Accordingly, the Applicant's position is that the use of CA powers and other relevant powers under the dDCO would not result in any serious detriment to NRIL's undertaking.

EXA'S CONCLUSIONS ON THE NETWORK RAIL INFRASTRUCTURE OBJECTION

- 9.8.30. The D8 LRT [\[REP8-032\]](#) indicates that the Applicant is crossing the railway using trenchless crossing techniques. The Applicant considers that NRIL's statutory operations would not be detrimentally impacted by NFOWF. The justification for the acquisition of rights in land is set out in the SoR [\[REP7-011\]](#).
- 9.8.31. The parties have agreed a substantial proportion of the PPs which are included in the dDCO [\[REP8-005\]](#). We also note from the LRT that HoTs were agreed between the Applicant and NRIL on 10 July 2025. In addition, the LRT indicates that progress has been made on the Framework Agreement between the parties. The Applicant expects that the PPs and related Framework Agreement will be agreed after the close of Examination.
- 9.8.32. However, at the close of the Examination PPs had not been agreed and an outstanding matter of substance related to the drafting of paragraph 46 of NRILs standard PPs. This is included as Schedule 14, Part 5, paragraph 47 of the dDCO but with the deletion of a restriction which requires the Applicant to seek NRILS consent prior to the exercise of powers conferred by various dDCO articles including CA and TP powers in respect of any railway property except with the consent of NRIL.
- 9.8.33. The Applicant's position is that the inclusion of any restriction on the use of the CA powers and other powers under the dDCO would result in a material impediment to the delivery of the Proposed Development. On the other hand, NRIL submit that the current PPs do not provide for sufficient safeguards and protection to it as an SU to ensure that it could properly regulate the rights proposed to be exercised over the railway network so as to avoid serious detriment to the carrying on of its undertaking.
- 9.8.34. The ExA has given serious consideration to the points raised by NRIL as an SU and the need to ensure that the dDCO if made would provide appropriate protection for the safe and efficient operation of the railway. However, we find the Applicant's concerns as regards the potential impact on the deliverability of the Proposed Development to be justified. The PPs as drafted would still require the technical details to be approved by NRIL prior to carrying out any works that may affect railway property. We therefore believe that NRIL would retain sufficient control over

the technical details of any works in order to safeguard its interests and enable it to comply with its licence obligations.

- 9.8.35. Having regard to the nature and purpose of the CA and TP powers sought, the ExA are content that the PPs contained in the dDCO would provide the necessary safeguards for NRILs duties and responsibilities as an SU. We conclude that the use of CA powers and other relevant powers under the dDCO would not result in any serious detriment to NRIL's undertaking and the SoS can be satisfied that the prescribed tests set out in s127 and s138 PA2008 would be met. In the event that development consent is granted, the DCO should include provision authorising the CA powers sought over this SU's land.

CADENT GAS LIMITED

- 9.8.36. In respect of Cadent Gas Limited, the LRT indicates that their initial representation [\[RR-039\]](#) emphasises the need to protect their distribution infrastructure. The D 8 LRT updated confirms that the parties have agreed the form of PPs to be included in the dDCO and Cadent Gas Limited withdrew its objection to the Proposed Development at D6 [\[REP6-080\]](#).

ENVIRONMENT AGENCY

- 9.8.37. As regards the Environment Agency (EA), the LRT [\[REP8-032\]](#) indicates that the form of the PPs has been agreed between the parties. The EA would have the benefit of the PPs set out at Part 2 of Schedule 14 of the dDCO [\[REP8-005\]](#). Given the inclusion of the agreed PPs in the dDCO, we do not consider that the EA's statutory operations would be detrimentally impacted by the Proposed Development. We are satisfied that the statutory tests would be complied with in relation to this SU.

ESSEX COUNTY COUNCIL

- 9.8.38. In relation to ECC as local highway authority, the LRT confirms that PPs have been agreed between the parties. These are included in Schedule 14, Part 8 of dDCO [\[REP8-005\]](#). The SoCG between the parties [\[REP8-060\]](#) notes that supplementary to PPs, a Framework Highways Agreement is sought by ECC. In order to secure the obligation to enter into such an agreement prior to the commencement of any works to the public highway, the Outline Construction Traffic Management Plan will be updated at D8 [\[REP8-013\]](#) to include an obligation on the Applicant to enter into such an agreement. This matter is recorded as being agreed between the parties. Given the safeguards that have been secured, the ExA is satisfied that the interests of this SU would be appropriately safeguarded in the event that the CA powers sought are exercised and the statutory tests would be complied with.

ANGLIAN WATER SERVICES LIMITED

- 9.8.39. For Anglian Water Services Limited, the LRT confirms that bespoke PPs for this water undertaker have been agreed. These are set out in the dDCO Schedule 14, Part 9 [\[REP8-005\]](#). The SoCG [\[REP8-074\]](#) between the parties also confirms that all the outstanding matters listed are agreed including PPs. We consider that the Applicant has provided justification for the acquisition of rights sought in the land. In the circumstances, we are content that Anglian Water Limited's statutory operations would not be detrimentally impacted by NFOWF and that the statutory tests would be complied with in relation to this SU.

NATIONAL GRID ELECTRICITY TRANSMISSION PLC

- 9.8.40. In respect of National Grid Electricity Transmission Plc (NGET), its response to EXQ1 6.1.44 [\[REP2-022\]](#) accepts that it does not have any existing infrastructure within the NFOWF redline boundary and that the provisions of s127 and s138 are not currently engaged. However, NGET requires the inclusion of the bespoke PPs in the dDCO to govern the potential overlap of CA powers between the respective projects. In response to ExQ3 9.3.1 [\[REP-082\]](#) NGET confirms that it has agreed PPs for its benefit with the Applicant. These PPs have been included in the dDCO at Schedule 14 Part 11 [\[REP6-005\]](#). They are contained in the rDCO for the protection and benefit of NGET, and the ExA is satisfied that the interests of this SU would be appropriately safeguarded in the event that the CA powers sought are exercised.

NATIONAL HIGHWAYS LIMITED

- 9.8.41. National Highways Limited's submissions are set out in their RR [\[RR-240\]](#), Responses to ExQ1 [\[REP2-049\]](#), Comments on responses to ExQ1 [\[REP3-053\]](#), the SoCG [\[REP8-080\]](#), Post hearing submissions [\[REP4-081\]](#), Responses to ExQ2 [\[REP5-102\]](#), D7 comments [\[REP7-083\]](#) and their Closing Statement [\[REP8-089\]](#).
- 9.8.42. The Closing Statement confirms that National Highways Limited has now agreed PPs with the Applicant and is content that the Strategic Road Network is sufficiently protected by these in combination with a side agreement, which together are sufficient to prevent serious detriment arising to National Highways' statutory undertaking. The LRT D8 update confirms that the agreed the form bespoke PPs for National Highways Limited was inserted into the dDCO Schedule 14 Part 6 at D7 ([\[REP7-007\]](#) and [\[REP7-008\]](#)). With all matters relating to the Strategic Road Network having now been agreed, National Highways has withdrawn its objections to the application.
- 9.8.43. The ExA notes that National Highways Limited has now withdrawn its objection to the application and the agreed PPs are now set out in the dDCO [\[REP8-005\]](#). As regards the CA and TP powers sought, we consider that the Applicant has provided a reasonable explanation of the need for and the extent of the land within the scope of the CA and TP powers sought. The proposed CA and TP of this land would be necessary for the achievement of the Applicant's reasonable objectives, and this represents a reasonable and proportionate approach. We conclude that the use of CA powers and other relevant powers under the dDCO would not result in any serious detriment to National Highways Limited's undertaking and the SoS can be satisfied that the prescribed tests set out in s127 and s138 would be met. In the event that development consent is granted, the DCO should include provision authorising the CA powers sought over this SU's land.

OTHER STATUTORY UNDERTAKERS

- 9.8.44. The LRT list certain other SUs namely, Eastern Power Networks PLC, Openreach Limited, OCU Group Limited, Aptura Limited and Thorpe Park Solar Farm Limited.
- 9.8.45. These SUs have not made any written or oral submissions to the Examination and no formal objection to the CA and TP powers sought over their land interests. They would have the benefit of the PPs relevant to their category of statutory undertaking contained in the dDCO Schedule 14. We are content that the Applicant has provided justification for the CA/TP of their land interests that are sought and that the tests in s127 and 138 PA2008 as appropriate would be complied with.

9.9. PROTECTIVE PROVISIONS

- 9.9.1. The LRT D8 update [\[REP8-032\]](#) sets out the position in relation to the negotiation with SUs at that stage and provides a final update on progress made in its discussions with parties in relation to PPs. This indicates where bespoke PPs have been agreed with SUs and where SUs would otherwise have the benefit of the PPs relevant to their category of statutory undertaking contained in the dDCO Schedule 14. We have given careful consideration to those instances where PPs have not been agreed as set out above.
- 9.9.2. The ExA has also considered the need for PPs for the Port of London Authority (PLA), and London Gateway Port Limited (LGPL) in Section 5.3 Navigation and Shipping of Chapter 5 of this Report. For the reasons set out therein, we conclude that PPs for their benefit should be included in the rDCO. The ExA finds that PPs are needed for both LGPL and PLA to protect their statutory undertakings of operating and maintaining its ports, including their reliance on the Deep Water Routes (DWRs).
- 9.9.3. In Harwich Haven Authority's (HHA) closing statement [\[REP8-087\]](#), HHA requests, amongst other things, that any residual risks are mitigated through clear and enforceable DCO-level provisions. For the reasons set out in Section 5.3 Navigation and Shipping of Chapter 5 of this Report the ExA recommends that the same right of approval of the plans as for LGPL and PLA is offered to HHA through agreement of PPs. However, given that PPs have not been provided for HHA or agreed in HHA's final signed SoCG [\[REP8-054\]](#), it is recommended that the SoS consult with the Applicant and the HHA to seek an agreed form of wording for PPs to include the HHA's right of approval of the mitigation plans and the use of arbitration to resolve disputes.
- 9.9.4. At the end of the Examination, there were no other identified outstanding concerns relating to PPs. Having regard to the extent and nature of the PPs within the rDCO and the relevant statutory tests, the ExA is content that there is nothing in relation to that which would prevent the grant of the CA powers sought.

9.10. OTHER CONSENTS AND AGREEMENTS

- 9.10.1. The SoR [\[REP7-011\]](#), Section 11, identifies the key consents that are or may be required in order for the Proposed Development to be constructed and subsequently operate. The SoR states that the Applicant is not aware of any reason why these and other consents required would not be granted and therefore does not consider that they represent an impediment to the Proposed Development proceeding.
- 9.10.2. The Consents and Licences Statement [\[AS-030\]](#) sets out the Applicant's strategy for obtaining any consents, licences, permits or other agreements that may be necessary to construct, operate, maintain and decommission the Proposed Development. It explains how the dDCO has been drafted to disapply certain legislative provisions, including disapplying a number of consents that would otherwise be required under a variety of different statutory regimes. It also seeks to provide assurances on the other consents and licences that will or may need to be obtained separately from the DCO process, including consents for which the SoS is not the consenting body.
- 9.10.3. As regards the feasibility and timing of the removal of the Galloper recommended ferry route, the Applicant has provided a position statement [\[REP5-071\]](#). The "Galloper" recommended route (RR) was ratified by the IMO in December 2006 as

part of a suite of traffic routing measures for the “SUNK Area”. The Applicant is cognisant of the advice in NPS EN-3 paragraph 2.8.183 concerning the need for international endorsement and that such processes may take time and with no guarantee of outcome, and the consequent need for early consultation. It is for this reason that the Applicant has undertaken consultation regarding the Galloper RR with the Maritime Coastguard Agency (MCA) and the Belgian Directorate General of Shipping, and other shipping and navigation stakeholders, over several years (since September 2023).

- 9.10.4. This consultation is summarised in Table 3.1 of [\[REP2-025\]](#). The interested coastal states for the Galloper RR are the UK and Belgium. The MCA and Belgian Directorate, the agencies with responsibility to represent the UK and Belgium in these matters, do not oppose the removal of the Galloper RR. The Belgian Directorate have consulted on the Formal Safety Assessment for the Removal of Galloper Recommended Route (FSA) [\[REP2-025\]](#) and confirmed that the consultation is closed with a positive outcome. The Applicant cannot identify any legitimate shipping, navigation, safety or environmental basis for any IMO member to object to a proposal by the relevant coastal states (UK and Belgium) to remove the Galloper RR. The Applicant is accordingly confident the proposed removal of the Galloper RR will be ratified by the IMO in due course.
- 9.10.5. The MCA outlined the multiple steps for the removal process and indicative timelines in its D2 and D4 submissions [\[REP2-046\]](#) and [\[REP4-080\]](#). The Applicant agrees with the process and steps outlined by the MCA and notes that it can be expected to take in excess of two years. The MCA provided a timeline for removal within its Written Representation submitted at D2 [\[REP2-046\]](#). In the Applicant’s Position Statement, it provides a summary of what it considers to be a pragmatic and reasonable alternative timeline. The MCA timeline indicates that at the earliest ratification would take place Q4 2028. In contrast, the Applicant’s proposed timeline provides for ratification by Q4 2027 at the earliest. The ExA in Section 5.3 of Chapter 5 identifies an inconsistency between the parties’ closing positions in relation to the timeline and in particular the timing of consideration of the removal by the Navigation, Communications and Search and Rescue (NCSR) committee. However, the Applicant remains confident that the removal of the Galloper RR will be endorsed in due course by the IMO. The Applicant’s position is that this should be an administrative exercise, and it requests that the MCA commence this process as soon as possible.
- 9.10.6. On another topic, the ES Chapter 17 Aviation and Radar [\[APP-031\]](#) refers to the two Required Navigation Performance (RNP) IFPs that were stated to be with the Civil Aviation Authority (CAA) awaiting approval. However, by way of clarification, the Applicant has explained that the two RNP IFPs are in no way related to or required as a result of the Proposed Development.

EXA’S CONSIDERATIONS

- 9.10.7. Under paragraph 19 of the CA Guidance, the Applicant needs to demonstrate that any potential risks or impediments to implementation have been properly managed and that any legal matters, including the need for any operational or other consents, have been taken into account.
- 9.10.8. The ExA has considered the removal of the Galloper recommended ferry route in detail in Section 5.3 of Chapter 5 of this Report. For the reasons set out in Section 5.3, the ExA accepts the MCA’s [\[REP5-100\]](#) view that the construction of the array area must not commence until the IMO has ratified the proposal to remove the

Galloper recommended route. The ExA therefore recommends that a requirement relating to the prior removal of the route should be included in the DCO and we have included our recommended requirement to serve that purpose in the rDCO. However, in terms of the feasibility and timing of that removal and whether it represents an impediment to the Proposed Development in CA terms, we note that the Applicant's navigation and environmental risk assessment on alternative routes vessels could take to Belgian ports has been accepted and the Belgian maritime administration has indicated they could support the removal of the Galloper RR.

- 9.10.9. The MCA has provided details of the formal multi-step process that would be necessary to request from the IMO that the Galloper recommended route is removed [\[REP2-046\]](#). The MCA and the Applicant have suggested different timelines for ratification that respectively provide for ratification at the earliest by Q4 2028 or Q4 2027. However, notwithstanding those differences, we consider that the Applicant's confidence that the removal of the Galloper RR will be endorsed in due course by the IMO to be fully justified. Given the position of the Belgian maritime administration, we agree that this should be an administrative exercise. We find that the Applicant has to date properly managed this potential risk and has taken appropriate steps with a view to obtaining the IMO approval.
- 9.10.10. The ExA has also considered in Chapter 6, Section 6.1 of this Report, the reference in ES Chapter 17 [\[APP-031\]](#) to the two RNP IFPs that were stated to be with the CAA awaiting approval. However, during the Examination, the Applicant clarified that the two RNP IFPs are in no way related to or required as a result of the Proposed Development. For the reasons stated in that section of this Report we do not regard this matter as representing a potential impediment to the Proposed Development.
- 9.10.11. The ExA is satisfied that all other necessary consents and licences to enable the Proposed Development to proceed have been identified and that there is no reason why such consents and licences should not be secured or granted should development consent be granted for the Proposed Development.

9.11. SPECIAL CATEGORY LAND

- 9.11.1. Special Category Land is defined in Regulation 2 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 as the land identified as forming part of a common, open space, National Trust land or fuel or field garden allotment and on the plan entitled "Special Category Land Plan" and forming part of the land plan.
- 9.11.2. The Special Category Land Plan [\[APP-200\]](#), identifies Plots 01-001, 01-002, 01-003, 01-004 and 01-006 as open space. The open space land is at landfall, being Holland Haven Country Park (Plot 01-006). A further area of Open Space is the foreshore (Plots 01-001, 01-002, 01-003, 01-004) which the Applicant considers to be open space because it is used by members of the public for recreational purposes. This area is broadly comprised of an area of beach with public access; a sea defence wall with walkway above; and a further path and cycleway between the sea defence and the golf course and country park.
- 9.11.3. The SoR [\[REP7-011\]](#) paragraph 10.2.1 explains that land at Frinton Golf Course (Plot 01-005) has been marked as Safeguarded Open Space by TDC. However, the Applicant does not consider this to form open space as it is not open to 'public recreation' as required by the definition of open space. In that respect, the access is restricted by the club and is not available to the public as of right.

- 9.11.4. For the Holland Haven Country Park open space, trenchless construction methods for installation of the cable would be employed, as described by Work No. 4. Alternatively, non-exclusive temporary rights of access for construction are sought, to support any works or access which may be required on the beach.
- 9.11.5. For the foreshore area of open space, trenchless construction methods for the installation of the cable would also be employed in this location. Access to this area by the public would continue to be available with minimal or no impact during the construction period, except in the event of a rare failure in the trenchless construction method being employed. Should this occur, public access might need to be restricted to enable the Applicant to implement mitigation; however, any restriction would be limited to the area affected and would be removed as soon as practicable, in accordance with the Outline Horizontal Directional Drill Method Statement and Contingency Plan [\[REP8-011\]](#). Following construction, the open space would remain unobstructed and available for the purposes for which it is currently used.
- 9.11.6. It should be noted that the Applicant does not propose to acquire the freehold title to any part of the open space land identified above. The Applicant proposes to acquire permanent rights to enable Work Nos. 4B and 4C, in accordance with Article 24 and Schedule 5; and temporary rights to enable Work Nos. 4B and 4C in accordance with Article 31 and Schedule 7.
- 9.11.7. The Applicant is seeking the rights to enable the installation of the cables under the open space land. Once installed, there would be no ongoing obstruction or change of use on the surface, and the current use could continue without alteration. To protect the cables once installed, a number of restrictive covenants are sought to be imposed over the surface of the land. The purpose of these restrictive covenants is to prevent activities on the surface which would endanger the cables. The restricted activities include construction, planting of trees over the cable area and alteration of the level of the land to such an extent that the cables would be endangered. The restrictive covenants are intended to prevent construction on the land. The Applicant submits that this is entirely compatible with its designation as open space. Once the cables have been installed under this land there would be no interference with the current uses.

EXA'S CONSIDERATIONS

- 9.11.8. The ExA is content that the land included within the Special Category Land Plan [\[APP-200\]](#), namely, Plots 01-001, 01-002, 01-003, 01-004 and 01-006 is open space for the purposes of s132(1) of PA2008. We agree that the land at Frinton Golf Course (Plot 01-005) should not be regarded as open space as it is not open to 'public recreation' as required by the definition of Open Space.
- 9.11.9. As the Applicant is seeking the CA of rights over land to which s132 of PA2008 applies, the SoS must be satisfied that one of the subsections (3) to (5) applies. Section 132(3) applies if the Open Space Land, when burdened with the Order right, will be no less advantageous than it was before to the persons in whom it is vested, other persons (if any) entitled to rights of common or other rights, and the public.
- 9.11.10. The ExA is satisfied that following installation of the cables there would be no ongoing impact, and neither the acquisition of the rights sought nor the imposition of restrictive covenants would render the open space less advantageous than it is at present to the persons to whom it is vested or the public than it currently is thus engaging the exemption under s132(3) PA 2008. This means that by virtue of

s132(2)(a) should the Order be made, it would not need to be subject to special parliamentary procedure.

9.12. CROWN LAND

- 9.12.1. As indicated above, the application does not include Crown Land and s135 PA2008 does not therefore apply.

9.13. THE EXA'S CONSIDERATION OF THE APPLICANT'S GENERAL CASE FOR THE GRANT OF CA AND TP POWERS

INTRODUCTION

- 9.13.1. The ExA's approach to the question whether and what CA powers it should recommend to the SoS to grant has been to seek to apply the relevant sections of the PA2008, notably s122 and s123, the Human Rights Act 1998 and the Equality Act 2010; and, in the light of the representations received and the evidence submitted, to consider whether a compelling case has been made in the public interest, balancing the public interest against private loss.
- 9.13.2. A number of general considerations also have to be addressed in the light of the CA Guidance, namely, whether all reasonable alternatives to CA have been explored; the Applicant must have a clear idea how it intends to use the land and that show that funds are available. The Applicant must also demonstrate that the proposed interference with the rights of those with an interest in land is for a legitimate purpose and that it is necessary and proportionate.
- 9.13.3. The dDCO [\[REP8-005\]](#) deals with both the development, itself, and CA powers. The case for CA powers cannot properly be considered unless and until the ExA has formed a view on the case for the development overall, and the consideration of the CA issues must be consistent with that view.
- 9.13.4. The ExA has shown in Chapter 8 of this Report that it has reached the view that development consent should be granted. The question therefore that is addressed here is the extent to which, in the light of the factors set out above, the case is made for CA powers necessary to enable the development to proceed.

THE PURPOSES FOR WHICH THE CA POWERS ARE SOUGHT AND WHETHER THE LAND IS REQUIRED FOR THE DEVELOPMENT TO WHICH THE APPLICATION FOR DEVELOPMENT CONSENT RELATES

THE SOURCE, AND SCOPE OF THE CA POWERS SOUGHT

- 9.13.5. The CA Guidance, paragraph 11, considers the purpose for which CA is sought, in the light of s122 PA2008. The effect of subsections 122(1) and 122(2) PA2008 is to provide that the land to be subject to CA must be required for the development to which the development consent relates; effectively that the land needs to be acquired, or rights over, or under it acquired or impediments upon it removed, in order that the development can be carried out.
- 9.13.6. The SoR [\[REP7-011\]](#) Section 5 explains the source and scope of the CA powers and Section 6 indicates the purpose of those powers including the need for the Proposed Development. Section 7 sets out the justification for the CA powers sought.
- 9.13.7. The SoR Appendix A [\[REP7-011\]](#) explains why CA powers are necessary in relation to each individual parcel of the land required for freehold acquisition, new rights and TP, with reference to the relevant works numbers and the nature of the works as set

out in Schedule 1, Part 1 of the dDCO. The proposed use of the land for which CA of the freehold is required is set out in the SoR Section 5.3, with the land for which permanent acquisition of rights and the imposition of restrictions explained in Section 5.4 and TP dealt with in Section 5.5. The Needs Case and Project Benefits Statement [APP-232] sets out the need for the Proposed Development and a summary of that need is contained in SoR Section 6.

9.13.8. The SoR Section 7, paragraph 7.2.5, asserts that the scope of the powers of CA proposed in respect of the land within the Order Land goes no further than is needed. The Applicant's position is that all the land included within the Order Land is needed to achieve the identified purpose of delivering the Proposed Development. In addition, steps have been taken to ensure that the interference with the rights of those with an interest in the affected land is no more than is necessary to deliver the benefits associated with the Proposed Development.

9.13.9. The SoR Section 13, concludes that the CA of the Order Land or rights over the Order Land (including restrictions), together with the overriding of interests, rights and restrictive covenants and the suspension or extinguishment of private rights, is required for the purposes of, to facilitate, or are incidental to, the Proposed Development and are proportionate and no more than is reasonably necessary.

9.13.10. Against that background, we shall now consider whether the land to be subject to CA is required for the development to which the development consent relates including certain specific aspects of the powers sought that were explored during the Examination.

WHETHER THE WORKS TO CREATE THE ELECTRICAL CONNECTIONS FROM THE PROPOSED OFFSHORE GENERATING STATION TO THE NATIONAL GRID ARE ASSOCIATED DEVELOPMENT

9.13.11. The SoR paragraph 3.2.2 [AS-028], indicates that the Applicant is seeking CA powers that would also facilitate the construction the of onshore cable ducting for the proposed VEOWF. The Applicant's responses to the ExQ1 and ExQ2 provides further details and explanation of the purpose for which the CA powers are sought including associated development.

9.13.12. In response to ExQ1 6.1.1 [REP2-020], the Applicant explains by reference to s115 PA2008 and the Planning Act 2008 Guidance on associated development (April 2013) (AD Guidance) that the works to install the ducts for the electrical connections from the proposed offshore generating station to the national grid for the proposed VEOWF (Shared Works) do not contravene the core principles of the AD Guidance.

9.13.13. In relation to core principles (i) and (iv), the Applicant notes that the ExA and SoS accepted that applicant's argument during the examination stage for the East Anglia One Offshore Windfarm (EA1) in 2014 that the laying of additional ducting (for two planned future projects) was development 'associated with' the EA1 because it would help address its cumulative impacts. Similarly, the Norfolk Vanguard Offshore Wind Farm DCO (granted in 2022) included the ability to install onshore ducts for the Norfolk Boreas Offshore Wind Farm (which was consented under a separate DCO). The Applicant draws attention to paragraph 6.5 of the SoS's Vanguard decision letter and submits that this reasoning should be adopted in relation to the Shared Works.

9.13.14. In response to ExQ2 6.0.1 [REP5-054], the Applicant provides further comments and explanation as to the relevance of the Norfolk Vanguard Offshore Wind Farm DCO to this case. VEOWF and NFOWF are being promoted by separate applicants but there are clear relationships between them. RWE Renewables is a common shareholder in both projects, and the Applicant submits that there is clear evidence

of effective cooperation and coordination between the two projects in the Co-ordination Report [REP1-004]. Furthermore, the Applicant notes that, in any case, a common applicant was not the single determining factor in the ExA and SoS's conclusion that the relevant ducting work constituted "associated development". Finally, the Applicant contends that the consenting processes for both projects are closely aligned.

9.13.15. The Applicant's response to ExQ1 6.1.2, sets out further details of the efficiencies that would result from the identification of the onshore cable route and substation location that has been undertaken in co-ordination with VEOWF. Whilst the width of the corridor which may be acquired is slightly wider than it would be for the NFOWF in isolation, the Applicant contends that the ability to install ducts for VEOWF would result in project efficiencies, with associated reduction in overall land take and environmental impacts.

9.13.16. In response to ExQ1 6.1.3 and 6.1.4, the Applicant provides further justification for the exercise of CA powers in relation to those works which are required for the proposed VEOWF project and explains why this would satisfy the condition in s122(2)(a) PA2008 in respect of the land required for that development over which powers of CA are sought.

EXA'S CONSIDERATIONS IN RELATION TO WHETHER THE WORKS TO CREATE THE ELECTRICAL CONNECTIONS FROM THE PROPOSED OFFSHORE GENERATING STATION TO THE NATIONAL GRID ARE ASSOCIATED DEVELOPMENT

9.13.17. The ExA notes that the AD Guidance paragraph 5 (iv) provides that associated development should be proportionate to the nature and scale of the principal development. However, the AD Guidance explains that this core principle should not be read as excluding associated infrastructure development (such as a network connection) that is on a larger scale than is necessary to serve the principal development if that associated infrastructure provides capacity that is likely to be required for another proposed major infrastructure project. The footnote to that subparagraph gives the example of an application for an offshore generating station, where: "the SoS may consider it appropriate for a degree of overcapacity to be provided in respect of the associated transmission infrastructure, so that the impacts of one or more other planned future projects which could make use of that infrastructure would be reduced by taking advantage of it".

9.13.18. The ExA agrees with the Applicant that the following points are relevant:

- The timing of VEOWF and the Proposed Development reflects a shared ambition for each project to be operational by 2030;
- the two projects are promoted by separate legal entities but there are clear relationships between them;
- the public interest benefits of the Shared Works include the further reduction of overall land take and adverse cumulative environment effects; and
- NPS policy and related guidance reflects the urgent need for new electricity generating capacity and establishes a policy expectation for undertakers of individual projects to collaborate and co-ordinate with other major infrastructure projects in close proximity or where there are direct overlaps between projects.

9.13.19. Taking these factors and the AD Guidance into account, the ExA finds that the Shared Works constitute 'associated development' related to the Proposed Development for the purposes of s115 PA2008. The Shared Works (comprising Work Nos. 6B, 12B and 14) are included in Schedule 1, Part 1 of the dDCO for NFOWF [REP8-05] and therefore form part of the development for which consent is

sought. We are content that this satisfies the condition in s122(2)(a) PA2008 in respect of the land required for that development over which powers of CA are sought including the powers sought in connection with the onshore works for the proposed VEOWF.

THE EXTENT OF THE LAND SOUGHT FOR THE ONSHORE EXPORT CABLE CORRIDOR

- 9.13.20. The Applicant's response to ExQ1 6.1.5 [\[REP2-020\]](#), clarifies the extent of the land sought for the onshore export cable corridor (OECC). The Works Plans [\[AS-019\]](#) show Work No. 6, incorporating 6A and 6B, as a single area. This is because the exact location of the NFOWF and VEOWF ducts within this area is not currently known and would not be known until the detailed design stage post DCO consent.
- 9.13.21. Whilst CA powers are sought over a wider area than would be required, the Applicant submits that this is necessary to allow the development to undergo detailed design. As more information on items becomes available, such as localised areas of difficult ground conditions or archaeological finds, the location of either or both projects' ducts would need to be micro-sited within the area shown as Work No. 6 to avoid certain features. The Applicant's position is that it is disproportionate to undertake detailed design ahead of consent being granted due to the substantial costs involved and additional ground investigation and archaeological trenching that might be required to fully identify any areas to avoid.

EXA'S CONSIDERATIONS IN RELATION TO THE EXTENT OF THE LAND SOUGHT FOR THE OECC

- 9.13.22. The ExA considers that the extent of flexibility sought in relation to the OECC is entirely appropriate and proportionate for a project of this type. We also believe that the combination of the drafting of Articles 21 and 24, the absence of any practical or other incentive to take more land than is ultimately required on a permanent basis, and the existence of a clear financial disincentive to doing so, is sufficient to ensure that the powers sought would be exercised in a proportionate manner and that ultimately no more land is acquired than is needed as a result.

THE EXTENT OF THE LAND SOUGHT FOR THE SUB-STATION SITE

- 9.13.23. The proposed coordinated onshore substation works area falls across two separate land holdings. The VEOWF substation predominantly falls within land owned by T. Fairley & Sons (Plot 15-016), while the NFOWF substation is located on land owned by The Executors of the Estate for Charles Tabor (Plot 16-001), as identified on the Land Plans [\[AS-018\]](#).
- 9.13.24. Section 5.3 of the SoR [\[AS-028\]](#) provides a summary of the Applicant's case for powers to CA the freehold interest in land for delivery of the Proposed Development. Appendix A, Table 1 'Freehold Acquisition' of the SoR identifies land Plots 15-014, 15-016 and 16-001 as being subject freehold acquisition for the purpose of Work Nos. 11 (onshore substation) and 12 (onshore substation compound). Paragraph 5.3.2 of the SoR [\[AS-028\]](#) summarises the Work Nos. identified for freehold acquisition and details that such powers are only sought where other powers would not be sufficient or appropriate to enable the construction, operation or maintenance of the Proposed Development.
- 9.13.25. The Applicant's responses to ExQ1 6.1.6 and 6.1.7 [\[REP2-020\]](#), ExQ2 6.0.3 [\[REP5-054\]](#), ExQ3 [\[REP7-051\]](#) and its Closing Statement [\[REP8-036\]](#) are relevant to this topic. In response to ExQ1 6.1.6 the Applicant submits that it is reasonably necessary to seek powers for the CA of the entirety of Land Plots 15-014, 15-016 and 16-001 included in the BoR [\[REP7-009\]](#) as part of the Proposed Development,

notwithstanding that some of the proposed freehold acquisition would be for the construction of the onshore substation for the proposed VEOWF. In response to ExQ3 6.0.1 [REP7-051], the Applicant confirms that all of these land plots are required for the NFOWF substation and associated infrastructure as part of the onshore substation works area.

- 9.13.26. Within the onshore substation works area, there is a requirement to provide the following items:
- The onshore substation;
 - the construction compound to allow works within the onshore substation area to be managed and coordinated;
 - drainage works including attenuation ponds;
 - access roads to the onshore substation and construction compounds; and
 - mitigation planting/earthworks to ensure the onshore substation visual impacts are mitigated.
- 9.13.27. The Design Vision [REP5-004] shows the indicative locations for these items. The Design Vision has been developed on the basis of co-located substations for NFOWF and VEOWF. The Applicant submits that this coordinated approach would ensure efficient land use and would minimise cumulative impacts. The Outline Landscape and Ecological Management Strategy [REP6-035] provides an illustrative vision for landscaping, and how these mitigation measures could be delivered.
- 9.13.28. The Applicant's position as set out in ExQ1 6.1.7 is that the acquisition of these plots is essential to facilitate the development and operation of the NFOWF substation, including fencing, creation of new access, drainage, screening, ecological mitigation and landscaping. The degree of interference required and the necessity for the Applicant to control the land, including restricting access to authorised personnel only to ensure the safety of those on site, would make it impractical for the current landowners to continue using this land.
- 9.13.29. In response to ExQ2 6.0.3, the Applicant refers to the summary of the technical reasons why two separate, but co-located, onshore substations are required for VEOWF and the Proposed Development (see item 3.1.4 of the Applicant's Response to Actions List for ISH1 and ISH2 [REP4-036]). As set out in section 7 of the SoR [AS-028], the co-ordinated approach between VEOWF and NFOWF necessitates an increased area of substation site over which CA powers are sought in order that certain works could be carried out under the first DCO to be implemented.
- 9.13.30. The Applicant submits that at this stage it is not feasible to divide the land between the two projects because the final substation layouts and associated landscape mitigation schemes have not yet been confirmed or approved by the relevant local planning authority. As the final detailed design of the various items has yet to be finalised, it is not currently possible to identify or define the exact area required within the onshore substation works area for the NFOWF substation alone.
- 9.13.31. Furthermore, as the design process is still evolving and owing to the integrated nature of the proposals, the Applicant contends that it requires the full extent of the land identified to retain sufficient flexibility to develop a scheme that would be acceptable to the relevant local planning authority and other stakeholders. Therefore, it is not currently possible to identify or define the exact area required within the onshore substation works area for the NFOWF substation alone. Consequently, the Applicant's current position is that all of the relevant land

identified within the land plans [\[AS-018\]](#) is required to deliver the NFOWF substation and at this time it is not possible to provide a plan for the NFOWF substation only.

EXA'S CONSIDERATIONS IN RELATION TO THE EXTENT OF THE LAND SOUGHT FOR THE SUB-STATION SITE

- 9.13.32. The ExA accepts that the use of common access routes from Bentley Road together with the provision of a common permanent access point and bellmouth from Ardleigh Road and aligned screening principles and advanced planting would all help to reduce environmental impacts. In relation to cumulative effects, we accept that the co-locating of NFOWF with VEOFW would keep impacts to a single area and have a lower overall land take compared to locating the onshore substations in different locations.
- 9.13.33. As was the case in relation to the cable corridor route, the ExA considers that the Applicant has provided sufficient justification for the extent of the land sought for the onshore substation in order to provide flexibility at this stage and that this is an entirely appropriate and proportionate approach. Furthermore, as stated by the Applicant in its oral submissions at the CAH [\[REP6-064\]](#), and in response to ExQ3 6.0.1, the Applicant is only able to exercise the CA powers over the land it actually requires for the Proposed Development. Therefore, in a scenario where only NFOWF comes forward, CA powers would only be exercised over the area of land required for NFOWF once the detailed design has been finalised. Given those circumstances, we are content that following finalisation of the landscape design, no more land would be acquired than is needed for the purposes of the Proposed Development in relation to the substation site.

ACQUISITION OF RIGHTS FOR THE PROPOSED EAST ANGLIAN CONNECTION NODE

- 9.13.34. In response to Ex1 6.1.8 the Applicant asserts that the powers sought over Plots 16-006, 16-007 and 16-008, as listed within the BoR [\[REP7-009\]](#) and Land Plans [\[AS-018\]](#) are necessary and proportionate as it was not then known where within these plots National Grid Electricity Transmission's (NGET) EACN substation and its ancillary items would be located, nor the details of the proposed connection point. The Applicant therefore requires the flexibility to locate and facilitate a connection between the NFOWF onshore substation and any point that NGET determines within these plots. There could otherwise be a scenario whereby NFOWF's onward cable connection crosses land that NGET acquire and land they do not. As a result, the rights are sought over the whole of these plots to enable development of NFOWF in accordance with s122(2)(a) PA2008. Once the design and detail of the EACN substation is known, the Applicant would only proceed with the rights that are required for the onward connection and access for operation and maintenance purposes.
- 9.13.35. Furthermore, the obligation for the installation and maintenance of the onward connection between the NFOWF substation to the EACN substation must be delivered by the Applicant and not NGET. Under the terms of the Bilateral Connection Agreement between the Applicant and NESO, the Applicant is responsible for works up to the Transmission Interface Point. This is normally a point within the National Grid substation and usually requires the Applicant to carry out some works within the substation (in this case the EACN).

EXA'S CONSIDERATIONS IN RELATION TO THE ACQUISITION OF RIGHTS FOR THE PROPOSED EACN

- 9.13.36. The operation of Article 24 allows for rights over land to be acquired, and also for new rights to be created over land. This includes the power to impose restrictive

covenants. This power applies for any purpose for which that land may be acquired under Article 21, namely, for so much of the Order land as is required for the authorised development, or to facilitate it, or as is incidental to it.

- 9.13.37. In the absence of details at the close of the Examination as to the precise location of the EACN connection point, the ExA is satisfied that the need for flexibility entirely justifies the extent of the areas over which the acquisition of rights are sought for the purposes of facilitating that connection. The Applicant would ultimately only proceed with the rights that are required for the onward connection and access for operation and maintenance purposes. We find this to be an appropriate and proportionate approach.

EXA'S OVERALL CONSIDERATIONS AS TO THE PURPOSES FOR WHICH THE CA POWERS ARE SOUGHT AND WHETHER THE LAND IS REQUIRED FOR THE DEVELOPMENT TO WHICH THE APPLICATION FOR DEVELOPMENT CONSENT RELATES

- 9.13.38. The ExA has examined the case which has been made for the grant of CA powers in respect of all plots included in the BoR; the justification for the inclusion of the plots in the SoR; the type and extent of the interests sought; the stated use of the land and whether there are clear and necessary proposals in relation to each plot sought; and the potential effects and consequences of taking the land proposed.
- 9.13.39. The ExA is content that all associated development comprised in the authorised works set out in Schedule 1 of the dDCO is appropriately included and reflects the AD Guidance. We conclude that the extent of the land over which powers are sought in the dDCO is no more than is reasonably required, and it is proportionate to the needs of the Proposed Development.
- 9.13.40. The ExA finds that in the event of the grant of development consent for the Proposed Development, there would be a need to acquire the rights and interests in sought in the CA land and the CA powers contained in the dDCO would be required to implement the development.

WHETHER ALL REASONABLE ALTERNATIVES TO CA HAVE BEEN EXPLORED

NEGOTIATIONS AND ACQUISITION BY VOLUNTARY AGREEMENT

- 9.13.41. The Applicant's responses to the ExA's first and second questions are relevant to this matter. In response to ExQ1 6.1.18 [\[REP2-020\]](#), the Applicant refers to the SoR [\[AS-028\]](#), particularly Sections 5, 7, 8 and Appendix B, which states that its approach to the CA of the relevant freehold interests, new rights and the TP of land within the Order Limits is to achieve this by negotiation wherever possible. The Applicant has sought to negotiate with all known interests who own land within the Order Limits, either through agreement of PPs or private agreements. The status of these negotiations is outlined within the LRT [\[REP8-032\]](#).
- 9.13.42. The Applicant's Written Summary of Oral Submissions at CAH1 [\[REP6-064\]](#) confirms that it has made efforts to acquire land and rights through voluntary agreement with landowners. At the CAH, the Applicant's representative noted that HoTs have been agreed for just over 80% of the cable route.
- 9.13.43. As explained in paragraph 7.9 of the SoR [\[AS-028\]](#), whilst the Applicant is seeking to agree the terms for all land and rights required, it remains necessary for it to seek CA powers over all the Order land. This is to secure such land, rights and interests and to ensure that any third-party interests or encumbrances affecting such land, rights and interests may be acquired, overridden or extinguished pursuant to the

dDCO, and to provide for any circumstance where agreements are not adhered to. This approach ensures that the Proposed Development could be constructed, operated and maintained without impediment

REASONABLE ALTERNATIVES INCLUDING MODIFICATIONS TO THE SCHEME

- 9.13.44. In response to ExQ1 6.1.19 [\[REP2-020\]](#), the Applicant referred to ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#) which outlines the site selection process that was undertaken including the consideration of alternative options and the steps taken to reduce the land required for the Proposed Development.
- 9.13.45. The Applicant's response to ExQ1 6.1.16 (ii) sets out examples of the modifications to the Proposed Development made following engagement with landowners and their representatives in respect of the potential impacts of it on day-to-day business operations, potential development losses, future business opportunity losses, drainage and treatment of soil.
- 9.13.46. A summary of engagement with landowners is set out in Section 3.7 of the Consultation Report [\[AS015\]](#) and includes meetings with landowners to review the Proposed Development's PEIR boundary and provide feedback and comment prior to and during stage 3 (statutory) consultation in April 2023 and various workshops and meetings.
- 9.13.47. In August 2023, the Applicant wrote to landowners / people with an interest in land to advise of a number of changes, including the refinement of the preferred cable route around Thorpe-le-Soken and a reduction from four proposed cable circuits to two cable circuits. This decision meant that the joint onshore cable construction width for NFOWF and VEOWF would now predominantly be 90 metres (m) wide rather than up to 250m. This change resulted in an overall reduction in the Proposed Development's footprint and reduced the number of landowners affected by it.
- 9.13.48. In response to ExQ2 6.0.9 (iii) the Applicant confirms that the examples previously provided to ExQ1 6.1.16 (ii) were intended to illustrate how the Applicant's proposals have been modified following engagement and consultation with landowners. These examples were not intended as an exhaustive list and additional examples of design modifications made in response to landowner engagement are set out in the response.
- 9.13.49. At the CAH [\[REP6-064\]](#), the Applicant's representative summarised the consideration of reasonable alternatives. This included the assessment of alternative land options during the site selection process, as detailed in ES Chapter 4 Site Selection and Assessment of Alternatives [\[APP-018\]](#), followed by engagement with landowners once a route was identified to determine whether any landowner concerns or proposals for the cable route could be accommodated.

EXA'S CONSIDERATIONS AS TO WHETHER ALL REASONABLE ALTERNATIVES TO CA HAVE BEEN EXPLORED

- 9.13.50. The ExA has given consideration to alternatives to the Proposed Development in Section 3.2 of Chapter 3 of this Report. We conclude that there are no policy or legal requirements that would lead us to recommend that development consent be refused for the Proposed Development in favour of another alternative.
- 9.13.51. In relation to acquisition by alternative means to CA, the CA Guidance, paragraph 25, states that applicants should seek to acquire land by negotiation wherever

practicable. As a general rule, authority to acquire land compulsorily should only be sought as part of an order granting development consent if attempts to acquire by agreement fail.

- 9.13.52. The Applicant has entered into negotiations with APs to seek to avoid the need to CA the relevant interests. The LRT [\[REP8-032\]](#) sets out the discussions the Applicant has had with holders of land interests to acquire the Order Land by agreement. The ExA considers that the Applicant's approach to achieve the CA and TP of land by negotiation wherever possible is in compliance with paragraph 25 of the CA Guidance.
- 9.13.53. The CA Guidance, paragraph 8, requires the Applicant to be able to demonstrate to the satisfaction of the SoS that all reasonable alternatives to CA (including modifications to the scheme) have been explored.
- 9.13.54. The SoR [\[REP7-011\]](#), Section 7.5, explains that the Applicant has considered all reasonable alternatives to CA including modifications to the Proposed Development following consultation events, stakeholder responses, and negotiations with landowners. Section 7.6 confirms that a number of strategic-level project location and design alternatives have been considered as part of the site selection and assessment of alternatives. Section 7.7 provides details of the site selection process for various elements of the Proposed Development.
- 9.13.55. The ExA recognises that the Proposed Development has evolved through consultations, negotiation, and discussion with a range of IPs and APs. The selection of the most appropriate route has taken into account various factors including the views of consultees and persons with an interest in land.
- 9.13.56. At the CAH, the Applicant also summarised its position regarding objections raised by Louis Fell on behalf of Strutt & Parker (Farms) Limited and Liana Enterprises Limited, particularly in relation to alternative cable routing options proposed by the landowner and whether the scheme should be modified to accommodate these options. The ExA has given detailed consideration to the specific modifications proposed on behalf of these APs in Section 3.2 of Chapter 3 of this Report.
- 9.13.57. The CA Guidance notes that, in some cases, it may not always be practicable to acquire each plot of land by agreement. Where this is the case the CA Guidance confirms that it is reasonable to include provision authorising CA covering all the land required at the outset. It also recognises that in some cases it may be preferable, or necessary, to acquire land compulsorily rather than by agreement.
- 9.13.58. We have examined the extent of the land for which CA powers are sought and have considered the arguments made by AP's who have raised objections. We find that the land that would be subject to the powers of CA sought is required in order to construct, operate, and maintain the Proposed Development or to facilitate its construction or operation, or to help mitigate its impact. In the light of the Applicant's response to oral and written questions on this topic, the ExA is satisfied that there is no alternative but to acquire third party land for those purposes. The ExA concludes that the Applicant has explored all reasonable alternatives to CA, including modifications to the scheme and there is no alternative to the use of CA powers.

AVAILABILITY AND ADEQUACY OF FUNDING

- 9.13.59. The Applicant's response to ExQ1 6.1.20 [\[REP2-020\]](#), refers to the Funding Statement [\[APP-008\]](#) which details the nature of the claims that the Applicant may be liable for, the likely quantum of those claims, how the Applicant is funded and how it will meet any claims for compensation resulting from the exercise of CA powers.

- 9.13.60. The Proposed Development is a joint venture by RWE Renewables (RWE) and SSE Renewables (SSER). Section 3 of the Funding Statement sets out the corporate structures of RWE and SSER and summarises both companies' extensive experience developing, owning and operating renewable energy developments in the UK. The Applicant's response to ExQ1 6.1.22 (i) indicates that RWE and SSER have drawn on this experience and on their extensive knowledge of the expected cost base of a project of a similar nature to the Proposed Development in addition to current and ongoing interactions with the relevant supply chain to prepare the Funding Statement and its assessment of required resources/costs. The estimate of the compensation resulting from the exercise of CA powers has been informed by the Property Cost Estimate (PCE) undertaken on behalf of the Applicant (see Appendix C to the Funding Statement).
- 9.13.61. During the Examination, the ExA questioned the reliability of the estimated figure, and its degree of accuracy given the considerable variation between the lower and higher estimates set out in the Funding Statement. In response to ExQ1 6.1.22 (ii) the Applicant refers to section 4 of the Funding Statement [[APP-008](#)] which sets out information relating to the estimated Proposed Development cost. The estimated costs include construction costs, operational costs, development costs, project management costs, financing costs, land acquisition costs and associated compensation payable to affected landowners. There is variation in the estimated costs figure because the scope of that figure covers the estimated costs of the range of wind turbine generators that could be utilised and other associated capital costs as well as the differences between Options 1, 2 (including 2a and 2b) and 3.
- 9.13.62. As regards the separate the availability of separate estimates for Options 1, 2 and 3, in response to ExQ1 6.1.22 (iii) the Applicant refers to the PCE which estimates the costs associated with the construction of the Proposed Development. VEOWF will also have been required to complete a PCE to inform its own Funding Statement to ascertain its own costs. The two PCEs combined together would present a worst-case scenario which would cover each of the three options. There are otherwise no separate estimates currently available for Options 1, 2 and 3. The Applicant notes, however, as set out above, that the expected costs for all three options are covered by the current estimate of £2.5 to £4.5 billion for all construction costs, operational costs, development costs, project management costs, financing costs, land acquisition costs and associated compensation payable to affected landowner
- 9.13.63. The Funding Statement [[APP-008](#)] also explains that the Applicant has included Article 48 in the dDCO [[REP8-005](#)]. This provides that CA powers contained in the DCO must not be exercised unless a guarantee or alternative form of security is approved by the SoS in respect of the liabilities of the undertaker to pay compensation in respect of the exercise of CA powers.
- 9.13.64. The duration of the guarantee or alternative form of security is restricted by Article 48(4) to 15 years after the date on which the relevant power is exercised. In response to ExQ1 6.1.23 [[REP2-020](#)] the Applicant explains that a 15 year limit has been included, as this would cover the time limit to implement the CA powers in Article 23 of the dDCO (being 7 years) and the statutory time limit to bring a claim for compensation (being 6 years from the date the power is exercised).
- 9.13.65. The Applicant states that the 15-year limit on the duration of the guarantee or alternative form of restriction contained in Article 48(4) has been agreed in several recently consented DCOs such as the East Anglia ONE North Offshore Wind Farm Order 2022, the Hornsea Four Offshore Wind Farm Order 2023 and the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024. The Applicant therefore considers the proposed 15-year limit to be reasonable as it is consistent with recently consented projects of the same nature.

- 9.13.66. The Applicant's response to ExQ1 6.1.22 (iv) sets out its position in relation to that the question of provision of compensation for a potential blight notice. For a blight notice to be accepted and compensation to be payable, it must be supported by evidence that the claimant has made reasonable endeavours to sell the land or property in question and that the claimant has been unable to do so or could only do so at a reduced price substantially lower than that which it might reasonably have been expected to sell at. Throughout the course of consultations and negotiations with landowners and occupiers along the route, the Applicant has not been made aware of any attempts to sell any of the affected land or property that has resulted in the land or property only being able to be disposed of at a significantly lower value or any parties intending to serve a statutory blight notice.
- 9.13.67. The Applicant has also considered the effect on Category 3 interests and considers that none of these interests fall within the legislation regarding statutory blight claims. Nonetheless, compensation would be available to those entitled to claim for it under the relevant provisions of the compensation code. The Applicant therefore confirms that although consideration was given to the potential for statutory blight claims within the PCE, it considers that in this instance the quantum of liability should be nil.

EXA'S CONSIDERATIONS AS TO THE ADEQUACY AND AVAILABILITY OF FUNDING

- 9.13.68. The CA Guidance, paragraph 9, requires the Applicant to be able to demonstrate that there is a reasonable prospect of the requisite funds for CA becoming available. Paragraph 18 requires the Applicant to be able to demonstrate that adequate funding is likely to be available to enable the CA within the statutory period following the DCO being made, and that the resource implications of a possible acquisition resulting from a blight notice have been taken into account. Paragraph 17 also indicates that the funding statement should provide as much information as possible about the resource implications of implementing the project for which the land is required as well as acquiring that land.
- 9.13.69. The Funding Statement [\[APP-008\]](#) details the nature of the claims that the Applicant might be liable for, the likely quantum of those claims, how the Applicant is funded and how it would meet any claims for compensation resulting from the exercise of CA powers. In the light of the further information and explanation provided by the Applicant in response to our questions, we are satisfied as to the accuracy and reliability of the estimates of both the expected costs for the Proposed Development including land acquisition costs and associated compensation payable to affected landowners.
- 9.13.70. We accept the Applicant's assessment that the risk of receiving a valid blight notice would be relatively low as the qualifying criteria would be unlikely to be met. In any event, the Funding Statement, paragraph 4.1.17, confirms that should any claims for blight arise because of the threat of CA of land or rights over land related to the Proposed Development, the costs of meeting any valid blight notice claim would be met by the Applicant. To ensure that the funding assessment caters for any 'blight risk' properties, the Applicant has included a contingent liability for blight claims.
- 9.13.71. The ExA considers that Article 48 of the dDCO would ensure that adequate funding would be in place before any CA compensation liability arises. For the reasons provided by the Applicant, we find the proposed 15-year limit on the duration of the guarantee or alternative form of restriction contained in Article 48(4) to be reasonable. We also note that it would be consistent with recently consented projects of the same nature.

- 9.13.72. The ExA concludes that should development consent be granted, there is a reasonable prospect of the requisite funds for CA becoming available within the statutory period following the DCO being made. We are also satisfied that the availability of funding of the Proposed Development more widely would not be a potential impediment to implementation. Finally, we are content that the financial resource necessary to accommodate possible acquisition resulting from a blight notice has been satisfactorily secured and that the Applicant has complied with the CA Guidance, paragraphs 9, 17 and 18 in relation to the availability and adequacy of funding.

THE WEIGHING OF THE PUBLIC BENEFITS AGAINST ANY PRIVATE LOSS TO THOSE AFFECTED BY CA

- 9.13.73. The Applicant's assessment of public benefit and private loss is explained in its responses to ExQ1 6.1.14, 6.1.15 and 6.1.16 [\[REP2-020\]](#) and ExQ2 6.0.6 [\[REP5-054\]](#). The SoR [\[REP7-011\]](#) and BoR are also of relevance.
- 9.13.74. The SoR Section 7.3 sets out the public benefits that would result from the Proposed Development. In addition to meeting the urgent national need for secure and affordable low carbon energy infrastructure, it would deliver other benefits. These include biodiversity net gain, and employment during the construction phase. Further information in relation to these project benefits can be found in the Needs Case & Project Benefits Statement [\[REP2-004\]](#) and the Addendum [\[REP4-037\]](#) to that document which provides an update in the context of the Seventh Carbon Budget published by the Climate Change Committee (CCC) on the 26 February 2025 and other relevant Government guidance.
- 9.13.75. The SoR Section 7.4 deals with the impacts and private loss that would result from the Proposed Development. The Applicant's position is that to deliver the benefits of the NFOWF would require the use of CA powers. The Applicant acknowledges that this would result in a private loss by those persons whose land or interests in land is compulsorily acquired. However, the Applicant points out that appropriate compensation would be available to those entitled to claim it under the relevant provisions of the national compensation code thereby minimising the private loss.
- 9.13.76. The Applicant submits that whilst the Proposed Development as a whole would, result in some adverse effects to the environment and local community, these would not outweigh the important nationally significant benefits of contributing towards the urgent national need for secure and affordable low carbon energy infrastructure. The SoR, paragraph 13.1.4, therefore concludes that there is a compelling case in the public interest for the land or rights over the land to be compulsorily acquired.
- 9.13.77. In the light of the CA Guidance, paragraphs 12, 13, and 14, the ExA questioned the Applicant's assessment of the effect upon APs and their private loss that would result from the exercise of CA powers. In response to ExQ1 6.1.14, the Applicant indicates that the majority of the interference with private rights would relate to the laying of the underground cables. Once construction has been completed, the land would be restored to its current use and agricultural activities could continue. Compensation would be payable for any loss or damage. Where the freehold of land is required (for the onshore substation and permanent highway works), the Applicant submits that the CA powers sought are reasonable and proportionate. The affected landowners would be entitled to compensation for their private loss.
- 9.13.78. In response to ExQ1 6.1.16 (i), the Applicant refers to the Consultation Report [\[AS-015\]](#). As a result of this consultation, in addition to engagement with landowners on both the Proposed Development and voluntary negotiations, the Applicant made changes where possible to mitigate the impacts on landowners, including a

reduction in land take or rights in land and amendments to the proposed works. Provision has been made within the PCE, Appendix C to the Funding Statement [\[APP-008\]](#) for compensation which may be due in line with the compensation code.

- 9.13.79. The Applicant's response to EXQ2 6.0.6, confirms that provision has been made within the PCE, Appendix C to the Funding Statement [\[APP-008\]](#) for compensation which may be due in line with the compensation code. The PCE includes possible heads of liability for: CA of land and rights in land and imposition of restrictions; severance; injurious affection; Part 1 Claims and all other potential claims. These heads of claim have been assessed per AP, rather than on a plot-by-plot basis, given that compensation payable would not be restricted to specific plots. The Applicant is not aware of any private loss as a result of the Proposed Development that could not be adequately compensated for under the compensation code.
- 9.13.80. At the CAH, as noted in the Applicant's written summary of oral submissions [\[REP6-064\]](#), the ExA asked the Applicant to summarise how private loss has been assessed and how that has informed the conclusion, in accordance with s122(3) PA2008, that there is a compelling case in the public interest for the land to be acquired compulsorily and the public benefit would outweigh the private loss.
- 9.13.81. The Applicant's representative explained that careful consideration has been given to the land and rights over which CA powers are being sought. The Applicant submits that it has sought only the minimum necessary powers: freehold acquisition would be limited to land required for the substations and for the widening of Bentley Road (which must be owned to be designated as highway), in addition new rights were sought for the cable corridor, and TP would be used for construction compounds.
- 9.13.82. Most of the affected land is agricultural land and could continue to be used for that purpose post-construction even when burdened with new rights. Where freehold acquisition is required, compensation is also considered an appropriate remedy. The Applicant is not aware of any landowners who have circumstances such that their private loss could not be adequately compensated for under the compensation code.

EXA'S CONSIDERATIONS IN RELATION TO THE WEIGHING OF THE PUBLIC BENEFITS AGAINST ANY PRIVATE LOSS TO THOSE AFFECTED BY CA

- 9.13.83. The CA Guidance paragraph 12, states that in addition to establishing the purpose for which CA is sought, s122 requires the SoS to be satisfied that there is a compelling case in the public interest for the land to be acquired compulsorily. Paragraph 13 explains that for this condition to be met, the SoS will need to be persuaded that there is compelling evidence that the public benefits that would be derived from the CA will outweigh the private loss that would be suffered by those whose land is to be acquired. Paragraph 14, reinforces that in determining where the balance of public interest lies, the SoS will weigh up the public benefits that a scheme will bring against any private loss to those affected by CA.
- 9.13.84. The SoR Appendix A [\[AS-028\]](#) sets out the purposes for which CA and TP powers are required on a plot-by-plot basis in Tables 1, 3 and 4. As indicated above, the ExA is content that all of the land subject to CA and TP would be necessary to construct, operate, and maintain the Proposed Development. Furthermore, the Applicant has taken a number of steps to ensure its approach to land acquisition and the exercise of CA powers in respect of each plot and each individual AP would not give rise to interference with private rights beyond what is necessary to deliver the Proposed Development.

- 9.13.85. The SoR Section 7.4 and the Applicant's responses to the ExA's written questions on this topic, outline the impacts and private loss that would be associated with the Proposed Development. The Applicant has explained the steps it has taken in response to consultation and engagement with landowners with a view to mitigating the impacts upon them, such as a reduction in land take or rights in land and amendments to the proposed works. Where changes to the proposals and design would be unable to mitigate impacts, the Applicant has undertaken engagement to understand the potential private losses and compensation provisions have been included within voluntary terms offered to landowners. The ExA considers that this represents a proportionate approach, and that the Applicant has made an adequate assessment of private loss that would be experienced by APs to weigh in the balance between public benefits and private losses.
- 9.13.86. The public benefits of the Proposed Development are set out in the Planning Statement [\[REP3-004\]](#) and the Needs Case and Project Benefits Statement [\[REP2-004\]](#) and [\[REP4-037\]](#). In relation to the need for the Proposed Development, the ExA has concluded in Chapter 3.1 that very great positive weight in favour of the grant of development consent should be given to this consideration. We equate this to the substantial weight referred to in NPS EN-1 paragraph 3.2.7. We have also considered identified benefits of the Proposed Development in the various generic topic sections of this Report, and we attribute moderate positive weight to socio-economic benefits in Section 6.6 of Chapter 6. For the reasons set out in Chapter 8, we conclude that taking into account the public benefits identified, the case for the grant of development consent is made. We believe that the substantial public benefits of the Proposed Development could only be realised if the CA of the land required for it could be guaranteed in a timely manner through the use of CA powers.
- 9.13.87. In terms of determining where the balance of public interest lies, the SoS will need to weigh up the public benefits that the Proposed Development would bring against any private loss to those affected by CA. The ExA concludes that the public benefits associated with the Proposed Development would strongly outweigh the private loss which would be suffered by those whose land would be affected by CA powers to enable the construction, operation, and maintenance of Proposed Development to proceed.

HUMAN RIGHTS

- 9.13.88. In assessing whether there is a compelling case in the public interest for the land to be acquired compulsorily, it is necessary to consider the interference with human rights which would occur, if CA powers were granted.
- 9.13.89. The European Convention on Human Rights (ECHR) was incorporated into domestic law by the Human Rights Act 1998. The relevant articles for the CA powers sought are:
- Article 1 of the First Protocol (the peaceful enjoyment of possessions and not to be deprived of possessions except in the public interest and subject to the conditions provided for by law and by the principles of international law);
 - Article 6 (fair and public hearing within a reasonable time by an independent and impartial tribunal); and
 - Article 8 (right to respect for private and family life, home and correspondence).
- 9.13.90. No public authority can interfere with these rights, except if it is in accordance with the law and is necessary in the interests of national security, public safety, or the economic well-being of the country. In assessing whether the interference with the

rights of individuals would be for a legitimate purpose, such a finding is predicated on the SoS reaching the conclusion that development consent should be granted.

- 9.13.91. The SoR [\[REP7-011\]](#) paragraphs 9.1.1 to 9.1.12 sets out the Applicant's position on this topic. To the extent that the Proposed Development would affect individuals' rights, the Applicant submits that for the reasons summarised in that section, any infringement of the rights of those whose interests in the land might be affected by the exercise of powers of CA would be proportionate and legitimate. It would also be in the public interest and in accordance with national law.
- 9.13.92. In response to ExQ1 6.1.24 the Applicant refers to NPS EN1 paragraph 5.11.8 which requires the Applicant to identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing. Section 5.16 of the Applicant's Planning Statement [\[AS-004\]](#) considers this in the context of impacts to land use and agriculture and demonstrates compliance with the relevant NPSs and other relevant policy. The Applicant also states that it has conducted extensive engagement to understand the impact of the proposals and the likelihood of private loss.
- 9.13.93. The SoR [\[AS-028\]](#) paragraph 9.1.6 indicates that the Order Land does not include, nor does the Proposed Development require the outright acquisition of any residential dwelling-houses. The Applicant's response to ExQ1 6.1.25 confirms that it is not anticipated that there would be any infringement of the rights protected by Article 8 of the ECHR. However, in the event that any infringement did occur, the Applicant's position is that the interference would be justifiable on the basis that it would be lawful and in the overriding public interest and benefit.

EXA'S CONSIDERATIONS IN RELATION TO HUMAN RIGHTS

- 9.13.94. From the details provided in the SoR and the Applicant's response to ExQ1 on this topic, the ExA is content that the Applicant has taken steps to ensure that its approach to CA is proportionate and would not give rise to interference with private rights beyond that which would be absolutely necessary. The land affected has been kept to the minimum necessary to ensure the delivery of the Proposed Development and the extent of the land sought has been reduced as the design has been developed. The Applicant has also attempted to reach voluntary agreements with all persons with an interest in the land affected.
- 9.13.95. The ExA is therefore satisfied that the Applicant has endeavoured to minimise the impact that CA would have on those individuals who would be affected by the Proposed Development. In addition, we note that compensation would be payable, to be assessed on an individual basis.
- 9.13.96. As regards potential health and wellbeing effects on people including mental health, in Chapter 4.7 Noise and Vibration, we conclude that there would be no significant adverse impacts on health and quality of life from noise. In Chapter 4.5 Human Health, we find that the mitigation proposals which would be secured by R8 of the dDCO [\[REP8-005\]](#) would be sufficient to protect the health and wellbeing of the local population and in particular, vulnerable groups. We are satisfied that the Applicant has adequately addressed all other issues relating to human health and wellbeing raised and we concur with ES Chapter 28 Human Health [\[APP-042\]](#) that the effect on human health would not be significant.
- 9.13.97. As regards the TP powers sought, the interference with rights subject to TP would be less than would be the case for CA and the use of this power would serve to minimise the extent of CA that would otherwise be required. Compensation would

also be payable for temporary use to construct or maintain the Proposed Development. We consider the interference with human rights in relation to the CA and TP powers sought to be both proportionate and justified.

- 9.13.98. The ExA has considered the individual rights interfered with and is satisfied that should the SoS be minded to grant development consent, then for Article 1 of the First Protocol and Article 8 (if engaged), the proposed interference with those rights would be for legitimate purposes that would justify such interference in the public interest. The extent of that interference would be proportionate. In reaching this conclusion, the ExA has had regard to the compensation to which those individuals would be entitled.
- 9.13.99. In relation to Article 6, the Applicant has consulted the persons set out in the categories contained in s44 PA2008 which include owners of the land subject to CA. All APs had the opportunity to participate in the Examination process and to make WRs and attend the CAH. In the event that development consent is granted, persons aggrieved may also challenge the DCO in the High Court, if they consider that the grounds for doing so are made out pursuant to s118 PA2008. The ExA is therefore satisfied that the requirements of Article 6 have been met.
- 9.13.100. The ExA concludes that the inclusion of CA and TP powers in the Order would not constitute any unlawful interference with rights under the Human Rights Act 1998 and that should the SoS be minded to grant consent, it would be appropriate and proportionate for the DCO to include the grant of powers of CA and TP.

PUBLIC SECTOR EQUALITY DUTY

- 9.13.101. The Applicant submitted an Equality Impact Assessment (EqIA) during the Examination [[REP1-049](#)] which explains how it has had regard to its PSED in the context of the application for development consent for the Proposed Development. The EqIA considers the potential effects of the Proposed Development on protected characteristic groups and seeks to identify any likely differential impacts on such persons. It also identifies opportunities to improve equality of opportunity and eliminate discrimination.
- 9.13.102. The EqIA Section 1.4 sets out the reasons for selecting which impacts reported four ES topic chapters (Traffic and Transport, Human Health, Socio-economics, and Recreation and Tourism) to take forward for assessment. All protected characteristics listed in the Equality Act 2010 have been considered in the EqIA. However, the characteristics of concern identified through screening (age, pregnancy or maternity, disability), together with the community resources linked to these characteristics, have been given particular focus when assessing the potential for equality effects on the affected resident population, along with income deprivation as an additional consideration.
- 9.13.103. Section 1.6 summarises the assessment findings and the related mitigation measures proposed. Taking into consideration the findings of screening and the assessment findings reported in the four ES topic chapters, the EqIA identifies the potential for localised effects on equality in relation to severance on Link 24 and amenity impacts on Link 25 (see Chapter 27 Traffic and Transport [[APP-041](#)]). Furthermore, potential effects on equality have been identified within, and within 500m of, the onshore project area (referred to as the local onshore cable area of influence ('LOCAL')). It highlights the need for an additional mitigation measure in relation to additional data collection that has been secured through the Outline Construction Traffic Management Plan (OCTMP) [[APP-251](#)] for severance on Link 24.

- 9.13.104. The Applicant's Written Summary of Oral Submissions at CAH1 [\[REP6-064\]](#) provides an update on its compliance with duties under s149 of the Equality Act 2010. The Applicant states that the EqIA [\[REP1-049\]](#) has been submitted to assist the SoS in discharging duties under s149 of the Equality Act 2010. The report identified mitigation measures that should be put in place to ensure that there would not be any disproportionate impact on protected groups, primarily relating to construction-phase management and community liaison. These measures have been secured through relevant management plans, and the Applicant is not aware of any changes that would affect the conclusions of the EqIA.
- 9.13.105. At the CAH, the ExA asked for further reasoning to support the conclusion that no protected groups would be disproportionately affected, specifically referencing Links 24 and 25, and the role of a community liaison officer in supporting older people. The Applicant's representative explained that the identified impact was potential rather than confirmed and the community liaison officer was considered an appropriate mitigation measure to reduce the risk of disproportionate effects on protected groups. The Applicant was not aware of any further impacts or additional mitigation measures that would be necessary.
- 9.13.106. The Applicant has also provided further details in its Response to Actions List for CAH1 [\[REP6-069\]](#). This indicates that to mitigate any disproportionate effects on older people resulting from potential severance effects along Link 24, a designated local community liaison officer would be appointed and would act as a point of contact for the local community. The provision of a local community liaison officer is set out in Section 1.2.6 of the Outline Code of Construction Practice [\[REP5-022\]](#) and secured by Requirement 8 of the dDCO [\[REP8-005\]](#). The local community liaison officer would facilitate clear, timely, and responsive communication tailored to the needs and concerns for all members of the community, including older people. For the reasons set out in the response, the appointment of a dedicated officer providing trusted and responsive communication is considered by the Applicant to be an appropriate and inclusive form of mitigation for that protected group.

EXA'S CONSIDERATIONS IN RELATION TO THE PSED

- 9.13.107. The Applicant's EqIA [\[REP1-049\]](#) has considered the impact that the Proposed Development would have on vulnerable groups and whether the mitigation measures proposed would be sufficient to prevent any significant effects from arising. The mitigation that would be secured by the dDCO reflects the findings of the EqIA. The ExA is satisfied that the Applicant has complied with its duties under s149 of the Equality Act 2010.
- 9.13.108. In exercising our functions as an ExA, we have had due regard to the PSED contained in s149 of the Equality Act 2010, which sets out the need to eliminate unlawful discrimination, harassment, and victimisation, and to advance equality of opportunity and foster good relations between people who share a protected characteristic and people who do not share it. We conclude that the implementation of the Proposed Development would not disproportionately affect persons who enjoy a protected characteristic, nor would there be any adverse effect on the relationship between such persons and persons who do not share a protected characteristic.

TEMPORARY POSSESSION

- 9.13.109. As indicated above, for some land plots TP has been sought as an alternative to CA. These powers are not CA powers and accordingly the tests under s122 and s123 PA2008 are not applicable. However, the request for the powers to enable the

Proposed Development to be implemented and maintained must be justified. The inevitable interference with human rights must also be justified, and there must be adequate compensation provisions in place for those whose land is affected.

EXA'S CONSIDERATIONS IN RELATION TO TP

- 9.13.110. The dDCO contains powers for TP which the ExA considers are appropriate for inclusion to support the delivery of the Proposed Development in respect of all plots noted for TP in the revised BoR [\[REP7-009\]](#). The ExA is satisfied that the relevant land is required for the purposes indicated by the Applicant and is necessary to implement the Proposed Development. The exercise of these rights of TP and use of land would infringe rights under the Human Rights Act 1998. However, the ExA considers that they are proportionate in relation to the Proposed Development, legitimate and in the public interest. We are also satisfied that adequate compensation provisions would be in place.
- 9.13.111. The ExA concludes that should the SoS grant development consent, then it would be appropriate to grant the TP powers sought as part of the DCO.

9.14. THE EXA'S OVERALL CONCLUSIONS ON THE GRANT OF CA AND TP POWERS

SECTION 122(2) – THE PURPOSE FOR WHICH CA IS SOUGHT

- 9.14.1. This section of the Act sets out the purposes for which CA may be authorised. In the light of the CA Guidance, it is necessary to consider whether the Applicant has justified its proposals for the CA of the land.
- 9.14.2. If the SoS concludes that the case for the grant of development consent is made, the ExA is satisfied that the legal interests in all the plots of land included in the revised BoR and shown on the Land Plans (as amended) would be required for the development to which the development consent relates or is required to facilitate or is incidental to that development. The purpose for each of the plots in the BoR is clearly defined and we are satisfied that the Applicant has demonstrated the need for the development in each of the plots. The requirements of s122(2)(a) and (b) PA2008 would, therefore, be met.

SECTION 122(3) – WHETHER THERE IS A COMPELLING CASE IN THE PUBLIC INTEREST

- 9.14.3. In relation to s123(3), in considering whether there is a compelling case in the public interest there are a number of issues to be considered in balancing the public interest against the private loss which would occur.
- 9.14.4. The ExA recognises that the Applicant has sought to reduce the effect on private property and to obtain all land and interests required privately by negotiation where possible. The extent of private loss has been considered and weighed appropriately in looking at alternatives, and in some instances has led to changes in the design of the Proposed Development.
- 9.14.5. The ExA considers that the Applicant has made an adequate and proportionate assessment of private loss that would be experienced by APs to weigh in the balance between public benefits and private losses. We are content that the Applicant has endeavoured to minimise the impact that CA would have on those individuals who would be affected by the Proposed Development and hence the extent of their private loss.

- 9.14.6. The private loss to those affected would be mitigated by limiting the use of CA powers to land necessary to deliver the Proposed Development and by the use of TP powers wherever possible to minimise both land-take and the extent of rights and interests to be acquired.
- 9.14.7. The ExA is content that the Applicant has explored all reasonable alternatives to CA, including modifications to the Proposed Development and acquisition by negotiation and agreement. The ExA concludes that there are no alternatives to the CA powers sought which ought to be preferred.
- 9.14.8. The ExA concludes that the public benefits associated with the Proposed Development would strongly outweigh the private loss that would be suffered by those whose land would be affected by CA powers to enable the construction, operation, and maintenance of the Proposed Development.
- 9.14.9. The Applicant has demonstrated a clear idea of how it intends to use the land rights which it proposes to acquire. It has shown that there is a reasonable prospect of the requisite funds both for acquiring the land and implementing the Proposed Development becoming available. The resource implications of a blight notice have been taken into account.
- 9.14.10. If the SoS decides that the case for the Proposed Development is made out the ExA concludes that:
- The need to secure the land and rights required and to construct the Proposed Development within a reasonable timeframe, and to ensure that its operation and maintenance is not thereafter impeded, represents a significant public benefit to weigh in the balance;
 - the private loss to those affected has been mitigated including through route and site selection, review of the existing land use and ownership, design alterations in consultation with APs, the approach to CA powers and the extent of the rights and interests proposed to be acquired, and engaging with all persons with an interest in land affected with a view to reaching a voluntary agreement;
 - the Applicant has explored all reasonable alternatives to the CA of the rights and interests sought and there are no alternatives which ought to be preferred;
 - adequate and secure funding would be available to enable the CA within the statutory period following the Order being made;
 - the resource implications of a possible acquisition resulting from a blight notice have been taken into account;
 - the proposed interference with the human rights of individuals would be for legitimate purposes that would justify such interference in the public interest and to a proportionate extent; and
 - the relevant duties under the Equality Act 2010 have been complied with.
- 9.14.11. Taking these various factors together, there would be a compelling case in the public interest for the CA powers sought in respect of each and every plot of the CA land shown on the Land Plans (as amended). There would therefore be compliance with s122(3) PA2008 and the land-related powers in the dDCO would be necessary and justified for the Proposed Development to proceed.

SECTION 120(5)(A) PA2008 – THE INCORPORATION OF OTHER STATUTORY POWERS

- 9.14.12. The dDCO seeks, in a number of instances, to apply s120(5)(a) and apply, modify or exclude a statutory provision. For example, Article 29, in relation to the Compulsory Purchase Act 1965. Since the dDCO is in the form of a statutory

instrument, it would comply with s117(4) PA2008. Furthermore, no provision would contravene the provisions of s126 PA2008 which relates to the modification or exclusion of a compensation provision.

SECTION 127 AND 138 PA2008

- 9.14.13. In the case of each s127 representation, adequate protection for the relevant SUs' assets would be provided by the PPs included in the rDCO, Schedule 14. The ExA concludes that the SoS can therefore be satisfied that the CA of the SUs' land or rights over that land would meet the prescribed tests set out in subsections 127(3) or (6).
- 9.14.14. In the case of each s138 representation, the ExA is content that the extinguishment of the relevant rights, or the removal or relocation of the relevant apparatus, would be necessary for the purpose of carrying out the development to which the dDCO relates. Therefore, in the event that development consent is granted for the Proposed Development, the DCO could include the CA powers sought in relation to SUs' land.

SPECIAL CATEGORY LAND

- 9.14.15. The Order Land includes Open Space land at landfall, being Holland Haven Country Park. In addition, a further area of Open Space is the foreshore which is used by members of the public for recreational purposes. The ExA considers that s132(3) PA2008 applies and that the Open Land when burdened with the Order rights would be no less advantageous to the persons to whom it is vested and the public that it currently is. This means that by virtue of s132(2)(a) should the Order be made, it would not need to be subject to special parliamentary procedure

CROWN LAND

- 9.14.16. The SoR [\[REP7-011\]](#) confirms that the Order Land does not include any Crown Land. As indicated above, the Crown Estate confirmed by letter to the Applicant dated 13 June 2025 that the Crown Estate Commissioners do not consider that there is any 'land' forming part of the Crown Estate within the Order Land and that consent pursuant to s135 PA2008 is not required.

TEMPORARY POSSESSION

- 9.14.17. The TP powers sought would be necessary both to facilitate implementation of the Proposed Development and to maintain it and adequate compensation provisions are in place in the dDCO.

OTHER CONSENTS AND AGREEMENTS

- 9.14.18. The Consents and Licences Statement [\[AS-030\]](#) sets out the other required consents and the position as to the status of securing those consents. In addition, the agreement of the IMO to the removal of the Galloper recommended route, has been considered in detail in Section 5.3 of Chapter 5 of this Report. The ExA has also considered in Section 6.1 of Chapter 6, of this Report, the reference in ES Chapter 17 [\[APP-031\]](#) to the two RNP IFPs that were stated to be with the CAA awaiting approval.
- 9.14.19. The ExA is satisfied that all necessary consents to enable the Proposed Development to proceed have been identified and that there is no reason why such

consents should not be secured or granted should development consent be granted for the Proposed Development.

9.15. THE EXA'S RECOMMENDATIONS ON THE GRANT OF CA AND TP POWERS

9.15.1. In the event that the SoS is minded to grant development consent for the Proposed Development, the ExA recommends that:

- The CA powers included in the rDCO be granted;
- the TP powers included in the rDCO be granted;
- the powers authorising the CA of SUs' land and rights over land included in the rDCO be granted;
- the powers authorising the extinguishment of rights, and removal of apparatus, of SUs included in the rDCO be granted; and
- the powers included in the rDCO to apply, modify or exclude a statutory provision be granted.

10. DRAFT DEVELOPMENT CONSENT ORDER AND RELATED MATTERS

10.1. INTRODUCTION

- 10.1.1. This Chapter provides an overview of the Examination of the Applicant's draft Development Consent Order (dDCO) [\[REP8-005\]](#) and sets out the Examining Authority's (ExA's) proposed changes to the Applicant's final version of the dDCO [\[REP8-005\]](#) as recommended to the Secretary of State (SoS) for Energy Security and Net Zero should they decide to grant development consent for the Proposed Development.
- 10.1.2. The Chapter provides a summary of the main changes made to the dDCO during the Examination. The ExA has not reported on every change made if they relate to typographical or grammatical errors, or minor changes in the interests of clarity or consistency or minor changes following discussions between the Applicant and Interested Parties (IP).
- 10.1.3. This Chapter does not make recommendations in relation to the outcome of the Examination in any other respect.
- 10.1.4. The final version of the dDCO as recommended by the ExA, referred to hereafter as the Recommended Draft Development Consent Order (rDCO) is set out at Appendix D to this Report.

10.2. THE DEVELOPMENT CONSENT ORDER AS APPLIED FOR AND EXAMINATION MATTERS

DRAFT DCO

- 10.2.1. The Applicant submitted an initial dDCO as part of the application [\[APP-005\]](#) and an Explanatory Memorandum (EM) [\[APP-006\]](#). The dDCO and the EM were updated at Deadlines (Ds) within the Examination with the latest versions of the dDCO and EM submitted by the Applicant being [\[REP8-005\]](#) and [\[REP8-007\]](#).
- 10.2.2. The EM sets out and explains the purpose and effect of each Article and Schedule of the dDCO, as required by Regulation 5(2)(c) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) (APFP) Regulations 2009. It also identifies and explains departures from the now-repealed Infrastructure Planning (Model Provisions) (England and Wales) Order 2009.
- 10.2.3. The ExA considered the detail of the structure and effectiveness of the dDCO through its written questions and at Issue Specific Hearing (ISH) 2 on the dDCO and related matters. In response, the Applicant submitted further drafts of the dDCO during the Examination to incorporate changes that arose from the ExA's written questions, submissions made by IP's and from the proceedings at ISH2 [\[EV6-001\]](#).
- 10.2.4. The Applicant provided a cumulative table of amendments made to the dDCO at each revision, the final version of which was submitted at Deadline (D) 8 [\[REP8-029\]](#). The amendments are summarised in Table 10.

Table 10: Iterations of the draft DCO

D Number	dDCO Revision Number	Exam Library Reference	Notable Changes Made
Application	0	APP-005	
Additional Submission	1	AS-022	Changes made to follow s.51 advice.
1	2	REP1-011	Definition of 'archaeological mitigation strategy' amended; ECC changes to reflect ECC being the discharging authority; changes to reflect removal of the gravity base system; Natural England added as a consultees for the written landscaping scheme, CoCP, ecological management plan, soil management plan, biodiversity net gain strategy and horizontal directional drill method statement; National Highways added as a consultee for the construction traffic management plan; additional noise receptor added; piling activity cessation; condition to provide 150m buffer to Margate and Long Sands SAC
2	3	REP2-007	Added definitions of 'design vision' and 'watercourse'; addition of 'written' to the documents that will need to be complied with; biodiversity net gain strategy to approved prior to works 11 and 12 commencing; MCA and CAA to be consulted on aids to navigation management plan; close out report to be submitted to Trinity House.
3	4	REP3-008	Changes to extent of public rights of way; clarification for design and consultation processes
4	5	REP4-004	Cable depths in deep water routes; outline sediment disposal management plan; deemed consent increased to 56 days for the street authority and National Highways; limit of total volume of drill arisings; reporting of debris and dropped objects; pile driving; outline cable specification and installation plan; swath bathymetric survey; deletion of protective provisions for benefit of London Gateway Port Ltd
5	6	REP5-008	Additional wording regarding water depth in deep water routes; groundwater monitoring plan; approval of plans prior to construction works and laying of

D Number	dDCO Revision Number	Exam Library Reference	Notable Changes Made
			cables; consultation in respect of cable installation plan; update of protective provisions
6	7	REP6-005	Written decommissioning programme to be submitted to SoS for approval; provision of a chemical register; exposure of cables
7	8	REP7-007	Galloper route-definition and proposed wording so that works cannot commence until the Maritime Safety Committee (MSC) ratifies the proposals to remove the route; EA to be consulted on CoCP, ecological management plan, groundwater monitoring plan, operational drainage strategy, horizontal directional drill method statement and contingency plan; changes to address concerns raised by MMO in [REP 6-082] and PLA in [REP6-090] ; consultation with harbour authorities on the pre-construction, construction and post-construction monitoring
8	9	REP8-005	Final dDCO

10.2.5. The ExA issued a schedule of proposed changes to the Applicant's dDCO [\[PD-019\]](#) between DL5 and DL6 and following ISH2. The Applicant provided its comments on the schedule at D7 [\[REP7-056\]](#).

10.2.6. At the close of the Examination, the Applicant submitted its final version of the dDCO [\[REP8-005\]](#) together with a document providing a comparison between the dDCO [\[REP8-005\]](#) and the original dDCO [\[APP-005\]](#). The Applicant also provided an updated EM [\[REP8-007\]](#).

EXAMINATION MATTERS

10.2.7. The ExA and some IPs raised issues relating to the dDCO. These were mainly raised by the Local Authorities within their Local Impact Reports (LIR), statutory bodies or statutory undertakers (SU). This Chapter will set out the main differences between the Applicant and other parties in respect of the dDCO that were considered during the Examination. Table 12 supplements this, setting out on a tabular basis the ExA's examination of and conclusion on the outstanding matters that were not agreed at the close of the Examination and where the ExA recommends that a change be made to the final dDCO.

ARTICLES

PART 1 – PRELIMINARY

ARTICLE 2 (INTERPRETATION)

- 10.2.8. The ExA's schedule of changes to the dDCO [\[PD-019\]](#) proposes that the definition of the "noise investigation protocol" referred to in R17 should be inserted in Article 2. The Applicant's D7 response states that it does not agree that this term needs to be defined, as it is referring to the final document to be prepared and submitted for approval pursuant to R17. This is similar to the reference to "landscaping scheme" in R7 or "ecological management plan" in R12. It is only the outline versions of any management plans that are defined by reference to a certified document [\[REP7-056\]](#).
- 10.2.9. The objections raised by the Port of London Authority (PLA) [\[REP2-057\(j\)\]](#) to the definitions of 'commence' and 'maintain', including any related proposed drafting amendments to Article 2 and/or Schedule 14 protective provisions (PPs), were considered at ISH2. In relation to the definition of 'commence', the PLA sought to be consulted about any surveys or monitoring that affect the Deep Water Routes (DWRs) in line with the process for the VEOWF surveys and monitoring that affect the DWRs. At ISH2, the PLA submitted that the definition of commence would not be appropriate for such provisions.
- 10.2.10. As regards the definition of 'maintain', the PLA raised concerns that the definition is broad and includes 'adjusting and altering'. In the context of the export cable works, to adjust or alter could result in a change in location and/or depth which would not be acceptable to the PLA.
- 10.2.11. At ISH2, the Applicant stated that Article 2 must remain the way it is, as it governs the whole of the dDCO including to inform all of the management plans. The Applicant's D3 response [\[REP3-037\]](#) confirms that the port authorities would be consulted as a matter of course in the context of preparing pre-construction surveys. The Applicant does not consider that PPs are necessary for the ports [\[REP4-034\]](#).
- 10.2.12. The PLA's written summary of oral submissions at ISH2 [\[REP4-088\]](#), highlights that care needs to be taken about how 'commence' is used and in the context of PPs for the PLA and within Schedule 14 the definition of commence may not be appropriate. The PLA confirms that its concerns could be addressed, if the point is covered in protective provisions (PPs) in the same way as for VEOWF. In those circumstances, the PLA would be comfortable with the definition as it currently stands in Article 2.
- 10.2.13. As regards the definition of 'maintenance', PLA's concern is that whilst the cables would be installed at an acceptable depth; by adjusting and altering, they would not then be maintained at that level which would have a knock-on impact on the DWRs. This is a matter that the PLA considers could and should be included within the offshore design parameters requirement. This would satisfy the PLA's concern to ensure that the cable could not be installed at one level and then maintained at a different (shallower) level. The PLA would be content if the dDCO contained a requirement that provided it with confidence in that respect.
- 10.2.14. The Applicant's written summary of oral submissions at ISH2 [\[REP4-034\]](#) confirmed that a package would be submitted at D4 to secure the commitment to the necessary cable burial depth within the DWR, including an outline cable specification and installation plan (oCSIP).

- 10.2.15. At D4, the Applicant updated the Outline Navigation and Installation Plan (oNIP) [REP4-011] and the Site Characterisation Report [REP4-013] and produced an outline CSIP (oCSIP) [REP4-039] to all include reference to the 22m depth in the areas required. The Applicant also revised the dDCO [REP4-005] to include a new paragraph under Schedule 1, Part 3 Requirements, to define the area where the cable must be installed and maintained at a level which would not preclude dredging to a level of 22m below CD.

EXA'S CONSIDERATIONS

- 10.2.16. As regards the inclusion of the noise investigation protocol in Article 2, the ExA accepts the Applicant's justification for not including this definition in the article. We note that R17(2) requires approval of the noise investigation protocol by the discharging authority prior to commencement of the operation of the substation and we consider this to be a satisfactory approach.
- 10.2.17. In Section 5.3 of Chapter 5 Navigation and Shipping of this Report, the ExA concludes that the permanent impacts to the Sunk and Trinity DWRs and Sunk Pilot Pilotage Area from the export cable corridor would be mitigated, taking into account the possible future case to dredge to 22m during the lifespan of the Proposed Development. We also consider the disagreement between the parties regarding the PLA's request for PPs in that section of the Report. We conclude that the PPs should be included in the rDCO for the PLA and we return to this matter below in relation to Schedule 14. However, for the purposes of Article 2, given the safeguards provided by the inclusion of PPs in the rDCO, we do not consider that any drafting amendments to the definitions of 'commence' or 'maintain' are necessary.

PART 2 – PRINCIPAL POWERS

ARTICLE 5 (BENEFIT OF THE ORDER)

- 10.2.18. The MMO raises concerns in [RR-216] that the inclusion of Article 5 could result in the provisions of s72 of the Marine and Coastal Access Act 2009 (MCAA) either being overridden or duplicated in dealing with transfers of, or variations to the DML's. The MMO provided further detail of its concerns at D2 [REP2-043] setting out its objections to the article and submitting that it would restrict the MMO's ability to enforce licences, be consulted on changes or transfers and to be able to keep proper records of changes.
- 10.2.19. The Applicant's response at D3 [REP3-038] states that the drafting of Article 5 is considered lawful, reasonable, precise and enforceable. The Applicant points out that the SoS is required to consult with the MMO under Article 5(6) prior to approving any such transfer or grant in relation to a DML (save in narrowly defined circumstances where the SoS's consent is not required per Article 5(8)).
- 10.2.20. The Applicant submits that this issue has been considered by different SoSs on multiple occasions in the past, in the context of various infrastructure projects, and the concept of DML transfer provisions has been found to be legitimate and justified. An example is the Hornsea Four project where the MMO adopted a similar position to that set out in respect of this application which was rejected by the SoS.
- 10.2.21. At ISH2, the Applicant referred to a similar request being made in the Examination of the Rampion 2 offshore windfarm. In that case, the examining authority and the SoS, at paragraph 6.23 of the decision, did not agree with the points raised by the MMO and did not remove a similar article [REP4-034].

- 10.2.22. The MMO D4 submissions [\[REP4-079\]](#) acknowledge the Rampion 2 decision. However, the MMO asserts at 3.1.3 that, as a matter of law, a DCO cannot transfer the benefit of a DML as proposed and draws support from sub-sections 120(3) and 120(4) and Part 1 Schedule 5 PA2008. The MMO initially contended that the use of the term “includes” in sub-section 120(4) and the reference to “any of the matters listed in Part 1 of Schedule 5” is intended as a non-exhaustive list. The MMO took the view that such flexibility did not extend to the transfer of the DML, as Article 72 of the MCAA already provides for this statutory procedure.
- 10.2.23. The ExA asked an additional question in respect of Article 5 at ExQ2 Q9.0.3 [\[PD-012\]](#) and the Applicant’s response at D5 [\[REP5-054\]](#) sets out its case for Article 5 to remain. In Q9.1.3 (iii) the ExA refers to the MMO [\[REP3-056\]](#) Table 1 which draws support from Schedule 6 paragraph 2(13) and paragraph 5(6) PA2008 and requests the MMO to further explain why, as a matter of law, these provisions preclude the transfer of the benefit of a DML. In response, the MMO states that it is still of the opinion that Schedule 6 PA2008 sets out that the DML is separate from the DCO and, as such, may not be modified via a non-material change procedure. It remains the MMO’s view that the transfer of the marine licence should follow the established procedure in Article 72 of MCAA.
- 10.2.24. The MMO’s D7 response [\[REP7-080\]](#) reiterates its position that the provisions for the transfer of the DML should remain under the MCAA. At the close of the Examination, Article 5 remained a point of disagreement with the MMO and in its D8 final submission [\[REP8-102\]](#) the MMO maintains its position that Article 5 should be removed from the dDCO [\[REP8-005\]](#). This is set out as a matter that is not agreed, and of material impact, in the MMO SoCG [\[REP8-064\]](#).
- 10.2.25. Whilst Article 5(9) carves out the ability for the MMO to amend the DML to correct the name of the undertaker to the name of the transferee or lessee, the MMO remains of the opinion that this does not fully mitigate the procedural duplication and burden previously referred to. The MMO has concerns that its enforcement capabilities might be delayed/compromised should transfers occur without its involvement. The MMO submits that all its concerns could be avoided by retaining the existing procedure for transfer as set out in Article 72 of MCAA which could be established through minimal changes to each marine licence.
- 10.2.26. The MMO highlights that it did not provide comments on Schedules 5 and 6 PA2008 in relation to this matter within the Rampion 2 Examination. The MMO now accepts that the use of the term “includes” is intended as a non-exhaustive list. However, the MMO remains of the opinion that the provisions set out in the PA2008 only allow for the marine licence to be deemed. Once deemed, the PA2008 does not sufficiently provide the SoS with the vires to transfer/vary the marine licence in the same manner as set out in Article 72 of MCAA. The MMO contends that Schedule 6 PA2008 (paragraph 2(13) and 5 (6)) sets out that the DML is separate from the DCO and may not be modified via a non-material change procedure. It remains the MMO’s view that the transfer of the marine licence should follow the established procedure in Article 72 of MCAA
- 10.2.27. The Applicant’s response to D7 submissions [\[REP8-044\]](#) notes that the Applicant and the MMO are in agreement that the term “includes” is intended as a non-exhaustive list. The Applicant asserts that in interpreting legislation it is a fundamental rule to assume clear legislative intent and to rely on the plain meaning of the instrument’s wording. If the relevant provision did not extend to the transfer of a DML, then it should be assumed that the provision would have been drafted to explicitly prevent this.

- 10.2.28. The Applicant notes that the MMO has failed to provide any legal authority or cogent further explanation why, as a matter of law, the provisions of the PA2008 preclude the transfer of the benefit of a DML. The MMO is asking the ExA to conclude, that the consistent and long-standing approach of the SoS in respect of the transfer of benefit of DMLs in Rampion 2 and all other made offshore wind farm (OWF) DCOs is unlawful. The Applicant contends that the SoS's position on this matter is beyond clear.
- 10.2.29. The Applicant response to D7 submissions [\[REP8-044\]](#) points out that Article 5 requires that the MMO are consulted on any transfer of the DMLs and therefore a transfer could not occur without their involvement. The Applicant does not agree that any regulatory uncertainty would arise.

EXA'S CONSIDERATIONS

- 10.2.30. The ExA notes that the SoS in the Rampion 2 decision, at paragraph 6.23, considered the MMO's position that s72(7) and (8) of the MCAA should be the only applicable legislation in respect to the transfer of a licence and that the Article 5 proposed in that case would undermine its role in a transfer process, placing all the power and responsibility with the SoS rather than itself. The MMO wanted the SoS to consider Rampion 2 as a test case of its argument. Nevertheless, in that case, the SoS agreed with the ExA that Article 5 should be retained because it did not just deal with DMLs, but all other licences required to construct the Proposed Development, and the purpose of the PA2008 was to provide a simple one-stop shop process for obtaining consent for national infrastructure projects and to have one legal instrument, the recommended Order, as its control.
- 10.2.31. The ExA agrees with the SoS's approach to such an article as set out in the Rampion 2 decision. The provisions of Article 5(6) would ensure that the MMO is consulted before the SoS gave consent to the transfer or grant to another person of the benefit of the provisions of the DML. In addition, Article 5(9) provides that the MMO may amend any DML granted under Schedules 8, 9 or 10 of the DCO to correct the name of the undertaker to the name of the transferee or lessee under Article 5. Furthermore, we prefer the Applicant's interpretation of the effect of subsections 120(3) and 120(4) and Part 1 Schedule 5 PA2008 to that of the MMO.
- 10.2.32. We concur with the Applicant that the proposed approach would not give rise to any impediment in relation to the MMO's ability to fulfil its duties in relation to enforcement of DMLs or prejudice the system of marine regulatory control. The ExA did not propose any changes to Article 5 in its Schedule of Changes to dDCO [\[PD-019\]](#). Our view remains that Article 5 would provide a satisfactory means for the regulation of the transfer of the DMLs and that it should be retained as drafted in the final DCO [\[REP8-004\]](#).
- 10.2.33. The PLA in its comments on the dDCO also raises concerns in relation to Article 5 [\[REP2-057\]](#). It states that, in line with the position agreed for VEOWF, it would expect the PPs to contain a requirement for the undertaker to notify the PLA in writing within 7 days of any sale, agreement or other transaction under Article 5. The matter of PPs for the PLA is considered below, in relation to Schedule 14. Subject to the inclusion of PPs for the PLA as set out in the rDCO, we do not consider that any amendment to Article 5 is necessary.

ARTICLE 6 (APPLICATION AND MODIFICATION OF LEGISLATIVE PROVISIONS)

- 10.2.34. The Environment Agency (EA) raised initial concerns in relation to this article including the disapplication of the provisions of the Environmental Permitting Regulations in respect of flood risk activity permits required for the crossings of main rivers [\[RR-091\]](#).
- 10.2.35. The progress of any discussions with the EA on this matter was discussed at ISH2. The EA explained that specific protection on this matter was important as it would apply to crossing of rivers, the proposed haul road and sea defences. The Applicant confirmed it would amend the PPs for the EA in the dDCO to reflect the agreed provisions included in the final dDCO for VEOWF at D4 [\[REP4-034\]](#).
- 10.2.36. The SoCG between the Applicant and the EA [\[REP8-076\]](#) does not record any outstanding areas of disagreement in relation to this article or PPs. The Applicant confirms that the relevant PPs for the EA do not disapply the relevant regulations, and Article 17(7) of the dDCO [\[AS-022\]](#) which relates to the discharge of water specifically confirms that the water discharge powers do not discharge the requirement of a permit under regulation 12 of the Environmental Permitting (England and Wales) Regulations 2016. At the close of the Examination the EA has not sought any further amendments.

EXA'S CONSIDERATIONS

- 10.2.37. Given the progress made on this matter during the Examination, and the matters which have been agreed between the parties, the ExA is content that no further drafting amendments to Article 6 are required.

ARTICLES – PART 3 STREETS

ARTICLE 12 – TEMPORARY RESTRICTION ON THE USE OF STREETS

- 10.2.38. At ISH2, it was discussed whether the 28-day period in Article 12(6) within which a street authority was required to notify the undertaker of its decision was necessary and reasonable. The Applicant subsequently updated Article 12(6) in the dDCO submitted at D4 [\[REP4-004\]](#) to change the relevant timeframe from 28 days to 56 days.

EXA'S CONSIDERATIONS

- 10.2.39. The ExA is content that this matter is now resolved and no further drafting changes to Article 12 are necessary.

ARTICLE 14 – TRAFFIC REGULATION

- 10.2.40. At ISH2, it was discussed whether the 28-day period in Article 14(15) within which a traffic authority was required to notify the undertaker of its decision was necessary and reasonable. The Applicant subsequently updated Article 14(5) in the dDCO submitted at D4 [\[REP4-004\]](#) to change the relevant timeframe from 28 days to 56 days.

EXA'S CONSIDERATIONS

- 10.2.41. The ExA is content that this matter is now resolved and no further drafting changes to Article 14 are necessary.

ARTICLES - PART 4 SUPPLEMENTAL POWERS

ARTICLE 20 – REMOVAL OF HUMAN REMAINS

- 10.2.42. This article would enable the undertaker to remove human remains from the Order land, or otherwise in accordance with the provisions set out, before carrying out any development or works which would or might disturb any human remains. The ExA questioned the inclusion of this article in ExQ1 Q9.1.10 noting that paragraph 4.4.9 of the EM [\[AS-024\]](#) submitted with the application states that this article is included on a precautionary basis in case human remains are discovered while carrying out the authorised development. The ExA sought further explanation and justification for the inclusion of this article which would remove the requirement for authorisation of removal of remains from the appropriate Minister.
- 10.2.43. In response [\[REP2-020\]](#), the Applicant refers to the explanation and justification contained at paragraph 4.4.9 of the EM [\[AS-024\]](#) including the references to recently granted development consent orders where this approach has been accepted by the SoS. The Applicant considers that the process of notification of discovery and, as necessary, the removal of the remains (in accordance with any directions which may be given by the SoS), is an appropriate mechanism to address these circumstances. The Applicant notes that this article also accords with the corresponding article in the dDCO submitted at D6 in the Five Estuaries Offshore Windfarm examination.

EXA'S CONSIDERATIONS

- 10.2.44. The final EM [\[REP8-007\]](#) explains that the article sets out a process of notification of the discovery of remains and for their removal and reinternment or cremation unless the remain are of such an age that establishing their identity is likely to be imposed and they are more appropriately treated as of archaeological value. Such a provision has been included in other made DCO's as set out in the EM.
- 10.2.45. The ExA is reassured by the inclusion of 20(13) which requires that the removal of the remains of any deceased person under this article must be carried out in accordance with any directions which may be given by the SoS. We consider that the Applicant has provided reasonable justification for the inclusion of the article in this case and agree that it should be retained.

SCHEDULE 1 – PART 3 REQUIREMENTS

REQUIREMENT 1 (TIME LIMITS)

- 10.2.46. The EM [\[REP8-007\]](#) explains that this requirement is based upon the model provisions but substitutes a requirement to commence the Proposed Development within 7 years of the date of the Order coming into force. The Applicant submits that this condition is precededented in Hornsea Project Three Offshore Wind Farm Order 2020, the Hornsea Four Offshore Wind Farm Order 2023, and the Sheringham and Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024.
- 10.2.47. In ExQ1 Q1.1.3 [\[PD-009\]](#) the Applicant was asked to comment on the compatibility of the proposed 7-year time limit for commencement of development with Government policy ambition to deliver 50 GW of offshore wind generation by 2030. The Applicant's response [\[REP2-020\]](#) is that whilst the Proposed Development is well-suited to delivery ahead of the 2030 target, and it would be delivered as soon as practicable, the time limit allows for unseen delays or delays outside the Applicant's control. The Applicant notes that a seven-year period was included in

the Hornsea Four Offshore Wind Farm Order 2023 and the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 for the same reasons.

EXA'S CONSIDERATIONS

- 10.2.48. There were no objections raised to the inclusion of this provision during the Examination. The ExA finds the Applicant's justification for the 7-year commencement period in this case to be reasonable. It would allow for a worst-case scenario in terms of unexpected delays beyond the Applicant's control. In the particular circumstances of this application, and the desirability of co-ordination with the proposed VEOWF in relation to the common aspects with that project, we consider it reasonable to allow for such flexibility. We are reassured by the Applicant's submissions that it would nevertheless endeavour to deliver the Proposed Development as soon as practicable, consistent with the government's 2030 policy ambition. The ExA does not recommend any amendment to this requirement.

REQUIREMENT 2 (OFFSHORE DESIGN)

- 10.2.49. The Natural England (NE) representation [[RR-243](#)], queries why the maximum amount of drill arisings was not included in the design parameters and NE requests these be included. The ExA raised this matter in ExQ1 [[PD-009](#)]. In response, the Applicant states that the amendment is not agreed as the limitation on the volume of sediment disposal is sufficient to address the concerns raised by NE [[REP2-020](#)].
- 10.2.50. In the NE Risk and Issues Log [[REP3-064](#)], NE again refers to the limit on drill arisings and in response at D4, the Applicant amended the DML's to include the maximum amount of drill arising. This matter is recorded as being resolved in the final submissions of the NE Risk and Issues Log [[REP3-064](#)].

EXA'S CONSIDERATIONS

- 10.2.51. The ExA is satisfied that no amendment to R2 is needed, as the DML's have been amended to include this provision.

REQUIREMENT 15 (GROUNDWATER MONITORING)

- 10.2.52. At D5 the Applicant submitted a Groundwater Risk Assessment and Monitoring Plan-Private Water Supplies and Licenced Abstractions [[REP5-049](#)] to [[REP5-052](#)]. The Applicant amended the dDCO [[REP5-008](#)] and the schedule of changes [[REP5-030](#)], explains that the additions to R15 reflect the commitments in the Groundwater Risk Assessment and Monitoring Plan [[REP5-049](#)] and respond to the comments made by ECC in [[REP4-073](#)], requesting that R15 be amended to reflect the wording of the VEOWF DCO.

EXA'S CONSIDERATIONS

- 10.2.53. The ExA sought amendments to R15 [[PD-019](#)] so that the requirement would be consistent with the wording of the VEOWF dDCO. This has now been achieved and is included in the final dDCO [[REP8-005](#)]. No further amendment to this requirement is therefore necessary.

REQUIREMENT 17 (CONTROL OF NOISE DURING OPERATIONAL STAGE)

- 10.2.54. ECC and TDC requested changes to R17 [[REP4-072](#)] on the control of operational noise to reflect a collaborative complaint handling approach in the noise investigation protocol. The Applicant's response to ExQ2 [[REP5-054](#)] confirms that

revisions had been made to the onshore substations operational noise and outline noise complaints protocol [REP5-036] to allow for a timeframe of up to 48 hours for initial site walkaround following complaints and that there would be a commitment to retain an acoustic consultant for 18 months following commencement of operation of the substation.

- 10.2.55. At D6, ECC [REP6-081] requested that the dDCO [REP8-005] be amended to reflect a joint panel approach with VEOWF and National Grid (NG) for the noise investigation protocol. In response to ExQ3, the Applicant [REP7-051] explains that the outline noise complaints protocol [REP5-036] sets out the details of the approach to communication and that R17 reflects the drafting agreed with VEOWF and NG in the outline noise complaints protocol [REP5-036] and the drafting of the VEOWF dDCO.
- 10.2.56. ECC suggested changes to R17 [REP5-090] to reflect the joint panel approach and the Applicant responded [REP5-090] that this would be unnecessary as the onshore substations operational noise and outline noise complaints protocol [REP5-036] adequately dealt with the matter. The ExA included the wording proposed by ECC in its schedule of changes to the DCO [PD-019]. The Applicant did not respond to this in [REP7-056]. The dDCO [REP8-005] does not include the changes proposed by ECC. The ECC and TDC SOCG [REP8-060] includes the noise investigation protocol as a matter that is not agreed.
- 10.2.57. The ExA requested [PD-019] that the outline noise investigation protocol should be included in Schedule 12 as a document to be certified. The Applicant's response [REP7-056] reasons that certifying the outline noise investigation protocol would prevent any changes arising from the Norwich to Tilbury (N2T) project being properly incorporated and therefore resulting in inconsistency across the three projects which would be contrary to the objectives of collaboration. The Applicant also notes that this document was not listed as a certified document in the final draft submitted in the examination of VEOWF.

EXA'S CONSIDERATIONS

- 10.2.58. The ExA accepts the Applicant's reasoning for not including the outline noise investigation protocol as a certified document, given the need for to retain a degree of flexibility at this stage and R17(2) requires approval of the noise investigation protocol by the discharging authority prior to commencement of the operation of the substation. However, in the light of the submissions made by ECC on this matter, the ExA considers that, in the interests of precision and enforceability, the changes proposed by ECC [REP6-081] are reasonable and necessary. They have therefore been included in the rDCO. This is instead of the ExA's [PD-019] proposed changes, as they also included the request for the protocol to be certified.

REQUIREMENT 18 (SKILLS AND EMPLOYMENT PLAN)

- 10.2.59. In the Suffolk County Council (SCC) Local Impact Report (LIR) [REP1-074], SCC requests that it be named as a consultee of the discharging authority in R18, dealing with the approval of the Skills and Employment Plan (SEP). This was also requested by SCC at ISH2 and in the response to the action points following ISH 2 [REP4-095].
- 10.2.60. The Applicant's response to ISH 2 [REP4-094] states that SCC has been extensively involved in the development of the Outline Skills and Employment Plan (OSEP) [APP-253] and that the SEP must be substantially in accordance with the OSEP. The Applicant submits that it is not necessary for SCC to be named as a

consultee, as it would have input as part of the consultation process undertaken by the discharging authority.

- 10.2.61. In the SCC SoCG [\[REP8-068\]](#), the request for SCC to be a named consultee is set out as a matter not agreed between the Applicant and SCC. It is also stated in the SCC final closing statement [\[REP8-91\]](#) that whilst the focus of the activities for the SEP is Essex, there are commitments in the SEP that are relevant to Suffolk. SCC considers that to ensure proper consideration is given to commitments relevant to Suffolk, it should be a named consultee and that this would add value by encouraging and promoting synergies with other infrastructure projects. SCC sets out the risks of an uncoordinated approach with duplicate or discordance measures if it is not a named consultee.

EXA'S CONSIDERATIONS

- 10.2.62. The ExA considers that given the impact socio economics would have on Suffolk and the number of infrastructure projects that could have an impact on Suffolk, it is justifiable that SCC be a named consultee of the discharging authority in respect of the approval of the SEP. Whilst the ExA notes that SCC have been extensively involved in the development of the OSEP and the SEP must be substantially in accordance with the OSEP, the likely benefits of SCC being a named consultee outweigh the objections raised by the Applicant. Therefore, the ExA recommends that R18(1) be amended to include the words "after consultation with SCC" and this is reflected in the rDCO.

ADDITIONAL REQUIREMENTS

REMOVAL OF THE GALLOPER RECOMMENDED ROUTE

- 10.2.63. The Maritime and Coastguard Agency (MCA) Written Representation [\[REP2-046\]](#) sets out its position in relation to the Galloper recommended route for ferries and other vessels overlapping the array area between the Harwich Haven ports and Ostend. The MCA indicate that approval for the removal of the route from the International Maritime Organisation (IMO) must be received before the offshore construction works can commence.
- 10.2.64. The MCA sets out the process for the application to remove the route, being that once the DCO is granted, a proposal to remove the route could be made to the UK Safety of Navigation (UKSON) Committee and if approved, the proposal would be presented 6 months before the meeting of the Experts Group on ships routing at the IMO sub-committee on Navigation Communication Search and Rescue (NCSR). If the Expert Group agrees the removal, it would then be presented to the subsequent Maritime Safety Committee. The MCA provides a proposed timeline for the process.
- 10.2.65. The MCA request the imposition of a requirement to ensure that construction that might impact the route could not commence until the approval for the removal of the route is in place and in [\[REP4-080\]](#), the MCA proposed wording for this.
- 10.2.66. The Applicant submitted 'without prejudice' wording for such a requirement [\[REP6-068\]](#) and in ExQ3 [\[PD-016\]](#), MCA were asked to confirm whether the wording was acceptable. MCA's response [\[REP7-081\]](#) provides an amended version of the requirement. The Applicant incorporated the changes in a new agreed R30 of the dDCO [\[REP8-005\]](#). However, that new R30 also includes a caveat that would enable the SoS, in consultation with the MCA, to approve a layout for Work Nos. 1 and 2 which safeguards sufficient sea space to allow vessels to continue to safely navigate via the Galloper recommended route.

EXA'S CONSIDERATIONS

- 10.2.67. The ExA has given detailed consideration to this matter in Section 5.3 of Chapter 5 of this Report. We agree with the MCA for the reasons set out therein that the new R30 is necessary to ensure that the construction works 1 and 2 shall not be commenced until confirmation of the removal of the Galloper recommended route is received. However, for the reasons that we explain in Section 5.3, the ExA considers that the draft wording as set out by the MCA in its response to ExQ3 Q15.0.2 [\[REP7-081\]](#) is the most appropriate form for R30 to take and not the drafting as set out in the final dDCO which includes provision for a safeguarded route. The MCA draft wording provided in response to ExQ3 has therefore been included in the rDCO.

PHASING REQUIREMENT – LANDSCAPE AND VISUAL EFFECTS

- 10.2.68. ECC requested at ISH 1 that a further requirement be added in the form of a Grampian condition to link the Proposed Development with the East Anglia Connection Node (EACN) proposals. This was set out in the ECC post hearing submission [\[REP4-073\]](#) with the suggested wording:

“No part of the authorised development may commence until details of the following have been submitted to and approved by the Secretary of State-evidence of development consent being granted for the National Grid’s East Anglia Connection Node substation which will connect the North Falls development to the grid”.

- 10.2.69. In ExQ2 [PD-12], the ExA sought further responses from the Applicant and the Councils. The Applicant’s response [\[REP5-054\]](#) states that the proposed Grampian requirement would not meet the tests of a DCO requirement and would not be reasonable or necessary. The Applicant sets out concerns relating to the potential delays this could cause to the delivery of the Proposed Development and submits that there would be potential alternative connection points, if the EACN is not granted consent. In response to ExQ2 [\[REP6-061\]](#), the Applicant reiterates comments made in its common response to relevant representations [\[REP1-048\]](#), that there is no functional interdependence between the Proposed Development and the EACN.
- 10.2.70. In [\[REP-051\]](#), the Applicant states that there is a presumption in favour of Critical National Policy (CNP) infrastructure projects as set out in EN-1 paragraphs 4.2.15 to 4.2.2. The Applicant indicates that the wind turbine generators would not be constructed without a grid connection. The Applicant already has a connection agreement with National Energy System Operator (NESO) and if the EACN is not granted consent, there are alternatives available.
- 10.2.71. The ECC final closing statement [\[REP8-101\]](#), maintains its position that the legal test for the Grampian requirement is met in that it is reasonable, necessary, relevant to planning, related to the development, precise and enforceable. ECC sets out a need to prevent unnecessary detrimental localised impact if N2T does not get consent and that the inclusion of the requirement would not impose unnecessary delays. This is recorded as a matter that is not agreed in the SoCG between the Applicant and ECC [\[REP8-060\]](#).

EXA'S CONSIDERATIONS

- 10.2.72. The ExA has given detailed consideration to the proposed Grampian requirement put forward by ECC in Section 4.6 of Chapter 4 of this Report. We have had regard to ECC’s concerns relating to the Proposed Development being taken forward

without consent for the EACN being in place. However, the ExA does not consider that it is necessary to tie the Proposed Development to the EACN as we find that there is no functional interdependence between them. In addition, the Applicant has a connection agreement with NESO, so that it would be able to achieve a connection if EACN does not receive consent. For the reasons set out in Section 4.6 of Chapter 4 of this Report, the ExA does not consider that the imposition of this additional requirement would be necessary or reasonable.

PHASING REQUIREMENT – SEASCAPE

- 10.2.73. SCC in its LIR seeks a new dDCO requirement that would impose a phasing restriction on undertaking works to construct the offshore wind turbine generators (WTGs) [\[REP1-074\]](#). SCC submits that the proposed phasing restriction is necessary to further the purpose of conserving the NL as required by the updated duty in s85 of the Countryside and Rights of Way Act 2000 (CRoWA). SCC contends that it is necessary to not allow harmful development to proceed unless the justification for it, namely, the contribution to energy supply to the grid is capable of being delivered to the grid [\[REP4-095\]](#).
- 10.2.74. The restriction would be in force until it is clear that the East Anglia Connection Node (EACN) has been consented to be delivered as part of the Norwich to Tilbury (N2T) proposal [\[REP4-095\]](#), [\[REP5-117\]](#), [\[REP6-092\]](#) and [\[REP7-096\]](#). SCC considers that its proposed wording for the requirement set out in its LIR [\[REP1-074\]](#) meets the tests that requirements should be precise, enforceable, necessary, relevant to the development, relevant to planning and reasonable in all other respects.
- 10.2.75. The Applicant disagrees that the proposed DCO requirement is necessary to comply with the duty for the reasons set out in its response to item 5 of its Position Statement on various issues relating to National Landscapes [\[REP5-068\]](#). It submits that the proposed phasing restriction cannot be considered a sufficient, appropriate and proportionate measure required to enable itself and the SoS to discharge the duty in respect of the Proposed Development.

EXA'S CONSIDERATIONS

- 10.2.76. The ExA has given detailed consideration to the proposed phasing requirement put forward by SCC in Section 5.4 of Chapter 5 of this Report. The ExA does not find the phasing requirement proposed by SCC to be justified in this case. We do not believe that its imposition is necessary, as an aspect of the SoS's discharge of the s85 CRoWA duty. Furthermore, we do not consider that it would be reasonable to impose such a requirement given the implications in terms of delay that could potentially flow from it. The ExA concludes that the imposition of such a requirement would be inappropriate as it would not meet the policy and legal tests for requirements in NPS-EN1.

OPERATIONAL LIFETIME REQUIREMENT

- 10.2.77. The MMO request a means to limit the lifetime of the Proposed Development and to set an end date, to ensure that repowering and the like would need to be the subject of a further consent [\[REP3-056\]](#).
- 10.2.78. NE Appendix K8 – Natural England's Risk and Issues Log [\[REP8-099\]](#), New Issue A31 also requests a provision in the dDCO to ensure that the Proposed Development would not exceed the operational lifetime that is set out by the Applicant in the ES [\[REP8-099\]](#).

- 10.2.79. The Applicant's response in [\[REP4-027\]](#) states that this would not be appropriate. The 30-year lifetime set out in [\[APP-019\]](#) is the indicative lifespan which could vary. The Applicant contends that it would be undesirable to curtail the lifespan of the Proposed Development which might be capable of continuing to operate. The Applicant also submits that it is not normal for DCO's to have a fixed end date and referred to recent windfarm DCOs that do not have a fixed end date.
- 10.2.80. The Applicant's Closing Statement [\[REP8-036\]](#), submits that this is not necessary, and that it would be highly irregular, to include a dDCO requirement limiting the operational lifetime of the Proposed Development. The dDCO and dDMLs do not grant the power to repower or decommission the project and therefore a further marine licence, and further environmental assessment, would be required for repowering or decommissioning activities, along with a Decommissioning Programme.
- 10.2.81. The Applicant identifies the clear benefits in leaving the fixed end date for the operational life span of the Proposed Development and points out that this is not normally included in DCOs and DMLs for offshore wind farms. For example, Mona, Rampion 2, Sheringham Shoal and Dudgeon Extension, Hornsea 3 and Hornsea 4 DCOs do not include a fixed end date for the operational period.

EXA'S CONSIDERATIONS

- 10.2.82. The ExA has considered the request made by NE and MMO and the inclusion of such a requirement was sought in our schedule of changes to the dDCO [\[PD-019\]](#).
- 10.2.83. However, in the light of the Applicant's response to that suggestion, we recognise that such a requirement would be unusual in the context of offshore wind farm DCOs and there is no such requirement contained in two recently made offshore wind farm (OWF) DCOs for Rampion 2 and Mona. The dDCO does not permit repowering, and it would only authorise the undertaker to construct and maintain [\[REP4-027\]](#).
- 10.2.84. The ExA does not find that the particular circumstances of this case justify a departure from the approach taken in other recent OWF DCOs on this matter. We conclude that the additional requirement to limit the lifetime of the Proposed Development would not be necessary and provision for this has not been included in the rDCO.

NATIONAL LANDSCAPE ENHANCEMENT SCHEME

- 10.2.85. The ExA's Rule 17 letter [\[PD-014\]](#) sought details from the Applicant of a scheme to demonstrate the principles which could enhance the National Landscape on a without prejudice basis. The Applicant set out a proposal [\[REP6-062\]](#) on a 'without prejudice' basis which includes a new requirement and funding to be made available. NE welcomes the introduction of the scheme [\[REP7-089\]](#) and SCC [\[REP8-091\]](#) and Suffolk and Essex Coast and Heaths National Landscape Partnership (SECHNLP) [\[REP8-094\]](#) have provided their comments on the proposals for the enhancement scheme, including the need to agree the enhancement scheme with SCC and SECHNLP.

EXA'S CONSIDERATIONS

- 10.2.86. The ExA has given detailed consideration to this matter in Section 5.4 of Chapter 5 of this Report. We note the comments made by NE, SCC and SECHNLP and we believe that it would be appropriate and reasonable to add a further requirement to

the dDCO [REP8-005] to secure the preparation and agreement of the National Landscape enhancement scheme. The ExA has considered the wording provided by the Applicant and has proposed amendments to this, so that it would satisfactorily secure the enhancement scheme and ensure compliance with the duty under s85 of the Countryside and Rights of Way Act.

SCHEDULES

SCHEDULE 8, 9 AND 10 - DEEMED MARINE LICENCES

SCHEDULE 8 (DEEMED MARINE LICENCE-GENERATION ASSETS)

SCHEDULE 9 (DEEMED MARINE LICENCE-TRANSMISSION ASSETS)

SCHEDULE 10 (DEEMED MARINE LICENCE, OFFSHORE TRANSMISSION ASSETS)

- 10.2.87. Schedules 8, 9 and 10 of the dDCO [REP8-005] set out the marine licences referred to in Article 6 of Part 6 of the dDCO [REP8-005] which would be deemed to be granted for the works that comprise the Authorised Development. This section considers various provisions of the DMLs that were not agreed between specific IPs and the Applicant by the end of the Examination.

MEAN HIGH WATER SPRINGS (MHWS) DEFINITION

- 10.2.88. The MMO set out proposed changes to Part 1-Preliminary Interpretation (2) (1) in respect of MHWS [REP7-080] as the MHWS is the average throughout the year, of two successive high waters, during a 24-hour period in each month when the range of tides is at its greatest (Spring tides). The MMO state that the period of time is not reflected in the dDCO [REP8-005] and request its amendment.

EXA'S CONSIDERATIONS

- 10.2.89. The ExA considers that the rationale of the MMO in making the request is correct and that the period should be reflected in the definition of MHWS for the purposes of ensuring accuracy and precision. The amended condition has been included in the rDCO

NOTIFICATION OF THE MMO OF THE SELECTED BUILD OPTION

- 10.2.90. The MMO requests that the DMLs include a provision that it is notified of the build option selected by the Applicant [REP7-080]. The ExA requested in its schedule of changes to the dDCO [PD-019] that a requirement to notify the MMO of the chosen build option be included. This was sought to ensure coordination of works with VEOWF and in the interests of achieving wider ecological protection effectiveness. The Applicant does not agree that this would be necessary [REP7-056] and states that if option 3 were to be chosen, the relevant DML would be discharged and the MMO would be engaged in the process. The Applicant referred to the coordination with VEOWF being for the proposed onshore cable route and in respect of build options 1 and 2.

EXA'S CONSIDERATIONS

- 10.2.91. The ExA accepts the Applicant's position on this matter in that the MMO is a DML consultee (for all DMLs), as already provided for in the dDCO. That would ensure that consultation and engagement with the MMO would take place irrespective of which option is taken forward. We do not consider that it is necessary to make separate provision for the notification to the MMO of the build option selected.

SCHEDULE 8, PART 2, PARAGRAPH 15 - MISLEADING INFORMATION

- 10.2.92. The MMO at D6 [REP6-82] requested a further condition to provide for the MMO to be notified if the undertaker becomes aware that false or misleading information had been used in obtaining the grant of the licence. The ExA included in this the schedule of changes [PD-019]. In response, the Applicant states that this would not be necessary as the matter is covered by s89 of the MCAA which would make it an offence to use false or misleading information or to intentionally fail to disclose material information [REP7-056]. The Applicant submits that this would be a duplication of the legislative provisions and has not been included in recent DCOs.

EXA'S CONSIDERATIONS

- 10.2.93. The ExA considers that the inclusion of this condition is reasonable as it provides the MMO with the certainty that it would be notified if any such false or misleading information is identified. This condition has therefore been included in the rDCO.

SCHEDULE 8, PART 3, CONDITION 21 (1) (M)

- 10.2.94. NE requests an amendment to require the Applicant to provide for an individual timing requirement to be submitted no later than 6 months prior to the commencement of piling [RR-243].
- 10.2.95. The Applicant in response states [REP1-044] that it would be inappropriate to include a maximum timescale on submission of plans for approval under DML conditions. The Applicant is not aware of any offshore wind DCO/DML which imposes such a requirement. As Critical National Priority Infrastructure it is imperative that the Proposed Development could be delivered without unnecessary and undue delay, to ensure the construction programme could be maintained. The imposition of a maximum time period for submission of preconstruction plans would provide less time for the necessary approvals to be obtained (including any amendments to the submitted plan which the MMO might require) and would add unnecessary risk to the construction programme.
- 10.2.96. This proposed amendment was included in the ExA's schedule of changes to the dDCO [PD-019]. In response, the Applicant states that the requirement to submit the SIP no later than 6 months prior to the commencement of piling is already secured in the DMLs at condition 22(1) (of schedules 8 and 10) and condition 23(1) (of schedule 9). The Applicant does not therefore consider that an amendment to condition 21(1)(m) is required [REP7-056].
- 10.2.97. The MMO [REP7-080] in response to this item in the ExA's schedule of changes notes that this is updated within the SIP document [REP5-015].
- 10.2.98. Appendix K8 – Natural England's Risk and Issues Log [REP8-099], still advises that this condition should be amended to give an individual timing requirement for the submission of the SIP no sooner than 9 months and no later than 6 months prior to commencement of piling. NE acknowledges that the timing condition is 6 months before the commencement, but this would not prevent an early submission.

EXA'S CONSIDERATIONS

- 10.2.99. The ExA has had regard to the need to appropriately consider in-combination impacts of other developments in the SIP and related timing of submission implications. However, we have also borne in mind the Applicant's concerns about creating unnecessary delays in any critical infrastructure delivery programme. We

consider the revised condition as drafted to be reasonable in all the circumstances and that no further amendment is required.

ORNITHOLOGICAL AND MARINE MAMMAL MONITORING - SCHEDULE 8, PART 2, CONDITIONS 25, 27 AND 28

- 10.2.100. The proposed monitoring only covers benthic monitoring and NE [\[RR-243\]](#) request that ornithological and marine mammal monitoring be added due to the potential impacts upon them. The Applicant's response [\[REP1-044\]](#) submits that the scope and drafting of the condition is well preceded and appropriate and that the ornithological and marine mammal monitoring would be secured in condition 21(1)(j) of the DML. The ExA requested that the condition be amended to include ornithological and marine mammal monitoring [\[PD-019\]](#). In response [\[REP7-056\]](#), the Applicant resists the amendment and adds that the monitoring would also be covered by the outline offshore in-principle monitoring plan (OIPMP) [\[REP8-009\]](#) secured by condition 21(1)(j) and covered by conditions 25, 26 and 27.

EXA'S CONSIDERATIONS

- 10.2.101. The ExA notes from the NE Risk and Issues Log [\[REP8-099\]](#) that the condition has not been amended and that NE and the Applicant are not agreed on this point. The ExA considers that in accordance with best practice, the conditions should be amended to include ornithological, benthic and marine mammal monitoring. Therefore, the ExA has amended condition 21(f) in Schedules 8 and 10, and condition 22(f) in Schedule 9, to include this monitoring in the rDCO.

SCHEDULE 9, PART 2, CONDITION 10

- 10.2.102. The ExA proposed a new condition to protect the DWRs [\[PD-019\]](#) and the Applicant [\[REP7-056\]](#) resisted this on the grounds that there is already a requirement in the dDCO [\[REP8-005\]](#) and that matters are covered in the outline cable specification installation plan (oCSIP). The PLA responded [\[REP8-090\]](#) that the oCSIP, would not give them the guarantee that the Deep Water Route Cable Installation Area (Future Dredging Depths) Plan would be secured, monitored and enforced. The condition would be a preferable means of providing the PLA with the certainty sought.

EXA'S CONSIDERATION

- 10.2.103. The ExA considers that the inclusion of the condition would be in the interests of precision and enforceability and that it is both reasonable and necessary to ensure that the works would not give rise to any unacceptable temporary or permanent impacts on navigation to and from the ports. Therefore, the ExA has included this change to condition 10 in the rDCO.

SCHEDULE 9, PART 2, CONDITIONS 13(4), 16(8) TO (14), 17(2), 26(1), 28(1) 28(3) AND 28(4)

- 10.2.104. The PLA stated [\[REP5-111\]](#) that it would expect to be referenced as a consultee in the DML for conditions 13(4), 16(8) to (14), 17(2), 26(1), 28(1) 28(3) and 28(4). The ExA subsequently requested [\[PD-019\]](#) that these changes were made to the dDCO on the basis they were reasonable and necessary. The Applicant's response [\[REP7-056\]](#) indicates that the dDCO had been updated to include PLA as one of the local harbour authorities as follows:

- For consultation in condition 13(4);
- to be provided with notices under a new condition 16(15) covering 16(8) to (14) above;

- to be provided with notices and kept informed of progress as condition 17(2);
- for consultation in condition 22(1); and
- for consultation / notification as per new condition 37 [\[REP8-005\]](#) covering 26(1), 28(1) 28(3) and 28(4).

10.2.105. The PLA confirmed that condition 37 was acceptable [\[REP8-090\]](#).

EXA'S CONSIDERATIONS

10.2.106. The ExA has considered the Applicant's changes which are incorporated into the final dDCO and is satisfied that these address the concerns raised by the PLA above.

SCHEDULE 9, PART 2, CONDITION 22 (1) (H) (II), (III) AND (IV)

10.2.107. The ExA proposed amendments to condition 22 [\[PD-019\]](#) in respect of the detailed cable laying plans for the protection of the DWRs. The Applicant resisted the amendments [\[REP7-056\]](#) on the basis that they would not be necessary, referring to the oCSIP and the post consent Cable Burial Risk Assessment.

EXA'S CONSIDERATIONS

10.2.108. The ExA considers that the amendments are necessary and reasonable and would serve the purpose of ensuring that the works would not give rise to any unacceptable temporary or permanent impacts on navigation to and from the ports. Therefore, the ExA has included these amendments in the rDCO.

SCHEDULE 9, PART 2, CONDITION 22 - PILING RESTRICTION

10.2.109. The ExA proposed a further subsection to limit the piling between 25 November and 3 January [\[PD-019\]](#). The Applicant responded [\[REP7-056\]](#) that this is dealt with in the outline Project Environmental Management Plan (oPEMP) which it updated at D6 [\[REP6-027\]](#). The MMO [\[REP8-102\]](#) indicate that whilst the oPEMP has been updated, the restriction on piling would be still be required in the DML, so that it is clear that the restriction is in place.

EXA'S CONSIDERATIONS

10.2.110. The ExA considers that it is reasonable to include the restriction in condition 22 in the interests of providing the necessary ecological protection by ensuring clarity and enforceability. Therefore, the ExA has included the restriction in condition 22 in the rDCO.

SCHEDULE 9, PART 2

10.2.111. The ExA proposed an additional condition [\[PD-019\]](#) before 'Offshore Safety Management' to deal with the Site Integrity Plan and also to be consistent with the VEOWF dDCO. The Applicant responded [\[REP7-056\]](#) that the further condition would not be necessary as the provisions are contained within either the DML or the oSIP.

EXA'S CONSIDERATIONS

10.2.112. The ExA considers that the additional condition is necessary and would provide consistency with the VEOWF DCO and would also be appropriate to ensure ecological protection. Therefore, the ExA has included the additional condition as condition 24 in the rDCO.

SCHEDULE 9, PART 2, CONDITION 22 (1) (A)(III)

- 10.2.113. The ExA added wording to the condition [PD-019] in respect of depths and the cable crossings. The Applicant responded [REP7-56] that these additions were not necessary as cable depth would be determined post consent via the cable burial risk assessment and the cable crossing are dealt with in the oCSIP.

EXA'S CONSIDERATIONS

- 10.2.114. The ExA considers that the additional wording is reasonable and should be included in the interests of precision and enforceability. Therefore, the ExA has included these additions in the rDCO.

SCHEDULE 9, PART 2, CONDITION 24

- 10.2.115. The ExA proposed additional wording [PD-019] so that the authorised development shall not commence until the MMO, in consultation with the MCA, has confirmed that the emergency response co-operation plan has been prepared. This was to ensure consistency with the VEOWF dDCO. The Applicant responded [REP7-056] that this was unnecessary and the MCA [REP2-046] had sought its removal at D4 [REP4-004].

EXA'S CONSIDERATIONS

- 10.2.116. The ExA agrees with the MCA [REP2-046] that it is not necessary to include a separate condition for the preparation of an emergency response cooperation plan and therefore no changes are proposed to the dDCO.

SCHEDULE 9, PART 2, NEW CONDITION 39 - REMEDIATION

- 10.2.117. The PLA requested a further condition to deal with remediation and to protect the interests of the ports and the DWRs.
- 10.2.118. The ExA proposed a new condition [PD-019] to that effect. The Applicant responded [REP7-056] that cable works and maintenance of the DWR areas are limited by the dDCO [REP8-005] and the DMLs and that the failure of the undertaker to remediate cable depths that do not meet the required levels would be a breach of the DML and the DCO. The Applicant stated that the inclusion of the condition would be a duplication of the controls that would be in place and that it would be committed to monitoring of cable levels and the PLA would be consulted throughout the development.

EXA'S CONSIDERATIONS

- 10.2.119. The ExA considers that the additional condition should be included in the interests of precision and enforceability and that it would be both reasonable and necessary to ensure that remediation is effective and that the works would not give rise to any unacceptable temporary or permanent impacts on navigation to and from the ports. Therefore, the ExA has included this new condition in the rDCO.

SCHEDULE 12 (DOCUMENTS TO BE CERTIFIED)

COORDINATION REPORT

- 10.2.120. The Statement of Common Ground (SoCG) between the Applicant and ECC and TDC [REP8-061] Section 2.11 identifies the inclusion of the Coordination Report [REP1-004] as a document to be certified in the DCO Schedule 12 as an outstanding area of disagreement.

EXA'S CONSIDERATIONS

- 10.2.121. The ExA has given consideration to this matter in Section 6.3 of Chapter 6 of this Report. We concur with the Councils that although the other certified documents referred to by the Applicant mention coordination with other projects, these are currently scattered in various documents and lack a cohesive approach. The ExA therefore concludes that the Co-ordination Report [\[APP-236\]](#) should be a certified document in the dDCO and this is reflected in the rDCO.

SCHEDULE 14 (PROTECTIVE PROVISIONS)

LONDON GATEWAY PORT LIMITED (LGPL)

- 10.2.122. The original dDCO [\[APP-005\]](#) contained PPs at Schedule 14 Part 7 for the benefit of the London Gateway Port Limited (LGPL). At D4, the Applicant removed the PPs from the dDCO [\[REP4-004\]](#) and in the schedule of changes to the DCO [\[REP4-017\]](#), the Applicant stated that the PPs were removed to reflect other mitigation measures provided which made the PPs for the ports unnecessary. The Applicants position was further set out in [\[REP4-044\]](#).
- 10.2.123. The LGPL response in [\[REP5-096\]](#) refers to its concerns which had been set out in [\[REP2-041\]](#). The LGPL submits that there would need to be parameters to prevent cables being laid at too shallow a depth which might impact on the use of DWRs by vessels or interfere with LGPL's statutory undertaking or powers to dredge. The LGPL's case is that the works must not give rise to permanent or temporary impacts on navigation to and from the port. The LGPL asserts that the PPs would be necessary, appropriate and precedented.
- 10.2.124. The concerns of the LGPL were discussed at ISH 2 and the LGPL's post hearing submission [\[REP4-077\]](#), sets out the reasoning for the request for the PPs. The Applicant explained the changes that it had made in terms of mitigation measures in [\[REP4-044\]](#) which it submits make the PPs unnecessary.
- 10.2.125. In EXQ2 Q9.4.1, the ExA asked LGPL if the mitigation measures would satisfy its concerns and preclude the need for the PPs. In response, LGPL referred to its "Response to Applicant's Response to Ports' Request for Protective Provisions" [\[REP5-096\]](#) which provides further details in support of its case for PPs.
- 10.2.126. In the ExA schedule of changes to the dDCO [\[PD-019\]](#), the ExA proposed the reinstatement of the PPs for the LGPL in the form that they were in the versions of the dDCO up to D4 [\[REP3-008\]](#).
- 10.2.127. The Applicant provided 'without prejudice' ports PPs at D7 [\[REP7-059\]](#). These had not been the subject of discussion with the LGPL. At D7, the LGPL set out the form of PPs that it would require in [\[REP7-079\]](#) and reiterated in its closing statement [\[REP8-088\]](#) that PPs are not agreed with the Applicant and remain a principal area of disagreement. The LGPL request the inclusion in the dDCO of PPs as set out in [\[REP7-079\]](#). Further information regarding the PPs in respect of the ports is discussed in Section 5.3 of Chapter 5 this Report.

EXA'S CONSIDERATIONS

- 10.2.128. The ExA has given detailed consideration to PPs for LGPL in Section 5.3 of Chapter 5 of this Report. We conclude that the inclusion of the PPs, as requested by the LGPL, would be reasonable and necessary to ensure that Work no 3 would not give rise to any unacceptable permanent or temporary impacts to navigation to and from London Gateway Port. These have therefore been included in the rDCO.

PORT OF LONDON AUTHORITY (PLA)

- 10.2.129. The PLA request that the Applicant provide PPs for PLA [\[REP2-057\]](#) and a form of PPs is appended to [\[REP2-056\]](#). The PLA state that PPs for it have been included in the VEOWF proposed dDCO and that to not have PPs for PLA in respect of the Proposed Development would be inconsistent.
- 10.2.130. The PLA raised these concerns at ISH 2 and the Applicant responded to the effect that the mitigation measures proposed would make the PPs unnecessary [\[REP4-044\]](#). In EXQ2, the ExA asked the PLA whether the mitigation measures would satisfy their concerns and preclude the need for the PP's. In response at D5 [\[REP5-111\]](#) [\[REP5-112\]](#), the PLA state that the PPs would be required to give them certainty that the proposed works would not have a detrimental effect on the Port of London. In the response to D5 submissions [\[REP6-090\]](#), the PLA confirm that they still require the PPs and provide a legal opinion in support and a form of proposed PPs for the benefit of PLA.
- 10.2.131. In reply to ExQ3 9.3.1 and 9.3.2 [\[REP7-093\]](#), the PLA provide amended proposed PPs and state that there has not been any engagement with the Applicant on the proposed PPs. The PLA closing statement [\[REP8-090\]](#), indicates that the Applicant's without prejudice PPs would not be acceptable to it and those PPs do not align with those set out in the VEOWF dDCO. The PLA's D8 response [\[REP8-093\]](#) to the EXA's schedule of changes to the DCO [\[PD-019\]](#) and the Applicant's response [\[REP7-056\]](#) makes the same point. The PPs do not include remediation or disputes clauses and would not give the PLA the certainty and protections it requires to ensure that the works would not give rise to unacceptable permanent or temporary impacts on navigation to and from the port. The PLA prefer the PPs included for it in the VEOWF dDCO, as submitted at D7 [\[REP7-093\]](#).

EXA'S CONSIDERATIONS

- 10.2.132. The ExA has given detailed consideration to PPs for the PLA in Section 5.3 of Chapter 5 of this Report. We conclude that the inclusion of PPs for the PLA is reasonable and necessary to ensure that the works proposed do not give rise to any unacceptable permanent or temporary impacts on navigation to and from the Port of London. These have therefore been included in the rDCO.

SCHEDULE 15 - COMPENSATION TO PROTECT THE COHERENCE OF THE NATIONAL SITE NETWORK

- 10.2.133. NE's relevant representation [\[RR-243\]](#) states that the compensation provided in Schedule 15 only covers the impact to the lesser black backed gull (LBBG) and it would be unable to advise that an Adverse Effect on Integrity (AEoI) on the Flamborough and Filey Coast (FFC) Special Protection Area (SPA) could be excluded. NE ask for compensatory measures for the relevant features to be included in Schedule 15 on a 'without prejudice' basis.
- 10.2.134. At ISH 2, the ExA asked the Applicants to provide an expanded Schedule 15 wording, and this was further set out in ExQ2 [\[PD-012\]](#). The Applicant's response at D5 [\[REP5-065\]](#) provides 'without prejudice' HRA DCO schedules.
- 10.2.135. The ExA's schedule of changes to the dDCO [\[PD-019\]](#) set out the changes sought in this respect by the ExA. The Applicant updated the dDCO at D6 [\[REP7-056\]](#) to add provision in Schedule 15 for compensation for kittiwake and guillemot. The Applicant commented that the compensatory measures for red throated diver (RTD) and razorbill were not necessary and that the compensation case provided was on a

‘without prejudice’ basis. The Applicant at D7 also provided compensation proposals for the MLS SAC on a ‘without prejudice’ basis.

- 10.2.136. The NE risk and issues log [\[REP8-099\]](#) indicates that the Applicant had provided a partial resolution only to this matter.

EXA’S CONSIDERATIONS

The ExA has given detailed consideration to this matter in the Summary of HRA and in Chapter 7 and the HRA Appendix C of this Report. The ExA recommends that Schedule 15 Part 2 of the Applicant’s dDCO received at D8 [\[REP8-005\]](#) is further altered to include a revised collective schedule for guillemot and razorbill (as per the additional wording within [\[REP7-043\]](#)) as without such an alteration Part 2 would only secure compensation measures for guillemot. The ExA also recommends the other remaining parts of Schedule 15: Part 1 (LBBG) and Part 3 (kittiwake) should be included in the final DCO. However, we do not recommend the inclusion of compensatory measures for RDT. These changes are reflected in the rDCO.

10.3. THE EXA’S DCO INCLUDING PROVISIONS RECOMMENDED TO BE CHANGED

- 10.3.1. The final version dDCO as recommended by the ExA (the rDCO) is set out in Appendix D. This the DCO that the ExA would recommend should the SoS for Energy Security and Net Zero decide to grant development consent for the Proposed Development.

- 10.3.2. The rDCO is structured as detailed in Table 11:

Table 11: Structure of the Recommended DCO

Articles	
Part 1	Preliminary Articles 1 and 2 contain the preliminary provisions providing for citation, commencement and interpretation
Part 2	Principal Powers - Article 3 provides the principal powers granting development consent for the Proposed Development; - Article 4 provides the principal powers to maintain the authorised development; - Article 5 sets out who has the benefit of the powers of the Order and how those powers can be transferred; - Article 6 details disapplication of legislative powers; - Article 7 provides a defence to proceedings brought in relation to certain statutory nuisance.
Part 3	Streets Articles 8 to 16 provide for the undertaker to be able to carry out works to and within streets, to alter, divert or stop up streets, to create or improve accesses and to temporarily close public rights of way
Part 4	Supplemental Powers

Articles	
	Articles 17 to 20 set out supplemental powers relating to discharge of water, protective works to buildings, authority to survey land and removal of human remains
Part 5	Powers of Acquisition Articles 21 to 34 provide for the undertaker to be able to compulsorily acquire rights over land as well as the land itself and for new rights to be created and to be able to temporarily use parts of the Order land for the construction or maintenance of the Proposed Development. The provisions also provide for the undertaker to extinguish certain private rights and to acquire, or acquire and create rights in, the subsoil below land rather than having to acquire the land itself as well as to appropriate and use land above and below streets. The provisions provide for compensation to be payable to Affected Persons (AP) in respect of these powers, where that is not already secured elsewhere. These articles also provide for powers in relation to land and equipment of Statutory Undertakers
Part 6	Operations - Article 35 provides the authorisation for the undertaker to use and operate the authorised development though the undertaker is still obliged to obtain any permit or licence under other legislation that may be required; - Article 36 is the provision under which the marine licences set out in Schedules 8, 9 and 10 are deemed granted.
Part 7	Miscellaneous and General - Article 37 to provides that any agreement for the transfer of the benefit of the Order could override landlord and tenant law; - Article 38 provides that the Order land will be construed as 'operational' land for the purposes of the Planning Act 1990 with the same planning rights as if planning permission had been granted; - Article 39 and Article 40 provide powers for the felling or lopping of trees and removal of hedgerows, including those subject to Tree Preservation Orders - Article 41 provides for the submission of documents to the SoS for certification - Article 42 and 43 provides for arbitration and the discharge of requirements - Article 44 ensures that the undertaker will not abandon or allow the offshore works to fall into decay - Article 45 to 47 provide protection to Trinity House and the Crown as well as giving effect to Schedule 14 which contains the provisions protecting the interests of certain statutory undertakers and statutory bodies - Article 48 provides for the undertaker to give a funding guarantee or form of security

Articles	
	▪ Article 49 provides that compensation cannot be paid for the same matter under the Order and any other enactment ▪ Article 50 relates to the service of notices ▪ Article 51 relates to compensation provisions
Schedules	
Schedule 1	the Authorised Development
Part 1	Provides for the description of the Proposed Development
Part 2	Provides for the ancillary works
Part 3	Sets out the Requirements (R)
Part 4	Sets out the procedures for the discharge of R
Schedule 2	Lists the streets and public rights of way subject to street works
Schedule 3	Lists the traffic regulations
Part 1	Lists the streets to be temporarily closed or restricted
Part 2	Lists the public rights of way to be temporarily closed or restricted
Part 3	Lists the speed limits to be imposed
Schedule 4	Lists the access that will be required
Schedule 5	Lists the land in which only new rights etc may be acquired
Schedule 6	Sets out the modification of compensation and compulsory purchase enactments for the creation of new rights
Schedule 7	Lists the land of which temporary possession may be taken
Schedule 8	Deemed Marine Licence (DML) for the generation assets
Part 1	Sets out the licensed marine activities
Part 2	Conditions of the DML
Schedule 9	DML for the transmission assets
Part 1	Sets out the licensed marine activities
Part 2	Conditions of the DML
Schedule 10	DML for the transmission assets (offshore converter platform)
Part 1	Sets out the licensed marine activities
Part 2	Conditions of the DML
Schedule 11	Lists the hedgerows to be removed
Schedule 12	Lists the documents to be certified
Schedule 13	Provides for the arbitration process

Articles	
Schedule 14	Sets out the Protective Provisions (PP) for the Statutory Undertakers
Part 1	Sets out the protective provisions for electricity, gas, water and sewerage undertakers
Part 2	Sets out the protective provisions for operators of electronic communications code networks
Part 3	Sets out the protective provisions for the Environment Agency
Part 4	Sets out the protective provisions for drainage authorities
Part 5	Sets out the protective provisions for Network Rail
Part 6	Sets out the protective provisions for National Highways
Part 7	Sets out the protective provisions for Five Estuaries Offshore Wind Farm Limited
Part 8	Sets out the protective provisions for Essex County Council as local highway authority
Part 9	Sets out the protective provisions for Anglian Water
Part 10	Sets out the protective provisions for Affinity Water
Part 11	Sets out the protective provisions for National Grid Electricity Transmission
Part 12	Sets out the protective provisions for Cadent Gas Limited
Part 13	Sets out the protective provisions for Eastern Power Networks
Part 14	Sets out the protective provisions for the Port of London Authority
Part 15	Sets out the protective provisions for London Gateway Port Limited
Schedule 15	Compensation to protect the coherence of the national site network in respect of the lesser black backed gull, guillemot, razorbill and kittiwake

10.3.3. The rDCO is based on the Applicant's final submitted dDCO (Revision 9) [\[REP8-005\]](#). It also contains the drafting changes which the ExA considers to be necessary to accommodate matters that were explored during the Examination. Table 13 below sets out the provisions for which the ExA recommends changes to the final dDCO [\[REP8-005\]](#) and which are included in the rDCO at Appendix D.

10.3.4. The matters which were raised and subsequently agreed during the course of the Examination are not listed in Table 12. They are incorporated in the dDCO and form part of the ExA's rDCO. The Table also does not include those matters for which we conclude that no changes are required.

Table 12: DCO provisions examined, and the recommended changes where required

Provisions	Examination issue	ExA reasoning	Recommended change
Schedule 1, Requirement 17 - Control of noise during operational stage	ECC and TDC requested [REP4-072] that R17 of the dDCO should be revised to reflect a collaborative complaint handling approach in the noise investigation protocol. (See section 4.7. of Chapter 4 of this Report).	The ExA considers this change requested by ECC to be reasonable and necessary.	(2) Prior to the commencement of operation of Work No. 11, a noise investigation protocol must be submitted to and approved by the discharging authority the undertaker will consult and agree with Five Estuaries Offshore Wind Farm Ltd and National Grid Electricity Transmission Plc, a noise investigation protocol to be submitted to and approved by the discharging authority. The noise investigation protocol must identify how the undertaker, Five Estuaries Offshore Wind Farm Ltd and National Grid Electricity Transmission Plc, will jointly investigate noise.
Schedule 1 Requirement 18 – Skills and Employment Plan	The SCC LIR [REP1-074] , requests that they be named as a consultee of the discharging authority in R18, dealing with the approval of the Skills and Employment Plan (SEP).	The ExA considers that given the impact socioeconomics would have on Suffolk and the number of infrastructure projects that would have an impact on Suffolk, it is justifiable that SCC be a named consultee of the discharging authority in respect of the approval of the SEP.	(1) No stage of the authorised development may commence until a skills and employment plan, substantially in accordance with the outline skills and employment plan has been submitted to and approved by the discharging authority, after consultation with Suffolk County Council.
Schedule 1	See section 5.3 of this	The ExA accepts that	Galloper recommended route

Provisions	Examination issue	ExA reasoning	Recommended change
Requirement 30 Gallopier recommended route	Report for the ExA's considerations. The MCA sought [REP2-046] [REP4-080] a requirement within the DCO/DML to ensure that no offshore construction that directly interacts with the Gallopier recommended route would commence before the removal would be in force.	such a requirement is necessary. However, we have concerns that the provision for a safeguarded route in the R30 as drafted in the dDCO [REP8-005] in the absence of further explanation from the parties introduces a high degree of uncertainty, which could have implications for the overall planning balance. We have therefore used the R30 wording previously agreed by the MCA [REP7-081] in the rDCO. We recommend that the SoS seeks the views of the MCA and the Applicant on the implications and feasibility of their agreed drafting submitted at D8 which includes provision for a safeguarded route through the array.	30 (1) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not commence any part of Work No. 1 or Work No. 2 until the MSC has ratified the proposal to remove the Gallopier recommended route. (2) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not install any surface-piercing infrastructure forming part of Work No. 1 or Work No. 2 until the MSC resolution to remove the Gallopier recommended route has come into force. ~~(3) Sub-paragraphs (1) and (2) are subject to sub-paragraphs (4) and (5).~~ ~~(4) If at any time the Secretary of State, in consultation with the MCA, approves a layout for Work Nos. 1 and 2 which safeguards sufficient sea space to allow vessels to continue to safely navigate via the Gallopier recommended route, the restrictions in sub-paragraphs (1) and (2) do not apply.~~ ~~(5) If the secretary of state's agreement or approval is obtained pursuant to sub-paragraphs (1), (2) or (4) above, the undertaker must install any infrastructure in accordance with the terms and conditions of any such agreement or approval.~~

Provisions	Examination issue	ExA reasoning	Recommended change
Schedule 1 New Requirement 31	In its R17 letter the ExA sought details of a scheme to demonstrate principles which could enhance the National Landscape on a without prejudice basis.	The ExA considers that an amended version of the Applicant's 'without prejudice' requirement, that would secure the associated NLES is reasonable and necessary. The NLES would secure enhancements which would enable the decision maker to confirm compliance with the CRoWA.	National Landscape Enhancement 31 (1) Work No. 1 and Work No. 2 must not be commenced until a National Landscape Enhancement Scheme has been submitted to and approved by the discharging authority in consultation with Suffolk County Council and Suffolk & Essex Coast & Heaths National Landscape Partnership. (2) The National Landscape Enhancement Scheme must accord with the principles set out in the National Landscape Enhancement Scheme principles document. (3) The National Landscape Enhancement Scheme must be implemented as approved. (4) In this Requirement "the National Landscape Enhancement Scheme principles document" means the principles set out in Table 2 of Applicant's Response to ExA's letter dated 6 June 2025 as a request for further information under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010.
Schedules 8, 9 and 10, Part 1 – Preliminary Interpretation (1). The height of	The MMO states MHWS is the average throughout the year, of two successive high waters,	In the light of the MMO's justification for this change, the ExA prefers the MHWS definition	The definition of the term MHWS is altered to: The average throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide

Provisions	Examination issue	ExA reasoning	Recommended change
Mean High-Water Springs (MHWS).	during a 24-hour period in each month when the range of the tide is at its greatest (Spring tides). The MMO requests amendment of the definition to reflect that. The dDCO at D8 defines the MHWS as meaning the highest level which spring tides reach on average over a period of time.	proposed by the MMO.	is at its greatest (Spring tides).
Schedule 8, Part 2, para 15	New condition to be added to para 15, was requested by the MMO to ensure that it is notified of any false or misleading information found or used in the Application.	This matter is covered by s89 MCAA 2009 which makes it an offence to make statements based on false or misleading information, and to intentionally fail to disclose material information. However, the recommended MMO Condition would provide further clarity and would be enforceable.	Add to para 15 (15) Should the undertaker become aware that any of the information on which the granting of this licence was based was materially false or misleading, the undertaker must notify the MMO local office of this fact in writing as soon as is reasonably practicable. The undertaker must explain in writing what information was materially false or misleading and must provide to the MMO the correct information.
Schedule 8 Part 2 Condition 21 (f),	Natural England noted at D5 that ornithological and marine	The ExA finds that Benthic, Ornithological and Marine Mammal	Whilst monitoring for benthic, ornithological, and marine mammal impacts is covered by the outline Offshore In-Principle Monitoring Plan

Provisions	Examination issue	ExA reasoning	Recommended change
Conditions 25, 26 and 27 Schedule 9, Part 2 Condition 22(1) (f), Conditions 26, 27 and 28 Schedule 10 Part 2 Condition 21(1) (f) Conditions 26, 27 and 28	mammal monitoring should also be requirements due to the potential for construction related impacts. In accordance with best practice.	monitoring should all feature in the wording of - Schedules 8, 9 and 10 Part 2, conditions as a precautionary step within the wording of the DMLs. This is because of ExA concerns the outline documents provided by the Applicant may not provide suitable protections unless further wording is secured.	(OIPMP) which is secured by the DML, as a further precaution the ExA seeks that benthic, ornithological and marine mammal monitoring is requested by all of the relevant DML Conditions applicable first hand. This relates to revising the wording of the Applicant's dDCO (Rev 9) within DML: For Schedule 8, Part 2 Condition 21(f) the ExA seeks to add- (f) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring (which shall include all benthic, ornithological and marine mammal monitoring) and related reporting in accordance with conditions 25, 26 and 27; For Schedule 9, Part 2 Condition 22(1) (f) the ExA seeks to add- (f) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring (which shall include all benthic, ornithological and marine mammal monitoring) and related reporting in accordance with conditions 26, 27 and 28. For Schedule 10, Part 2 Condition 21(1) (f) the ExA seeks to add - (f) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction

Provisions	Examination issue	ExA reasoning	Recommended change
			monitoring (which shall include all benthic, ornithological and marine mammal monitoring) and related reporting in accordance with conditions 25, 26 and 27.
Schedule 8, Condition 27	Marine mammal monitoring should be included in the Condition.	As above	As above.
Schedule 9 – Part 2, Condition 10	See section 5.3 of this Report. This is discussed further in the Deep Water Routes - ExA's consideration.	The ExA considers this change to be in the interests of precision and enforceability and is both reasonable and necessary to ensure that any stage of the works would not give rise to any unacceptable temporary or permanent impacts on navigation to and from the Ports.	(4) Any part of the authorised development located within the following areas shown on the Deep Water Route Cable Installation Area (Future Dredging Depths) Plan, must be designed, installed, operated and maintained at a level which would not preclude or impede dredging: (a) of the area shown shaded in orange and labelled Sunk A – Sunk DW Buffer, to a level of 22 metres below Chart Datum; (b) of the area shown shaded in pink and labelled Trinity – Trinity DW Buffer, to a level of 22 metres below Chart Datum; (c) of the area shown shaded in green and labelled Sunk B – Sunk DW Buffer, to a level of 19 metres below Chart Datum; and (d) of the area shown shaded in blue and labelled Sunk Pilotage Area – Sunk Pilot Diamond Buffer, to a

Provisions	Examination issue	ExA reasoning	Recommended change
			level of 22 metres below Chart Datum.
Schedule 9 – Part 2, Condition 22(1) (a) (iii)	The PLA considers the changes relate to a pre commencement design plan and it is appropriate that the design plan details the target depth for the cable and any cable crossings so that the MMO is approving a design plan which coupled with the CBRA gives certainty that R2(3) is being met in the case of Work No 3 and any cable crossings. The Applicant considers these amendments are not necessary.	The ExA considers this change to be reasonable and in the interests of precision and enforceability.	(iii) the length, depth and arrangement of cables comprising Work Nos. 2, 3 and 4A ₂ , including cable crossings ;
Schedule 9 Part 2 Condition 22(1)(g)	MMO and NE seek a condition to secure specific matters within a marine mammal mitigation protocol.	The ExA is content that the 'outline' SNS SAC SIP provides a mechanism to further consider the use of NAS following any consent and could secure this if necessary. Whilst securing NAS at this stage under the	In the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol (in accordance with the outline marine mammal mitigation protocol), the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant SNCB and which must include details of noise reduction methods

Provisions	Examination issue	ExA reasoning	Recommended change
		DCO may preclude the exploration of avoidance and reduction of impacts prior to seeking to apply mitigation, the view of the ExA is that there is strong likelihood NAS would be required. Given the likelihood the ExA concludes that on a precautionary basis a marine licence condition stipulation in the DCO should therefore be introduced as proposed by the MMO and NE.	through project design (primary measures) and/or, deployment of noise mitigation systems or noise abatement systems (secondary measures) that will be utilised to manage sounds from those piling activities and such protocol must include full details and justification for the mitigation chosen or excluded for deployment in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol for that stage, in accordance with the draft marine mammal mitigation protocol, the intention of which is to prevent injury to marine mammals, including details of soft start procedures with specified duration periods following current best practice as advised by the relevant SNCB;
Schedule 9 – Part 2, Condition 22(1)(h) (ii), (iii) & (iv)	Change proposed by the PLA. The PLA note that the MMO at [REP7-080] (paragraph 10.1.11) had no concerns with this inclusion. The Applicant provided no explanation for not including the proposed ExA change to Condition 22(1)(h) (ii) [REP8-093] .	The ExA considers this change is in the interests of precision and enforceability and is both reasonable and necessary to ensure that any stage of the works would not give rise to any unacceptable temporary or permanent impacts on navigation to and from the ports.	~~(ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to Chart Datum (excluding the areas shown shaded orange, pink or hatched purple on the Deep Water Route Cable Installation Area (Future Dredging Depths) Plan where navigable depth may not be reduced) and, in the event that any area of cable protection exceeding 5% of~~

Provisions	Examination issue	ExA reasoning	Recommended change
			~~navigable depth is identified (in areas other than those shown shaded orange, pink or hatched purple on the Deep Water Route Cable Installation Area (Future Dredging Depths) Plan), details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection;~~ (ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment demonstrating compliance with condition 10(4); ~~(iii) proposals for the volume and areas of cable protection to be used for each cable crossing, and proposals for timing and methodology for reporting on actual volumes and areas post construction; and~~ (iii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to Chart Datum (excluding the Areas of Interest where navigable depth may not

Provisions	Examination issue	ExA reasoning	Recommended change
			be reduced) and, in the event that any area of cable protection exceeding 5% of navigable depth is identified (in areas other than the Areas of Interest), details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection; ~~(iv) proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised development which includes a risk based approach to the management of unburied or shallow buried cables;~~ (iv) proposals for the volume, depth and areas of cable protection to be used for each cable crossing, and proposals for timing and methodology for reporting on actual volumes, actual depths and areas post construction; and (v) proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised development which includes a risk based approach to the

Provisions	Examination issue	ExA reasoning	Recommended change
			management of unburied or shallow buried cables;
Schedule 9, Condition 22	Request to add in further subsection of condition 22: “No percussive piling associated with offshore substation platform foundations may take place between 25th November to 3rd January (inclusive) in any year for the protection of spawning herring unless otherwise agreed in writing with the MMO.”	The ExA sought a further subsection to limit the piling between 25 November and 3 January in [PD-019]. The Applicant states that this is dealt with in the outline Project Environmental Management Plan (oPEMP) updated at D6 [REP6-027]. The MMO [REP8-102] indicates that whilst the oPEMP has been updated, the restriction on piling would still be required in the DML, so that it is clear that the restriction is in place. The final agreed Project Environmental Management Plan (oPEMP) could potentially deal with the MMO's request. However, as a precaution the ExA recommends further change	To Condition 22 (1) add new provision: “(p)” “No percussive piling associated with offshore substation platform foundations may take place between 25th November to 3rd January (inclusive) in any year for the protection of spawning herring unless otherwise agreed in writing with the MMO.”

Provisions	Examination issue	ExA reasoning	Recommended change
		to Schedule 9, part 2, condition 22 - piling restriction line with MMO's advice to ensure necessary marine wildlife protection.	
Schedule 9 - Condition 23(4)	Proposed by LGPL in response to ExQ3 9.2.3 [REP7-077] .	The ExA considers this change is both reasonable and necessary to ensure consistency with LGPL's and PLA's approval rights for plans which are detailed in their respective PPs.	(4) The licensed activities must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 22, unless otherwise agreed in writing by the MMO (provided that before giving any such agreement the MMO ~~has consulted~~ must consult with any party that it was required to consult with, or who would have given a prior approval , in relation to a relevant plan, protocol, statement, scheme or details pursuant to condition 22);
Schedule 9, part 2	The ExA proposed an additional condition [PD-019] before 'Offshore Safety Management' to deal with the Site Integrity Plan and also to be consistent with the VEOWF dDCO. The Applicant responded [REP7-056] that the further condition	The ExA considers that the additional condition is necessary and would provide consistency with the VEOWF DCO and would also be appropriate to ensure ecological protection.	Add additional condition before Offshore Safety Management: "Site Integrity Plan —(1) No piling activities can take place until a southern north sea special area of conservation site integrity plan ("SIP"), which accords with the principles set out in the outline southern north sea special area of conservation site integrity plan, has been submitted to, and approved in writing, by the MMO in consultation with the relevant statutory nature conservation body.

Provisions	Examination issue	ExA reasoning	Recommended change
	would not be necessary as the provisions are contained within either the DML or the oSIP.		(2) The SIP submitted for approval must contain a description of the conservation objectives for the Southern North Sea Special Area of Conservation (“SNS SAC”) as well as any relevant management measures and it must set out the key statutory nature conservation body advice on activities within the SNS SAC relating to piling as set out within the JNCC Guidance and how this has been considered in the context of the authorised scheme. (3) The SIP must be submitted in writing to the MMO no later than six months prior to the commencement of piling activities. (4) In approving the SIP, the MMO must determine whether the authorised scheme at the preconstruction stage, in-combination with other plans and projects, would be in line with the JNCC Guidance. (5) The approved SIP may be amended with the prior written approval of the MMO, in consultation with the relevant statutory nature conservation body, where the MMO determines that the authorised development, in-combination with other plans or projects at the pre-construction stage, is in line with the JNCC Guidance”.
Schedule 9 - Part 2, New Condition 39.	The purpose of this condition is to put a process around such	The ExA considers this change is in the interests of precision and	Remediation 39 (1) Where, following the installation or maintenance of cables forming Work No.

Provisions	Examination issue	ExA reasoning	Recommended change
	remediation to ensure that remediation is effective.	enforceability and is both reasonable and necessary to ensure that remediation is effective and would not give rise to any unacceptable temporary or permanent impacts on navigation to and from the ports.	3, located within the Areas of Interest, it is identified by the undertaker (who shall notify the MMO and the local harbour authorities as soon as reasonably practicable of this fact and in any event within 2 business days) or, following inspection by a local harbour authority (and the same is notified to the undertaker as soon as reasonably practicable), that the level of any cable is such that the condition 10(4) has not been achieved or at any time following installation or maintenance the cable has moved such that the requirements of condition 10(4) are no longer being achieved, then, unless otherwise agreed in writing with the MMO and the local harbour authorities, the undertaker is required to carry out remediation works as specified in the cable specification and installation plan subject to sub paragraph (2) below. (2) Unless otherwise agreed in writing with the MMO and the local harbour authorities, the undertaker will carry out the following arrangements for the carrying out the remediation works: (a) the undertaker will re-bury the cable to the required specification to achieve the requirements of condition 10(4); and (b) following the completion of the works in sub-paragraph (2)(a), if it is

Provisions	Examination issue	ExA reasoning	Recommended change
			identified by the undertaker or the local harbour authorities (following inspection) that the required specification is not achieved, then the undertaker will remove the cable without unreasonable delay and thereafter relay a new cable pursuant to an updated cable specification and installation plan approved by the MMO and the local harbour authorities which updated cable specification and installation plan specifically identifies and addresses why the previous cable burial was not successful, how that has been addressed and what measures are to be used in relaying the cable to prevent the failure reoccurring. (3) The steps in this paragraph shall be repeated until the requirement in condition 10(4) is achieved or the cable is permanently removed from the areas referred to in paragraph 38(1).
Schedule 12 – Documents to be certified.	Outline Project Environmental Management Plan (OPEMP) [REP6-027] and outline Offshore In-Principle Management Plan (OIPMP) [REP8-009] should be included in the	The OPEMP [REP6-027] and OIPMP [REP8-009] are referred to in the dDCO definitions as being certified under Article 41 and listed in Schedule 12.	The document reference of [REP8-009] was missing in Schedule 12 in the dDCO so this has been added to the rDCO.

Provisions	Examination issue	ExA reasoning	Recommended change
	list and is noted as an omission by the ExA	Therefore, the documents should feature in Schedule 12. The ExA notes that the dDCO [REP8-005] includes the above documents in Schedule 12.	
Schedule 12 – Documents to be certified.	The Councils and IP's raised concerns relating to the coordination of the Proposed Development and other projects in the area and the need to ensure that the projects are delivered in a coordinated manner.	The ExA concurs with the Councils that although the other certified documents referred to by the Applicant mention coordination with other projects, these are currently scattered in various documents and lack a cohesive approach. The ExA therefore concludes that the Co-ordination report should be a certified document in the dDCO	Include the Coordination Report Rev 2 [REP1-004] in the list of documents to be certified in Schedule 12.
Schedule 14, Part 14	The Applicant disagrees with the PLA that PPs are required for PLA.	See section 5.3 of this Report.	Insertion of PPs for the PLA from PLA's response to ExQ3 9.3.3 Appendix [REP7-093] . This is with the exception of the remediation section. The ExA has removed this part as this is covered by a new condition 39 Remediation, Schedule 9, in the rDCO.

Provisions	Examination issue	ExA reasoning	Recommended change
Schedule 14, Part 15	The Applicant disagrees with the LGPL that PPs are required for LGPL.	See section 5.3 of this Report.	Insertion of PPs for the LGPL in the form set out in its D7 comments [REP7-079] , as requested by LGPL [REP8-088] , with the addition of the provisions for the 'Notification of transfer of the benefit' and 'Provision of the as built details' from the Applicant's without prejudice PPs [REP7-059] .
Schedule 15 Compensation to protect the coherence of the national site network.	NE and the RSPB dispute the Applicant's compensation package as a whole for ornithology. Schedule 15 of the dDCO was updated by the Applicant at D6 to include compensation schedules for Kittiwake and Guillemot in addition to LBBG following the Rampion 2 decision. The Applicant still maintains its original assessments are correct. NE and RSPB also sought compensation for RTD and Razorbill. There was a further issue as to whether or not MLS SAC	Whilst the Applicant's position on RTD and Razorbill remains that compensation is not necessary the ExA finds compensation is needed for Razorbill but not RTD. Moreover, compensation for the MLS SAC is not deemed to be required in accordance with the ExA's HRA findings (all HRA findings are reported in Chapter 7 and Appendix C).	The ExA recommends Schedule 15 Part 2 of the Applicant's dDCO received at D8 [REP8-005] is further altered to include a revised collective schedule for guillemot and razorbill (as per the additional wording within [REP7-043]). Without such an alteration Part 2 would only secure compensation measures for guillemot. The ExA also recommends the other remaining parts of Schedule 15: Part 1 (LBBG) and Part 3 (kittiwake) should be retained in the final DCO.

Provisions	Examination issue	ExA reasoning	Recommended change
	compensation was required.		
Schedule 15 Part 1, Para 3 Schedule 15, Part 2, Para 14 Schedule 15 Part 3, Para 24	The ExA noted that the list of requirements to include in the CIMP lacks detail when compared to similar provisions.	The Applicant updated the dDCO to reference survey methodologies in paragraph 3(2)(d) of Part 1 of Schedule 15 (and the equivalent paragraphs of the other parts of the Schedule). Plus, sufficient information for the outline CIMPs have been provided by the Applicant in: [REP6-013/014] ; [REP6-017/018] ; [REP6-021/022] and [REP6-025/26] combined.	None
Schedule 15, Part 1, para 6a	Securing adequate compensation scale following consideration of NE advice.	The ExA accepts that three breeding seasons is likely to be an appropriate implementation timeframe prior to commencement of development unless otherwise agreed by the relevant strategic consultative group once formed.	None. As the breeding seasons are for a minimum figure of 3.

Provisions	Examination issue	ExA reasoning	Recommended change
Schedule 15 Para 7,8 and 9.	The compensation should be maintained until the SoS approves its decommissioning in consultation with the relevant SNCB. Also, the provision must require the approval of the SoS and consultation with the SNCB in line with the above.	The ExA requires further amendment on a precautionary basis to ensure the avoidance of ecological harm.	The compensation measures implemented in accordance with any final CIMP must not be decommissioned without written approval of the Secretary of State in consultation with the relevant SNCB.
Schedule 15 Part 3	The scale of compensation for kittiwake having regard to nesting spaces able to be secured is an issue considered by the ExA.	To ensure adequate nesting spaces could be provided by the final CIMP ensuring overall ecological effectiveness in accordance with NE advice [REP8-100] .	Add to 24 (2) with: (m) 48 kittiwake nesting spaces shall be secured unless otherwise agreed by the Kittiwake Consultative Steering Group.

10.4. OTHER CONSENTS AND AGREEMENTS

- 10.4.1. The rDCO, if made, would require a number of other consents and licences to be granted. The position at the close of the Examination on other consents is set out in Chapter 9. We are satisfied that all necessary consents to enable the Proposed Development to proceed have been identified and that there is no reason why such consents should not be secured or granted should development consent be granted for the Proposed Development.

10.5. CONCLUSIONS

- 10.5.1. The ExA has considered all iterations of the dDCO as set out in Table 12 above and the degree to which the Applicant's final version has addressed matters arising during the Examination. The substantive amendments and other changes that we

recommend to the Applicant's final dDCO [[REP8-005](#)] as shown in Table 13 above are included in the rDCO in Appendix D of this Report.

- 10.5.2. The ExA is satisfied that the rDCO (Appendix D) satisfactorily defines the scope of the consent that would be granted. It would secure the necessary controls and mitigation for potential adverse effects identified in the Environmental Statement (ES) and sufficiently address the issues raised during the course of the Examination. In compliance with the NPS EN-1 paragraph 4.1.16, we are content that the rDCO only includes requirements that are necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in all other respects.
- 10.5.3. Taking all matters raised in this Chapter and all matters relevant to the DCO raised in the remainder of this Report fully into account, if the SoS is minded to make the DCO, it is recommended that the DCO should be made in the form set out in the rDCO, which can be located at Appendix D of this Report, subject to the SoS being satisfied on the matters set out in Table 13 of Chapter 11 of this Report.

11. SUMMARY FINDINGS AND CONCLUSIONS

11.1. INTRODUCTION

- 11.1.1. This Chapter summarises the Examining Authority's (ExA) conclusions and sets out its recommendation to the Secretary of State (SoS) for Energy Security and Net Zero (ESNZ).

11.2. CONSIDERATION OF FINDINGS AND CONCLUSIONS

- 11.2.1. As the ExA has noted in Chapter 3 above, the NPSs establish the urgent need for offshore wind for both energy security and net zero. In relation to section (s) 104 of the Planning Act 2008 (PA2008), the ExA concludes that making the recommended Development Consent Order (rDCO) would be in accordance with NPS EN-1, NPS EN-3 and where relevant, NPS EN-5.
- 11.2.2. Furthermore, making the rDCO would not substantially conflict with the UK Marine Policy Statement, or the East Inshore and East Offshore Marine Plans, and the South East Inshore Marine Plan. In reaching its conclusions, the ExA has also had regard to the Local Impact Reports (LIRs) produced by:
- Babergh District Council [[REP1-063](#)];
 - East Suffolk Council [[REP1-064](#)];
 - Essex County Council (in partnership with Tendring District Council) [[REP1-065](#)]; and
 - Suffolk County Council [[REP1-074](#)].
- 11.2.3. The ExA notes that in the LIRs, the Councils outlined various concerns which are addressed in Chapters 3 to 6 of this Report.
- 11.2.4. Whilst the Secretary of State (SoS) for Energy Security and Net Zero (ESNZ) is the competent authority under the Conservation of Habitats and Species Regulations 2017 and will make the definitive assessment.
- 11.2.5. The ExA is satisfied that the correct European sites and qualifying features have been identified for the purposes of assessment, and that all potential impacts which could give rise to significant effects have been identified. The ExA considers that there is sufficient information before the SoS to enable an appropriate assessment to be undertaken.
- 11.2.6. However, the ExA's findings are that AEol cannot be excluded beyond reasonable scientific doubt on the following European sites and qualifying features from the Proposed Development:
- Razorbill of FFC SPA (in-combination);
 - AOE SPA and Ramsar site – LBBG (in-combination);
 - FFC SPA – kittiwake (collision risk, in-combination), guillemot (displacement, in-combination);
 - Farne Islands SPA – guillemot (displacement, in-combination).
- 11.2.7. The Applicant submitted a formal derogation case [[REP7-015](#)] that included an assessment of alternative solutions, a case for IROPI, and proposed compensation on a without prejudice basis for razorbill of FFC SPA, RTD of OTE SPA and Annex I sandbank of MLS SAC. Compensation measures for the guillemot feature of the Farne Islands SPA is set out in the Guillemot and Razorbill Compensation document [[REP6-023](#)].

- 11.2.8. The subjects of alternative solutions, IROPI, and compensation were given substantial consideration during Examination. The ExA is satisfied that no feasible alternative solution exists that would represent a lesser adverse effect to the Proposed Development. Given the evidence available, with regards to the case for IROPI the ExA is of the opinion that IROPI for the Proposed Development could be established.
- 11.2.9. The findings of the Examination are that compensation packages required would be feasible and appropriate and is adequately secured in the dDCO/DML but only with further changes to be agreed, as highlighted in Chapter 10.
- 11.2.10. The ExA recommends that Schedule 15 Part 2 of the Applicant's dDCO received at Deadline 8 [\[REP8-005\]](#) is further altered to include a revised collective schedule for guillemot and razorbill (as per the additional wording within [\[REP7-043\]](#)). Without such an alteration Part 2 would only secure compensation measures for guillemot. The ExA also recommends the other remaining parts of Schedule 15: Part 1 (LBBG) and Part 3 (kittiwake) should be included in the final DCO.
- 11.2.11. The ExA considers that there is sufficient information before the SoS to enable them to undertake an appropriate assessment and to apply the derogation tests of alternative solutions, IROPI, and compensation in order to fulfil their duty under the requirements of The Habitats Regulations.
- 11.2.12. Regarding designated heritage assets and in consideration of Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 (Decisions Regulations), the ExA has found the Proposed Development would result in less than substantial harm to designated heritage assets. However, those harms are outweighed by the substantial public benefits of the Proposed Development resulting from the provision of low carbon energy to meet the need identified in NPS EN-1, and by the other benefits of the application as summarised in Chapter 8.
- 11.2.13. In terms of biodiversity and bearing in mind Regulation 7 of the Decisions Regulations, the ExA is satisfied that biodiversity, ecological and nature conservation issues have been adequately assessed and that the requirements of NPS EN-1 are met. The ExA considers that this Report, together with the ES, considers biodiversity sufficiently to inform the SoS in this respect, noting the position of NE on the cumulative effects on seabirds of the offshore wind programme of which NFOWF is a contributory element.
- 11.2.14. Regarding the duty in s85 of the Countryside and Rights of Way Act 2000 (CRoWA) CRoWA placed on public bodies to seek to further the purpose of conserving and enhancing the natural beauty of the nationally designated landscape. The ExA considers that the ES and this Report are sufficient to inform the SoS in this respect and that the duty can be discharged for the following reasons:
- The onshore elements of the Proposed Development would accord with the purpose of conserving the natural beauty of the Dedham Vale National Landscape (DVNL);
 - the Applicant has sought to avoid harm to the purposes of designation of the DVNL through the proposed landscaping mitigations secured by R7 of the dDCO [\[REP8-005\]](#);
 - the proposed mitigation accords with the mitigation hierarchy and for the DVNL, it would not be reasonable or appropriate to impose additional compensation measures;

- for the offshore elements of the Proposed Development, notwithstanding the mitigation measures proposed by the Applicant to avoid and reduce impacts on the statutory purposes of the Suffolk and Essex Coast and Heaths National Landscape (SECHNL), we consider that the degree of residual harm that would result is such that it would be reasonable and appropriate to require additional measures in order to comply with the duty;
- this would be achieved by means of a National Landscape Enhancement Scheme (NLES) secured by a DCO requirement, subject to the provision of a revised NLES as set out in Section 5.4 of this Report.

- 11.2.15. The ExA has considered the case for Compulsory Acquisition (CA) and Temporary Possession (TP) of land and rights in order to implement the Proposed Development. We are satisfied that the legal interests in all plots of land included in the final Book of Reference [\[REP7-009\]](#) and indicated on the final Land Plans [\[AS-018\]](#), Crown Land Plan [\[REP7-006\]](#), Special Category Land Plan [\[APP-200\]](#), would be required for the Proposed Development with regard to both CA and TP powers. In relation to land subject to CA, the ExA is content that the land to be taken would be no more than is reasonably required and is proportionate. The Applicant has a clear idea of how it intends to use the land and the ExA takes the view that the availability of funding for the Proposed Development more widely would not be a potential impediment to implementation. Our recommendations in respect of the grant of CA powers, and the s127 and s138 representations are set out in Chapter 9.
- 11.2.16. As regards all other matters and representations received, the ExA has found no important and relevant matters that would individually or collectively lead to a different recommendation to that below.
- 11.2.17. The ExA has had regard to the provisions of the Human Rights Act 1998, in particular Article 6 (Acts of public authorities), Article 8 (Judicial remedies) and Article 1 of the First Protocol (Protection of property). The ExA considers that the Examination has ensured a fair and public hearing, that any interference with human rights arising from implementation of the Proposed Development is proportionate and strikes a fair balance between the rights of the individual and the public interest. The ExA is satisfied that compensation would be available in respect of any quantifiable loss. There is no disproportionate or unjustified interference with human rights so as to conflict with the provisions of the Human Rights Act 1998.
- 11.2.18. The ExA has had regard to the Public Sector Equality Duty (PSED) throughout the Examination and in producing this Report. We conclude that the implementation of the Proposed Development would not disproportionately affect persons who enjoy a protected characteristic, nor would there be any adverse effect on the relationship between such persons and persons who do not share a protected characteristic. On that basis, there would be no breach of the PSED.
- 11.2.19. Taking account of the mitigation and compensation secured through the rDCO in Appendix D of this Report, the ExA finds there are no adverse impacts arising from the Proposed Development that would outweigh its benefits. In respect of all other matters and representations received, the ExA is satisfied that there are no important or relevant matters that would individually or collectively lead to a different recommendation from that set out below. The ExA is satisfied that the Proposed Development meets the tests in s104 of PA2008.

11.3. CONCLUSION

- 11.3.1. For all of the above reasons, the ExA considers the Proposed Development meets the tests of s104 of the PA2008. On that basis, the ExA concludes that the case for the development has been made and that the SoS for ESNZ makes the North Falls Offshore Wind Farm Project Order in the form attached at Appendix D to this Report.

11.4. MATTERS FOR THE SECRETARY OF STATE

- 11.4.1. The ExA considers the evidence before the SoS at the close of the Examination is sufficient for them to determine the Application. As noted in Chapter 9, the ExA is satisfied there are no impediments to the Proposed Development.
- 11.4.2. There are some other important areas that the ExA would like to draw to the SoS's attention. These are shown in Table 13 below

Table 13: Matters for the SoS

Matter	Reason	Section of the Report
The SoS may wish to consult ECC/TDC and the Applicant on amending R8(1) to include details of an action plan containing details of the measures that would be implemented in the event of exceedance and repeated exceedances of construction noise threshold levels.	ExA considers that construction noise monitoring arrangements need to be more clearly articulated with identified channels for addressing exceedances.	Section 4.7: Noise and Vibration
The SoS may wish to consult ECC/TDC and the Applicant to seek an update of the OCoCP to include the definition of high impact activities as defined in Sections 26.4.3.3 to 26.4.3.4 in ES Chapter 26 for construction noise levels and Section 26.4.3.5 in ES Chapter 26 for construction vibration levels.	This will aid enforcement of paragraph 49 of the OCoCP which states no high impact activities between 1300 -1900 on Saturdays.	Section 4.7: Noise and Vibration
The ExA considers that the R30 (Galloper recommended route) wording previously agreed by the MCA [REP7-081] should be applied and this is included in the rDCO. This is instead of the R30 wording in the dDCO	The provision for a safeguarded route in R30 introduces a high degree of uncertainty regarding the implications for navigational safety and generating capacity, which could ultimately affect the planning balance.	Section 5.3: Navigation and Shipping

Matter	Reason	Section of the Report
[REP8-005] agreed by the MCA and the Applicant. The SoS may wish to seek the views of the MCA and the Applicant as to the full implications of a requirement that includes provision for a safeguarded route as agreed by them in the SoCG.		
The SoS may wish to consult with the HHA and the Applicant to seek an agreed form of wording for PPs for inclusion in the DCO.	Given the safety critical nature of this issue and that the rDCO includes for PPs, which include the right of approval of the mitigation plans, for both LGPL and the PLA, the ExA recommends the right of approval of the mitigation plans is offered to the HHA through agreement of PPs. This would allow the HHA the control it is seeking over concurrent construction and maintenance RAM operations in the Sunk area.	Section 5.3: Navigation and Shipping
It is recommended that the SoS may wish to consult with SCC and SECHNLP and the Applicant on an amendment to the National Landscape Enhancement Scheme (NLES) secured by R31.	The ExA concludes that the provision of the NLES with a sufficient fund limit would be required to comply with the general duty in s85 of the CRoWA.	Section 5.4 Seascape and Visual Effects

11.5. RECOMMENDATION

- 11.5.1. For all of the above reasons, and in light of the ExA's findings and conclusions on important and relevant matters set out in this Report, the ExA recommends that the SoS for ESNZ makes the North Falls Offshore Wind Farm Order in the form recommended at Appendix D of this Report

APPENDIX A: OTHER LEGISLATION AND POLICY

Appendix A:

Other Legislation and Policies

North Falls Offshore Wind Farm (EN010119)

Report to the Secretary of State

Table A1 – Other Legislation

- Acquisition of Land Act 1981
- Ancient Monuments and Archaeological Areas Act 1979
- Burial Act 1857
- Climate Change Act 2008
- Control of Electromagnetic Fields at Work Regulations 2016
- Control of Pollution Act 1974
- Controlled Waste (England and Wales) Regulations 2012 (SI 2012/811)
- Countryside and Rights of Way Act 2000
- Electricity Act 1989
- Environment Act 1995
- Environment Act 2021
- Environmental Permitting (England and Wales) Regulations 2016
- Environmental Protection Act 1990
- Equality Act 2010
- Flood and Water Management Act 2010
- Hazardous Waste (England and Wales) Regulations 2005 (SI 2005/894)
- Health and Safety at Work etc. Act 1974
- Highways Act 1980
- Human Rights Act 1998
- Infrastructure Planning (Decisions) Regulations 2010
- Land Drainage Act 1994
- Levelling-up and Regeneration Act 2023
- National Parks and Access to the Countryside Act 1949
- Natural Environment and Rural Communities Act 2006
- New Roads and Street Works Act 1991
- Planning (Listed Buildings and Conservation Areas) Act 1990
- Pollution Prevention and Control Act 1999
- Protection of Badgers Act 1992
- The Air Navigation Order 2016 (SI 2016/765)
- The Air Quality Standards Regulations 2010
- The Construction (Design and Management) Regulations 2015
- The Conservation of Habitats and Species Regulations 2017
- The Control of Substances Hazardous to Human Health (COSHH) Regulations 2002
- The Convention on Biological Diversity 1992
- The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979
- The Convention on the International Regulations for Preventing Collisions at Sea (COLREGs) 1972
- The Energy Act 2013
- The Eels (England and Wales) Regulations 2009
- The Electricity Safety, Quality and Continuity Regulations 2002
- The Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020

- The Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019
- The Espoo and Aarhus Conventions
- The Hedgerows Regulations 1997
- The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
- The International Convention for the Safety of Life at Sea (SOLAS) 1974
- The Management of Health and Safety at Work Regulations 1999
- The OSPAR convention 1992
- The Traffic Management Permit Scheme (England) Regulations 2007
- The Waste (England and Wales) Regulations 2011 (SI 2011/988)
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017
- Traffic Management Act 2004
- Treasure Act 1996
- Town and Country Planning Act 1990
- United Nations Convention on the Law of the Sea (UNCLOS) 1982
- United Nations Environmental Programme (UNEP) Convention on Biological Diversity 1992
- Water Act 2003 and 2014
- Water Resources Act 1991
- Wildlife and Countryside Act 1981

Other relevant Directives and assimilated EU laws:

- Habitats Directive (92/43/EEC)
- Hazardous Waste Directive (2008/98/EC)
- Landfill Directive (1999/31/EC)
- The Birds Directive (2009/147/EC)
- Water Framework Directive (2000/60/EC)
- Waste Framework Directive (Wafd) (2008/98/EC)

Table A2 - Other Relevant Policies, Statements and Guidance

- A Green Future: Our 25 Year Plan to Improve the Environment (2018)
- Assessing Greenhouse Gas Emissions and Evaluating their Significance (2022)
- British Energy Security Strategy (2022)
- Clean Power 2030 Action Plan: A new era of clean electricity (2024)
- Climate Change Adaption and Resilience (2020)
- East Inshore and East Offshore Marine Plans (2014)
- Energy White Paper: Powering our Net Zero Future (2020)
- Getting Great Britain building again: speeding up infrastructure delivery (2023)

- Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report (2005)
- Guidelines for Landscape and Visual Impact Assessment: Third Edition (2013)
- Kyoto Protocol (1997)
- Landscape Institute Technical Guidance Note: Residential Visual Amenity Assessment (2019)
- Marine Guidance Note (MGN) 654 (2021)
- National Infrastructure Strategy (NIS) (2020)
- National Planning Policy Framework (NPPF) (2023)
- Net Zero Strategy: Build Back Greener (2021)
- Offshore Energy Strategic Environmental Assessment Review and Update of Seascape and Visual Buffer study for Offshore Wind farms Final Report for Hartley Anderson (2020)
- Powering Up Britain (2023)
- South East Marine Plan (2021)
- The Clean Growth Strategy (2017)
- The Glasgow Pact COP26 (2021)
- The state of environmental impact assessment in the UK, IEMA (2011)
- The United Nations Adoption of the Paris Agreement COP21 (2015)
- Transmission Acceleration Action Plan (2023)
- UK Marine Policy Statement (2011)
- UK Offshore Energy Strategic Environmental Assessment 4 (2022)
- United Nations Framework Convention on Climate Change (1992)

APPENDIX B: ABBREVIATIONS LIST

Appendix B:

List of Abbreviations

**North Falls Offshore Wind Farm
(EN010119)**

Report to the Secretary of State

Abbreviation	Full name
1990 Act	The Town and Country Planning Act 1990 (as amended)
A	article
AA	appropriate assessment (for the purposes of the Habitats Regulations)
AADT	average annual daily traffic flow
AD	Air Defence
AEoI	adverse effects on integrity
AEZ	Archaeological Exclusion Zone
AfL	Agreement for Lease
AIL	Abnormal Indivisible Loads
AIS	Air Insulated Switchgear
ALA1981	Acquisition of Land Act 1981
ALARP	As Low As Reasonably Practicable
ALB	arms length bodies
ALC	agricultural land classification
ALO	Agricultural Liaison Officer
AMSL	Above Mean Sea Level
AN	Advice Note
ANCB	Appropriate Nature Conservation Body
ANO	air navigation order
AoCM	adequacy of consultation milestone (in pre-application)
AoCR	adequacy of consultation representation (in acceptance)
AOD	Above Ordnance Datum
AONB	area of outstanding natural beauty
AP	affected person
APFP Regs	The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009

Abbreviation	Full name
AQA	air quality assessment
AQD	European Union Air Quality Directive 2008
AQMA	air quality management area
AQS	Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007
AQTAG	Air Quality Technical Advisory Group
ARSI	access required site inspection
ASI	accompanied site inspection
ATC	Air Traffic Control
ATS	air traffic service
BAT	best available technology or techniques
BAU	business as usual
BCR	benefit cost ratio
BESS	battery energy storage system
BGS	British Geological Survey
BMV	best and most versatile (agricultural land)
BNG	biodiversity net gain
BNL	Base Noise Level
BOAT	byway open to all traffic
BoR	book of reference
BPM	best practicable means
BS	British Standard
CA	compulsory acquisition
CAA	Civil Aviation Authority
CABE	Commission for Architecture and the Built Environment
CAH	compulsory acquisition hearing
CAP	Civil Aviation Publication

Abbreviation	Full name
CA Regs	The Infrastructure Planning (Compulsory Acquisition) Regulations 2010
CAT	Case Administration Team (in NI)
CBRA	Cable Burial Risk Assessment
C3P	category 3 person
CCA2008	Climate Change Act 2008
CCUS	carbon capture utilisation and storage
CD	chart datum
CD&E	construction, demolition and excavation (waste)
CEA	Cumulative Effects Assessment
CEMP	construction environmental management plan
CIMP	Compensation Implementation and Monitoring Plan
CL	common land
CM	Case Manager (in NI)
CNP	critical national priority
CNS	communications, navigation and surveillance
CO	Case Officer (in NI - also NSIP Officer)
CoC	certificates of compliance
CoCP	code of construction practice
COLREGS	Convention on International Regulations for Preventing Collisions at Sea
COMAH	Control of Major Accident Hazard Regulations 2015
CompA	competent authority
CoPA1974	Control of Pollution Act 1974
CPO	compulsory purchase order
CPRE	Campaign to Protect Rural England
CRoWA	Countryside and Rights of Way Act 2000

Abbreviation	Full name
CS	core strategy
CSIP	cable specification and installation plan
CST	Customer Services Team (in PINS)
CTMP	construction traffic management plan
d	draft
D	deadline
DAD	design approach document
DAS	design and access statement
DAMS	detailed archaeological mitigation strategy
dB	Decibel
DBA	desk-based assessment
DCO	Development Consent Order
DD	draft documents
dDCO	draft Development Consent Order
dDML	draft Deemed Marine Licence
DEFRA	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
DfT	Department for Transport
DIO	Defence Infrastructure Organisation
DLL	District Level Licence
DLUHC	Department for Levelling Up, Housing and Communities (now MHCLG)
DM	do-minimum
DML	Deemed Marine Licence
DMRB	Design Manual for Roads and Bridges
DPD	development plan document
DS	do-something

Abbreviation	Full name
DV	Design Vision
DWR	deep water route
EA	Environment Agency
EACN	East Anglian Connection Node
ECC	Essex County Council
ECHR	European Convention on Human Rights
EIA	Environmental Impact Assessment
EfW	energy from waste
EHRC	Essex Historic Environment Record
EIA	environmental impact assessment
EIA Regs	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
EIEOMP	East Inshore and Offshore Marine Plan
EL	examination library
EM	Explanatory Memorandum
EMF	ElectroMagnetic Fields
EMP	ecological management plan
EPL	European protected species licence
EPO	Environmental Protection Officer
EPP	Evidence Plan Process
EPR	The Infrastructure Planning (Examination Procedure) Rules 2010
EPS	European protected species
EqIA	Equality Impact Assessment
EQRP	Essex Quality Review Panel
ERCoP	Emergency Response Cooperation Plan
ES	Environmental Statement

Abbreviation	Full name
ESDA	Electronic Service Delivery for Abnormal Loads
EST	Environmental Services Team (in PINS)
ET	Example Tree (within the WIs)
ETG	Expert Topic Group
EU	European Union
ExA	Examining Authority
ExQ1 (or 2, 3)	The ExA's first, second, third rounds of written questions
FAS	flood alleviation scheme
	[Five Estuaries Offshore Wind Farm – see VEOWF]
FFC SPA	Flamborough and Filey Coast SPA
FLCP	Fisheries Liaison and Coexistence Plan
FLL	functionally linked land
FLO	Fisheries Liaison Officer
FLOWW	Fishing liaison with offshore wind and wet (renewables group)
FRA	flood risk assessment
FS	funding statement
FTE	Full time Equivalent
GCN	Great Crested Newt
GDPR	General Data Protection Regulations 2018
GHG	Greenhouse Gas
GIA	Growth and Infrastructure Act 2013
GIS	Gas Insulated Switchgear
GOWF	Galloper Offshore Wind Farm
GGOWF	Greater Gabbard Offshore Wind Farm
GLA	Greater London Authority

Abbreviation	Full name
GLVIA3	Guidelines for Landscape and Visual Impact Assessment 3
ha	hectare(s)
HA1980	Highways Act 1980
HDD	Horizontal Directional Drilling
HE	Historic England
HGV	heavy goods vehicle
HHA	Harwich Haven Authority
HHFA	Harwich Haven Fishermen's Association
HoT	Heads of Terms
HCI	Habitats of Conservation Importance
HPI(s)	habitat(s) of principal importance
HRA	habitats regulations assessment
HRA1998	Human Rights Act 1998
HWNPS	Hazardous Waste National Policy Statement
IAP	initial assessment of principal issues
IAQM	Institute of Air Quality Management
ICES	International Council for the Exploration of the Sea
IEMA	Institute of Environmental Management and Assessment
IFP	Instrument Flight Procedures
ILVO	Flanders Research Institute Agricultural, Fisheries and Food Research
IMO	International Maritime Organisation
INNS	Invasive Non-Native Species
IP	interested party
IP Regs	The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015

Abbreviation	Full name
iPCOD	Interim population consequences of disturbance modelling
IROPI	imperative reasons of overriding public interest
ISH	issue specific hearing
JDG	Joint Design Guide
JNCC	Joint Nature Conservation Committee
KEIFCA	Kent and Essex Inshore Fisheries and Conservation Authority
KKE MCZ	Kentish Knock East Marine Conservation Zone
LA	local authority
LAeq	the continuous A-weighted sound pressure level (LAeq).
LAr,Tr	the specific sound level plus a “character correction” if required for the acoustic features of the noise such as tonality, impulsivity and intermittency
LBBG	Lesser Black Backed Gull
LBPC	Little Bromley Parish Council
LCA	Local Character Area
LCT	Local Character Type
LEMP	landscape and ecological management plan
LEMS	Landscape and ecological management strategy
LGPL	London Gateway Port Limited
LHA	Local Highways Authority
LIR	local impact report
LLFA	Lead Local Flood Authority
LMP	Landscape Management Plan
LNR	local nature reserve
LNRS	low noise road surfacing
LOAEL	lowest observed adverse effect level

Abbreviation	Full name
LoD	limits of deviation
LoNI	letter of no impediment
LRN	local road network
LSA	London Southend Airport
LSE	likely significant effects
LT	Learning Tree (within the WIs)
LTP	local transport plan
LV	light vehicle
LVIA	landscape and visual impacts assessment
LWA	land and works agreement
m	metres
MAIB	Marine Accident Investigation Branch
MPA	marine protected area
MCA	Maritime and Coastguard Agency
MCAA2009	Marine and Coastal Access Act 2009
MCZ	Marine Conservation Zone
MEEB	Measures of Equivalent Environmental Benefit
MGN	Marine Guidance Note
MHCLG	Ministry for Housing, Communities and Local Government
MHWS	Mean High Water Springs
MMO	Marine Management Organisation
MoD	Ministry of Defence
MPA	Marine Protected Areas
MMMP	Mammal Mitigation Protocol
MLS SAC	Margate and Long Sands Special Area of Conservation
MPS	marine policy statement

Abbreviation	Full name
MRF	Marine Recovery Fund
MSC	Maritime Safety Committee
MU(s)	motorised user(s)
MW	Mega Watt
NaFRA	National Flood Risk Assessment
NATS	National Air Traffic Services
NE	Natural England
NERL	National Air Traffic Services (En Route plc)
NESO	National Energy System Operator (NESO)
NFFO	National Federation of Fishermen's Organisation
NFOWF	North Falls Offshore Wind Farm
NFU	National Farmers Union
NGET	National Grid Electricity Transmission Plc
NH	National Highways
NIA(s)	noise important area(s)
NI	National Infrastructure (in PINS)
NIC	National Infrastructure Commission
NIP	navigation and installation plan
NIPA	National Infrastructure Planning Association
NL	National Landscape
NLES	National Landscape Enhancement Scheme
NM	Nautical Mile
NMU(s)	non-motorised user(s)
NNR	National Nature Reserves
NPA2017	Neighbourhood Planning Act 2017
NPPF	National Planning Policy Framework

Abbreviation	Full name
NPS	national policy statement
NPSA	National Policy Statement for Airports
NPSE	Noise Policy Statement for England
NPS EN-1	Overarching National Policy Statement for Energy
NPS EN-2	National Policy Statement for Fossil Fuel Electricity Generating Infrastructure
NPS EN-3	National Policy Statement for Renewable Energy Infrastructure
NPS EN-4	National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines
NPS EN-5	National Policy Statement for Electricity Networks Infrastructure
NPS EN-6	National Policy Statement for Nuclear Power Generation
NPSHW	National Policy Statement for Hazardous Waste
NPSNN	National Policy Statement for National Networks
NPSP	National Policy Statement for Ports
NPSWW	National Policy Statement for Waste Water
NSIP	Nationally Significant Infrastructure Project
NRA	Navigational Risk Assessment
NRMM	Non-Road Mobile Machinery
NSIPO	NSIP Officer (in NI - aka Case Officer)
NT	National Trust
NtM	Notices to Mariners
NTS	Non Technical Summary
NVSR	Noise and Vibration Sensitive Receptor
o	outline
OCoCP	Outline Code of Construction Practice
OCP	Offshore Converter Platform

Abbreviation	Full name
oCSIP	cable specification and installation plan
oCTMP	Outline Construction Traffic Management Plan
OECC	Onshore Export Cable Corridor
OFH	open floor hearing
oFLCP	Outline Fisheries Liaison and Coexistence Plan
OFW	offshore wind
OL	Operational Lead (in NI)
OLEMS	Outline Landscape and Ecological Management Strategy
OM	Operations Manager (in NI)
oNIP	Outline Navigation and Installation Plan
OnSS	Onshore Substation
oODS	Outline Operational Drainage Strategy
OpCo	Operational Co-ordination Group (in NI)
oPEMP	Outline Project Environmental Management Plan
oPRoWMP	Outline Public Rights of Way Management Plan
OREI	Offshore Renewable Energy Installations
OS	open space
oSDMP	Outline sediment disposal management plan
oSEP	Outline Skills and Employment Plan
OSP	Offshore Substation Platform
OSW	onshore wind
OTE SPA	Outer Thames Estuary Special Protection Area
OWF	offshore wind farm
OWSI	Outline Written Scheme of Investigation
OTNR	Offshore Transmission Network Review
PA2008	Planning Act 2008

Abbreviation	Full name
PAD	Protocol for Archaeological Discoveries
PADSS	principal areas of disagreement summary statement
PAP	pre-action protocol
PCD	policy compliance document
PD	Procedural Decision
PEIR	Preliminary Environmental Information Report
PEMP	Project Environmental Management Plan
PIL	person with interest in the land
PL	Professional Lead (in PINS)
PLA	Port of London Authority
PM	preliminary meeting
PMA	private means of access
PP	protective provisions
PPA	planning performance agreement
PRA	preferred route announcement
PRoW	public right of way
PSED	public sector equality duty
PTI	planning time index
PUM	project update meeting
PVMB	present value monetised benefits
R6	rule 6 letter
R8	rule 8 letter
r	recommended
R	requirement
rDCO	The ExA's recommended Development Consent Order
REAC	register of environmental actions and commitments

Abbreviation	Full name
REZ	renewable energy zone
RIES	Report on the Implications for European Sites
RIS	Road Investment Strategy
RL	replacement land
RLB	red line boundary (the order limits)
RNLI	Royal National Lifeboat Institution
RNP	Required Navigation Performance
RPA	root protection area
RPG	registered park and garden
RR	relevant representations
RRH	Remote Radar Head
RSA	Road Safety Audit
RSPB	Royal Society for the Protection of Birds
RTD	Red-throated Diver
RWE	RWE Renewables UK Swindon Limited
RYA	Royal Yachting Association
s106	Section 106 agreement under the Town and Country Planning Act 1990
SAC	special area of conservation
SAR	search and rescue
SANG	suitable alternative natural greenspace
SCC	Suffolk County Council
SCL	special category land
SD	supplementary document (to the WIs)
SDMP	sediment disposal management plan
SEB	statutory environmental body
SECHNL	Suffolk and Essex Coast and Heaths National Landscape

Abbreviation	Full name
SECHNL	Suffolk and Essex Coast and Heaths National Landscape Partnership
SEMP	South East Marine Plan
SEZ	Structures exclusion zone
SGAR	stage gate assessment review (used in National Highways)
SHC	Suffolk Heritage Coast
SI	Statutory Instrument
SIAA	statement to inform an appropriate assessment
SIP	Site Integrity Plan
SIRT	Service Improvement and Resourcing Team (in NI)
SLVIA	Seascape, Landscape and Visual Impact
SNCB	statutory nature conservation body
SNCI	site of nature conservation interest
SNS SAC	Southern North Sea Special Area of Conservation
SoCC	statement of community consultation
SoCG	statement of common ground
SOAEL	significant observed adverse effect level
SOLAS	Safety of life at Sea
SoR	statement of reasons
SoS	secretary of state
SoSESNZ	Secretary of State for Energy Security and Net Zero
SNS	Southern North Sea
SP	statutory party
SPA	special protection area
SPA MMP	special protection area management and monitoring plan
SPP	special parliamentary procedure

Abbreviation	Full name
SPZ	Source Protection Zone
SRN	strategic road network
SSER	SSE Renewables Offshore Windfarm Holdings Limited
SSSI	site of special scientific interest
SU	statutory undertaker
SUDS	sustainable drainage systems
TA	transport assessment
TBHSPA	Thames Basin Heaths Special Protection Area
TCPA1990	Town and Country Planning Act 1990
TDC	Tendring District Council
TH	Trinity House
TJB	Transition Joint Bays
TMCo	Traffic Management Co-ordinator
TMP	transport management plan
ToR	terms of reference
TP	temporary possession
TPO	tree preservation order
TSS	traffic separation scheme
TTSA	traffic and transport study area
TTT	Template and Tools Tree (within the WIs)
UK	United Kingdom
UKCP18	United Kingdom Climate Projections 2018
UKHO	United Kingdom Hydrographic Office
UNCLOS	United Nations Convention on the Law of the Sea
USI	unaccompanied site inspection
UU	unilateral undertaking

Abbreviation	Full name
UXO	unexploded ordnance
VEOWF	Five Estuaries Offshore Wind Farm
VfM	value for money
VP	Viewpoint
WACA1981	Wildlife and Countryside Act 1981
WAM	Wide Area Multilateralisation
WTG	Wind Turbine Generators
WUR	Wageningen University and Research
WCS	worst case scenario
WebTAG	web-based transport analysis guidance
WER	Water Environment Regulations
WFD	Water Framework Directive
WMS	written ministerial statement
WI	work instructions
WQ	written questions
WR	written representation
WTG	wind turbine generator
WWNPS	Waste Water National Policy Statement
ZTV	zone of theoretical visibility
ZOI	Zone of Influence

APPENDIX C: HABITATS REGULATIONS ASSESSMENT

1. FINDINGS AND CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

1.1. INTRODUCTION

- 1.1.1. This Appendix sets out the Examining Authority's (ExA) analysis and conclusions relevant to the Habitats Regulations Assessment (HRA). This will assist the Secretary of State (SoS) for the department of Energy Security and Net Zero (DESNZ), as the competent authority, in performing their duties under The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017 ('The Habitats Regulations').
- 1.1.2. This Appendix is structured as follows:
- Section 1.2: Findings in relation to Likely Significant Effects (LSE) on the United Kingdom (UK) National Site Network (NSN) and other European sites;
 - Section 1.3: Conservation Objectives for sites and features;
 - Section 1.4: Findings in relation to Adverse Effects on Integrity (AEoI);
 - Section 1.5: Alternative solutions considered;
 - Section 1.6: Imperative Reasons of Overriding Public Interest (IROPI);
 - Section 1.7: Compensatory measures (CM);
 - Section 1.8: HRA conclusions.
- 1.1.3. In accordance with the precautionary principle embedded in The Habitats Regulations, consent for the Proposed Development may be granted only after having ascertained that it will not adversely affect the integrity of European site(s) and no reasonable scientific doubt remains (CJEU Case C-127/02 Waddenzee 7 September 2004).
- 1.1.4. For the purpose of this Appendix, in line with The Habitats Regulations and relevant Government policy, the term 'European sites' includes Special Areas of Conservation (SAC), candidate SACs, proposed SACs, Special Protection Areas (SPA), potential SPAs, listed and proposed Ramsar sites and sites identified or required as CM for adverse effects on any of these sites. The 'UK NSN' refers to the network of European sites within the UK.
- 1.1.5. Policy considerations and the legal obligations under The Habitats Regulations are described in Chapter 2 and Appendix B of this Report.
- 1.1.6. Marine Conservation Zones (MCZ) are not included in the designations to be considered under The Habitats Regulations. The Proposed Development is also within the zone of influence of Blackwater, Crouch, Roach and Colne Estuaries (BCRC) MCZ and Kentish Knock East (KKE) MCZ. The implications of the Proposed Development for these designations are discussed in Chapter 5.2 of this Report.
- 1.1.7. The ExA has been mindful throughout the Examination of the need to ensure that the SoS has such information as may reasonably be required to carry out their duties as the competent authority. We have sought evidence from the Applicant and the relevant Interested Parties (IPs), including Natural England (NE) as the Appropriate Nature Conservation Body (ANCB) and NatureScot, through written questions and issues specific hearings (ISH).

RIES and Consultation

- 1.1.8. The ExA produced a Report on the Implications for European Sites (RIES) [PD-020] which compiled, documented, and signposted HRA relevant information provided in the development consent order (DCO) application and examination representations up to D6 (24 June 2025). The RIES was issued to set out ExA understanding on HRA-relevant information and the position of the IPs in relation to the effects of the Proposed Development on European sites at that point in time. Consultation on the RIES took place between 1 July 2025 and 23 July 2025. Comments were received from the Applicant [REP7-054] and NE [REP7-085] at D7 (15 July 2025), and from the Applicant [REP8-035], NE [REP8-100], the Marine Management Organisation (MMO) [REP8-102] and the Royal Society for the Protection of Birds (RSPB) [REP8-103] at D8 (23 July 2025). These comments have been taken into account in the drafting of this Appendix.
- 1.1.9. The ExA's recommendation is that the RIES, and consultation on it, may be relied upon as an appropriate body of information to enable the SoS to fulfil their duties of consultation under regulation 63(3) of The Habitats Regulations and regulation 28(4) of The Offshore Habitats Regulations, should the SoS wish to do so.
- 1.1.10. It is noted that at the point of issue of the RIES, several HRA matters remained outstanding. Numerous examination submissions at D7 and D8 included HRA relevant information. In accordance with the Planning Inspectorate's [Advice on HRA](#), the RIES is not revised following consultation. This Appendix considers all HRA representations made by IPs during the examination, including those made after consultation on the RIES. Given the HRA information submitted by both the Applicant and NE following publication of the RIES, the SoS may wish to undertake further consultation to fulfil their duties under The Habitats Regulations.

Proposed Development Description and HRA Implications

- 1.1.11. The Proposed Development is described in Chapter 1 of this Report.
- 1.1.12. The spatial relationship between the order limits of the Proposed Development and the closest offshore European sites is shown in Figure 2.1 of the HRA Screening [APP-174]. More distant SACs designated for Annex II marine mammals are shown on Figures 7.3 to 7.5 of [APP-174]. The spatial relationship between the Order Limits of the Proposed Development and the onshore European sites is shown on Figure 2.2 of [APP-174].
- 1.1.13. Not all the sites that the Applicant has identified in its screening assessment are depicted on a figure.
- 1.1.14. The Proposed Development is not directly connected with, or necessary to, the management of a European site. Therefore, the SoS must make an 'appropriate assessment' (AA) of the implications of the Proposed Development on potentially affected European sites in light of their conservation objectives.
- 1.1.15. The Applicant submitted a HRA Report – the Report to Inform Appropriate Assessment ('the RIAA') with its DCO application, which comprised the following documents:
- RIAA in the following parts and appendices:
 - Part 1 Introduction [APP-173];

- Part 2 Benthic Ecology Annex 1 Habitat in SAC and SPA Supporting Habitat [\[APP-175\]](#), updated to [\[REP7-013\]](#);
- Part 3 Marine Mammals Annex II Species [\[APP-176\]](#);
- Part 4 Offshore Ornithology (Birds Directive Annex 1 and Migratory Species [\[APP-178\]](#);
- Part 5 Onshore European and Ramsar Sites [\[APP-181\]](#);
- Part 6 Summary [\[APP-182\]](#);
- Appendix 1.1 HRA Screening [\[APP-174\]](#);
- Appendix 3.1 Marine Mammals Unexploded Ordnance (UXO) Clearance Information and Assessment [\[APP-177\]](#);
- Appendix 4.1 Modelling the abundance of red-throated diver (RTD) in the area of overlap between North Falls digital aerial surveys (12km buffer) and the Outer Thames Estuary (OTE) SPA [\[APP-179\]](#);
- Appendix 4.2 Population Viability Analysis (PVA) [\[APP-180\]](#).
- Habitats Regulations Derogation Provision of Evidence [\[APP-183\]](#) updated to [\[REP7-015\]](#) and associated reports:
 - Appendix 1 CM Overview [\[APP-184\]](#) updated to [\[REP1-015\]](#), [\[REP6-009\]](#), [\[REP7-017\]](#) and [\[REP8-015\]](#);
 - Annex 1A HRA Compensation Consultation [\[APP-185\]](#) ;
 - Annex 1B Compensation Funding Statement [\[APP-186\]](#) updated to [\[REP8-017\]](#);
 - Annex 1C In Principle Letter of Agreement from Dogger Bank South (DBS) East and West [\[APP-187\]](#);
 - Appendix 2 Lesser Black-Backed Gull (LBBG) Compensation Document [\[APP-188\]](#) updated to [\[REP1-017\]](#), [\[REP6-011\]](#) and [\[REP8-021\]](#);
 - Annex 2A Outline Lesser Black-backed Gull Compensation Implementation and Monitoring Plan (CIMP) [\[APP-189\]](#) updated to [\[REP1-019\]](#), [\[REP6-013\]](#) and [\[REP8-019\]](#);
 - Annex 2B LBBG Compensation Effects on Designated Sites [\[REP4-010\]](#);
 - Appendix 3 Red Throated Diver Compensation Document [\[APP-190\]](#) updated by [\[REP1-021\]](#) and [\[REP6-015\]](#);
 - Annex 3A Outline Red Throated Diver CIMP [\[APP-191\]](#) updated to [\[REP1-023\]](#) and [\[REP6-017\]](#);
 - Appendix 4 Kittiwake Compensation Document [\[APP-192\]](#) updated to [\[REP2-011\]](#) and [\[REP6-019\]](#);
 - Annex 4A Outline Kittiwake CIMP [\[APP-193\]](#) updated to [\[REP1-025\]](#) and [\[REP6-021\]](#);
 - Appendix 5 Guillemot and Razorbill Compensation Document [\[APP-194\]](#) updated to [\[REP1-027\]](#) and [\[REP6-023\]](#);
 - Annex 5A Outline Guillemot and Razorbill CIMP [\[APP-195\]](#) updated to [\[REP1-029\]](#) and [\[REP6-025\]](#);
 - HRA Shadow Appropriate Assessment for Guillemot of the Farne Islands SPA [\[REP1-056\]](#);
 - HRA Update to Breeding Season Apportioning of LBBG at the Alde-Ore Estuary (AOE) SPA [\[REP1-058\]](#);
 - HRA LBBG Compensation – Gedgrave Marshes Impact Assessment [\[REP5-072\]](#).

1.1.16. Annex 2B [\[REP4-010\]](#) comprised a LSE screening and assessment of AEoI of the proposed potential CM for LBBG of the AOE SPA and Ramsar site and was submitted at D4 by the Applicant as part of its Habitats Regulations Derogation Provision of Evidence.

1.1.17. The RIAA was supported and informed by updates, including:

- Further information regarding marine mammals [\[REP1-057\]](#) updated to [\[REP3-046\]](#);
- Updated Information for Offshore Ornithology Cumulative Effects Assessment (CEA) [\[REP3-040\]](#).

1.1.18. The Applicant also provided mitigation plans setting out measures identified in the RIAA, including:

- Outline Site Integrity Plan (SIP) for the Southern North Sea (SNS) SAC [\[APP-243\]](#) updated [\[REP5-014\]](#);
- Draft Marine Mammal Mitigation Protocol (MMMP) [\[REP3-013\]](#) updated to [\[REP5-012\]](#), [\[REP6-029\]](#) and [\[REP8-030\]](#).

1.1.19. Parts of the RIAA and supporting documents were updated at various deadlines during the Examination in response to representations and written questions. Updates were made to the RIAA to reflect modelling undertaken and to incorporate additional mitigation measures committed to by the Applicant. The Derogation Provision of Evidence was updated to include a 'without prejudice' derogation case for the Annex I sandbank feature of Margate and Long Sands (MLS) SAC in [\[REP7-015\]](#), and an associated Outline Benthic CIMP [\[REP7-058\]](#) was submitted.

1.1.20. At D6, the Applicant maintained its position that there would be no AEol in-combination to the guillemot feature of FFC SPA and the Farne Islands SPA, and the kittiwake feature of FFC SPA, however, it accepted that based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEol would not be excluded by the SoS from the Proposed Development in-combination with other plans and projects on these features. As such, the Applicant amended the Without Prejudice HRA DCO Schedules [\[REP6-057\]](#) to remove reference to guillemot of FFC SPA and the Farne Islands SPA and kittiwake of FFC SPA. The Applicant maintained its conclusion of no AEol for razorbill of FFC SPA and RTD of OTE SPA and the Without Prejudice DCO schedules [\[REP6-057\]](#) provide compensation for razorbill and RTD if required.

1.1.21. The draft DCO was updated at each deadline with the latest version at D8 [\[REP8-005\]](#).

Appropriate Nature Conservation Bodies

1.1.22. The offshore component of the Proposed Development is located in the Southern North Sea in English waters. However, the HRA Screening [\[APP-174\]](#) identified potential for LSE on several European sites within the UK NSN in Scotland for consideration in the Applicant's assessment. On 10 December 2024 the ExA wrote to NatureScot inviting it to attend and take part in the examination as an 'other person' (OP) [\[PD-006\]](#).

1.1.23. The ExA [\[PD-018\]](#) wrote again to NatureScot on 1 July 2025 requesting a response to 2 questions in the RIES [\[PD-020\]](#) related to the Applicant's proposed CM for RTD, which would be located in Scotland. NatureScot [\[REP7-097\]](#) provided advice at D7, which is discussed at Section 1.7 of this Appendix. No other representations were received from NatureScot during the examination.

Non-UK sites

- 1.1.24. The Applicant's HRA Screening [APP-174] identified 92 non-UK European sites for inclusion within the screening assessment. These are Natura 2000 sites in European Economic Area (EEA) states. They are listed in Tables 5.2, 6.2, 7.2 and 8.5 of [APP-174]. The locations of non-UK sites are not depicted in the Applicant's RIAA.
- 1.1.25. The Applicant did not identify any LSE on European sites in EEA states designated for Annex I benthic habitat, Annex II migratory fish or offshore ornithology.
- 1.1.26. The Applicant identified LSE for 27 European sites in EEA states (Belgium, France, Germany and the Netherlands) designated for Annex II marine mammals. These sites were assessed for AEol by the Applicant in RIAA Part 3 Marine Mammals Annex II Species [APP-176]. The Applicant concluded no AEol for all sites.
- 1.1.27. Transboundary matters are fully discussed in Chapter 6.3 of this Report.
- 1.1.28. Only UK European sites are addressed in this Appendix.

Summary of HRA Matters Considered During the Examination

- 1.1.29. The main HRA matters raised by the ExA, NE and other IPs, and discussed during the examination include:
- Benthic ecology
 - definition of the maximum design scenario (MDS) or worst-case scenario (WCS);
 - assessment of indirect effects on the MLS SAC arising from sandwave levelling and placement of cable protection.
 - Marine mammals
 - reliance upon interim population consequences of disturbance modelling (iPCOD);
 - use of noise abatement systems (NAS) and SIPs;
 - Applicant's AEol conclusions for the harbour porpoise qualifying feature of the SNS SAC.
 - Ornithology
 - Applicant's AEol conclusions for guillemot qualifying feature of the Farne Island SPA, guillemot, kittiwake, northern gannet and razorbill qualifying features of the Flamborough and Filey Coast (FFC) SPA and RTD feature of the OTE SPA
 - Compensatory measures
 - approach to and calculations determining the quantum of compensation;
 - feasibility, deliverability and likely success of proposed CM (against various criteria) for guillemot, kittiwake, LBBG and razorbill qualifying features;
 - availability of strategic compensation (Marine Recovery Fund (MRF)) for ornithological qualifying features.
- 1.1.30. These matters are discussed in the sections below, as appropriate.

1.2. FINDINGS IN RELATION TO LIKELY SIGNIFICANT EFFECTS (LSE)

- 1.2.1. Under regulation 63 of The Habitats Regulations and regulation 28 of The Offshore Habitats Regulations, the competent authority must consider whether a development will have LSE on a European site, either alone or in-combination with other plans or projects. The purpose of the LSE test is to identify the need for an AA and the activities, sites or plans and projects to be included for further consideration in the AA.
- 1.2.2. The European sites and qualifying features that were considered in the Applicant's assessment of LSE for the main development proposed are presented in the HRA Screening [\[APP-174\]](#). These are listed in the following tables:
- Table 5.2 – Annex I benthic features;
 - Table 6.2 – Annex II migratory fish;
 - Table 7.2 – Annex II marine mammal species (harbour porpoise, grey and harbour seal);
 - Table 8.4 – SPAs and Ramsar sites with offshore ornithological features;
 - Table 9.2 – SPAs and Ramsar sites with onshore ornithological features;
 - Table 10.4 – onshore SACs and Ramsar sites with Annex I habitats or Annex II species.
- 1.2.3. NE [\[REP1-044\]](#) agreed that all relevant European sites and qualifying features that could be affected by the Proposed Development had been identified by the Applicant. NatureScot [\[REP7-097\]](#) did not identify any additional European sites or qualifying features.
- 1.2.4. The European sites and qualifying features considered in the Applicant's assessment of LSE for the potential LBBG CM at Lantern Marshes and Gedgrave Marshes are described in Sections 3.2 of [\[REP4-010\]](#) and [\[REP5-072\]](#) respectively.
- 1.2.5. No additional UK European sites or qualifying features have been identified by IPs that could be affected by the LBBG CM for inclusion within the Applicant's HRA Screening.
- 1.2.6. On the basis of the evidence provided, the ExA considers that all relevant European sites and qualifying features have been identified.

LSE from the Proposed Development Alone

Main RIAA

- 1.2.7. The Applicant identified potential impacts of the Proposed Development considered to have the potential to result in LSE alone during construction, operation and maintenance, and decommissioning in the HRA Screening [\[APP-174\]](#). The LSE impact pathways are summarised in Table 1.1 below.

Table 1: Pathways for LSE assessed by the Applicant [APP-174]

Receptor group (and location of information in [APP-174])	LSE pathway (construction, operation and decommissioning unless otherwise stated)
Annex I benthic habitats (Table 5.1)	▪ Lasting habitat loss (operation) ▪ Temporary physical disturbance ▪ Increased suspended sediment concentrations ▪ Smothering due to increased suspended sediment ▪ Re-mobilisation of contaminated sediments ▪ Colonisation of introduced substrate, including non-native species (operation)
Annex II migratory fish species (Table 6.1)	▪ Physical disturbance, displacement and temporary habitat loss ▪ Lasting habitat loss ▪ Increased suspected sediments and sediment re-deposition ▪ Re-mobilisation of contaminated sediments ▪ Accidental release of pollutants ▪ Introduction of non-native species ▪ Underwater noise and vibration ▪ Electromagnetic field (EMF) ▪ Changes in fishing activity
Annex II marine mammal species (Table 7.1)	▪ Physical or auditory injury and behavioural effects from underwater noise ▪ Physical or auditory injury and behavioural effects from underwater noise during UXO clearance ▪ Barrier effects as a result of underwater noise ▪ Vessel interactions (increased risk of collision) ▪ Disturbance at seal haul out sites ▪ Changes to water quality ▪ Changes to prey availability and supporting habitats, and any disturbance to foraging at sea
SPAs and Ramsar sites with offshore ornithological features (Table 8.1)	▪ Disturbance or displacement due to work activity, presence or movement of vessels and other plant, and lighting ▪ Disturbance or displacement or barrier effect due to presence of turbines and other infrastructure ▪ Collision risk due to presence of turbines and other infrastructure (operation) ▪ Indirect impacts through effects on habitats and prey species
SPAs and Ramsar sites with onshore ornithological features (Table 9.3)	Within European site boundary ▪ Noise and visual disturbance (construction and decommissioning) Within functionally linked land (FLL) ▪ Direct permanent loss (construction) ▪ Direct temporary damage or disruption of habitats (construction and decommissioning)

Receptor group (and location of information in [APP-174])	LSE pathway (construction, operation and decommissioning unless otherwise stated)
	▪ Indirect effects from air quality emissions (construction and decommissioning) ▪ Indirect effects (construction and decommissioning) ▪ Noise and visual disturbance (construction and decommissioning)
Onshore SACs and Ramsar sites with Annex I habitats or Annex II species (Table 10.3)	▪ Indirect effects from air quality emissions (construction and decommissioning) ▪ Indirect disturbance of Annex II species from noise (construction and decommissioning) ▪ Indirect visual disturbance of Annex II species, including from lighting (construction and decommissioning) ▪ Indirect effects from changes in supporting surface or groundwater resources ▪ Direct and indirect effects on ex-situ habitats which support Annex II species

- 1.2.8. Tables A1 to A5 in Annex 1 of the RIES [\[PD-020\]](#) detailed the LSE impact pathways screened in for each European site and qualifying feature.
- 1.2.9. The Applicant's RIAA Screening [\[APP-174\]](#) concluded no LSE for sites identified where migratory fish species were qualifying features on the basis that there is no potential for direct or indirect effects resulting from the Proposed Development. NE did not raise concerns regarding offshore SAC Annex II fish species. This matter is not discussed further in this Appendix.
- 1.2.10. NE [\[REP8-097\]](#) [\[REP8-100\]](#), RIES Q1] stated that the RIAA Part 2 [\[REP7-013\]](#) had not considered the ecological implications of the predicted sediment deposition within the MLS SAC. It provided an example that deposition was not set in the context of relevant thresholds for smothering. The ExA notes that [\[REP7-013\]](#) does include smothering as an LSE impact pathway assessed for AEol. The ecological implications of sediment deposition to Annex I sandbank of the MLS SAC during construction are considered for AEol in Section 1.4 of this Appendix.
- 1.2.11. No additional impact pathways were identified by IPs for inclusion within the assessment.
- 1.2.12. The Applicant's conclusion of no LSE with respect to the sites screened for impacts from the main development was not disputed by ANCBs or IPs during the examination.

HRA for LBBG compensatory sites

- 1.2.13. The Applicant provided separate assessments of sites identified with potential to deliver measures to compensate for impacts to LBBG of the AOE SPA.
- 1.2.14. HRA Annex 2B LBBG Compensation Effects on Designated Sites [\[REP4-010\]](#) assesses potential for CM at Lantern Marshes (owned by the National Trust), comprising the installation of predator-proof fencing and habitat management. The

Applicant concluded that the CM would give rise to LSE on one or more of the qualifying features of:

- AOE SPA – from temporary disturbance and spread of invasive non-native species (INNS) during construction, maintenance during operation and decommissioning;
- AOE Ramsar site – for the same LSE pathways as AOE SPA;
- Orfordness-Shingle Street SAC – for the same LSE pathways as AOE SPA.

1.2.15. The qualifying features and LSE pathways screened in by the Applicant for the Lantern Marshes compensation site are detailed in Table 3.3.1 of [\[REP4-010\]](#).

1.2.16. HRA LBBG Compensation – Gedgrave Marshes Impact Assessment [\[REP5-072\]](#) assesses proposed CM at Gedgrave Marshes, comprising the installation of predator-proof fencing, habitat management and measures to encourage birds to investigate and settle in the fenced area. The Applicant concluded that the Proposed Development would be likely to give rise to LSE on one or more of the qualifying features of:

- AOE SPA – from temporary disturbance and spread of INNS during construction, maintenance during operation and decommissioning, and predation of other species by LBBG;
- AOE Ramsar site – for the same LSE pathways as AOE SPA.

1.2.17. CM for LBBG is discussed more fully in Section 1.7 of this Appendix.

LSE from the Proposed Development In-Combination

1.2.18. The Applicant addressed potential in-combination effects arising from the Proposed Development within section 4.1 of the HRA Screening [\[APP-174\]](#), which sets out the overall methodology applied. The other plans and projects included in the in-combination assessment are set out for each receptor group in the following sections of the HRA Screening [\[APP-174\]](#) unless otherwise stated:

- Annex I benthic habitat – paragraph 46;
- Annex II migratory fish – paragraph 62;
- Annex II marine mammal species – paragraph 75;
- Paragraph 114 of [\[APP-178\]](#) for red-throated divers;
- Table 4.21 of [\[APP-178\]](#) for lesser black-backed gull (LBBG);
- Table 4.32 of [\[APP-178\]](#) for gannet;
- Table 4.39 of [\[APP-178\]](#) for kittiwake;
- SPAs and Ramsar sites with onshore ornithological features – Table 5.9 of the RIAA Part 5 [\[APP-181\]](#);
- Onshore SACs and Ramsar sites with Annex I habitats or Annex II species – paragraph 169.

1.2.19. The HRA Screening [\[APP-174\]](#) explains that activities such as commercial fisheries and operation of offshore wind farms (OWF) already in existence were included in the baseline conditions and did not form part of the in-combination assessment.

1.2.20. No plans or projects were identified in [\[REP4-010\]](#) for the in-combination assessment of effects arising from the potential LBBG CM at Lantern Marshes.

1.2.21. The Gedgrave Marshes Impact Assessment [\[REP5-072\]](#) identified one other project (comprising the formalisation of an existing unofficial footpath on the bank of the

River Ore as part of the King Charles III England Coast Path) for the in-combination assessment of effects arising from the potential LBBG CM at Gedgrave Marshes.

- 1.2.22. In many cases, where the Applicant's screening exercise established the potential for LSE to arise from the Proposed Development alone, the potential for in-combination effects was also considered and discussed in the Applicant's HRA Screening [\[APP-174\]](#) and the assessments of the LBBG CM sites [\[REP4-010\]](#) and [\[REP5-072\]](#). This approach as far as it has a bearing on the screening for LSE was not a matter for discussion in the examination.
- 1.2.23. The Applicant included a detailed assessment of in-combination effects in the assessment of effects on the integrity of the affected European sites in the RIAA (Parts 2 to 5 [\[APP-175\]](#) to [\[APP-181\]](#), as updated during the examination).

- 1.2.24. No additional plans or projects were highlighted by IPs during examination.

LSE Assessment Outcomes

- 1.2.25. The European sites for which the Applicant concluded no LSE would occur from either the Proposed Development alone or in-combination with other projects and plans are presented by receptor group in the HRA Screening [\[APP-174\]](#), in the tables as summarised at paragraph 1.2.2 of this Appendix and paragraph 2.4.2 of the RIES [\[PD-020\]](#).
- 1.2.26. No representations were made by any IPs on the conclusions of no LSE for the European sites and features screened out in the Applicant's screening assessment.
- 1.2.27. The European sites and qualifying features presented in Table 2 of this Appendix were assessed by the Applicant to determine if they could be subject to AEoI, as a result of the Proposed Development alone or in-combination with other plans and projects, in view of their conservation objectives.
- 1.2.28. NE [\[REP8-100\]](#), RIES Q1] raised an additional LSE pathway of ecological effects arising from sediment deposition during construction to Annex I sandbank of the MLS SAC, which is assessed for AEoI in Section 1.4 of this Appendix.
- 1.2.29. No other matters were raised in the examination by IPs in relation to the Applicant's screening assessment.
- 1.2.30. The ExA is satisfied, on the basis of the information provided and subject to the inclusion of the additional pathway of ecological implications from sediment deposition to the MLS SAC during construction, that the correct impact-effect pathways for each site have been assessed. The ExA is content with the approach to the assessment of alone and in-combination likely significant effects.
- 1.2.31. Taking into account the reasoning set out above, the ExA considers that the Proposed Development is likely to have a significant effect from the impacts identified on the qualifying features of the European sites in tables A1 to A5 in annex 1 of the RIES [\[PD-020\]](#) for the main development, and listed above under 'HRA for LBBG compensation sites' for Lantern and Gedgrave Marshes compensation site, when considered alone, or in-combination with other plans or projects. Other than outlined above for the MLS SAC, this was not disputed by NE during the examination.

1.3. CONSERVATION OBJECTIVES

- 1.3.1. The conservation objectives for the European sites and features screened in for potential LSE are set out in the following parts of the RIAA for the main development proposed:
- Annex I benthic habitat [[REP7-013](#), section 2.4.2 and Table 2.7 for benthic habitat supporting the OTE SPA];
 - Annex II marine mammal species [[APP-176](#), sections 3.4.2, 3.5.2 and 3.6.2];
 - offshore ornithology [[APP-178](#), section 4.4];
 - onshore ecology [[APP-181](#), sections 5.4.1 and 5.5.1.2].
- 1.3.2. For the LBBG compensation sites, conservation objectives for the European sites and features screened in for potential LSE are set out in sections 3.2.1.2 and 3.2.3.2 of [[REP4-010](#)] (Lantern Marshes) and section 3.2.1.1 of [[REP7-052](#)] (Gedgrave Marshes). In both reports, section 3.2.2.2 states in relation to the AOE Ramsar site that a decision was made by Defra and NE not to produce a conservation advice package and to focus instead on those provided for the SPA.
- 1.3.3. The conservation status (favourable or unfavourable) of the European sites affected by the Proposed Development was requested by the ExA in the RIES [[PD-020](#), RIES Q3]. The Applicant [[REP8-035](#), section 3] provided a summary of the condition status of all European sites and qualifying features screened into the RIAA.
- 1.3.4. The RIAA Part 2 Benthic Ecology Annex I Habitat [[APP-175](#)] stated that the MLS SAC has a conservation objective to maintain the Annex I sandbank in favourable condition. The ExA noted that the condition assessment for this SAC was updated by NE in January 2025, with the site being in unfavourable condition due to existing anthropogenic pressures. In response to requests from the ExA, the Applicant commented at ISH2 on the implications of this update (as reported in [[EV6-007](#)]) and provided an updated version of its Supporting Information on Offshore Additional Mitigation [[REP4-041](#)]. It stated that the updated condition statement identified that coarse sediment and sand sub-features of the Annex I sandbank were in unfavourable condition.
- 1.3.5. The Applicant [[PD-013](#), Q10.0.10] stated that NE's rationale for the updated condition statement related to the placement of infrastructure in the SAC and as the Proposed Development would avoid direct overlap (there is no infrastructure placed directly in the SAC), the change did not influence its assessment. Nonetheless, in response to questions in the RIES [[PD-020](#)], the Applicant updated the RIAA Part 2 [[REP7-013](#)] to reflect the updated NE condition assessment. The ExA also sought views from NE on the change; NE [[REP5-110](#)] referred to its comments in [[REP5-105](#)], which stated that in the absence of further interpretation by the Applicant of its hydrodynamic modelling, NE could not advise that an AEol of the MLS SAC during operation could be ruled out, as the scale of impact would take the site further away from the restore objective.

1.4. FINDINGS IN RELATION TO ADVERSE EFFECTS ON THE INTEGRITY (AEol)

- 1.4.1. The European sites and qualifying features identified in Table 2 below [and Annex 1, Tables A1 to A5 of the RIES [[PD-020](#)]] were further assessed by the Applicant to determine if they could be subject to AEol from the Proposed Development, either alone or in-combination. The assessment of AEol was made in light of the

conservation objectives for the European sites, as described by receptor group in the RIAA Parts 2 to 5 [\[REP7-013\]](#) [\[APP-176\]](#) [\[APP-178\]](#) [\[APP-181\]](#), and LBBG compensation site assessments ([\[REP4-010\]](#) for Lantern Marshes and [\[REP5-072\]](#) for Gedgrave Marshes). The outcome of the Applicant's assessment for the main development alone or in-combination is summarised by receptor group in Tables 6.1 to 6.5 of the RIAA Part 6 Summary [\[APP-182\]](#).

- 1.4.2. For the LBBG compensation sites, the assessment outcome is summarised in section 3.3.2 of [\[REP4-010\]](#) and [\[REP5-072\]](#) for the Proposed Development alone, and section 3.3.5 of [\[REP4-010\]](#) and section 3.3.4 of [\[REP5-072\]](#) for the Proposed Development in-combination.
- 1.4.3. The ExA is satisfied, based on the information provided, that the correct impacts have been assessed.
- 1.4.4. Based on the findings of the examination, the ExA is satisfied that an assessment of AEol from the Proposed Development in-combination with other plans or projects can be based on this information and that no other plans or projects are required to be taken into account.
- 1.4.5. Aside from the AOE SPA and Ramsar site, FFC SPA and the Farne Islands SPA, the Applicant's RIAA [\[APP-173\]](#) to [\[APP-195\]](#) as updated, and HRA for the LBBG compensation sites at Lantern Marshes [\[REP4-010\]](#) and Gedgrave Marshes [\[REP5-072\]](#) concluded that the Proposed Development would not result in AEol to all the remaining European sites and features considered.
- 1.4.6. Although the Applicant concluded that AEol in-combination could not be excluded for the LBBG feature of the AOE SPA and Ramsar site, the guillemot feature of FFC SPA and the Farne Islands SPA, and the kittiwake feature of FFC SPA, these sites were also assessed for other features for which the Applicant concluded that AEol could be excluded. These sites and features are listed below along with other sites which the Applicant concluded no AEol but NE and/or the RSPB disagreed. These matters were discussed throughout the Examination.
 - AOE Ramsar site (wetland invertebrate assemblage and wetland plant assemblage);
 - FFC SPA (seabird assemblage consisting of guillemot, razorbill and kittiwake);
 - Farne Islands SPA (seabird assemblage, including razorbill)
 - FFC SPA gannet
 - MLS SAC (sandbanks which are slightly covered by seawater all the time);
 - Orfordness – Shingle Street SAC (coastal lagoons and perennial vegetation of stony banks);
 - OTE SPA (red-throated diver);
 - SNS SAC (harbour porpoise);
 - Stour and Orwell Estuaries SPA (avocet, black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, knot, pintail, redshank and waterbird assemblage).
- 1.4.7. At the close of the examination, the Applicant's conclusions had not been disputed by NE in relation to the features of the sites listed in Table 2 below. Furthermore, NE confirmed that (other than a list of European sites in [\[RR-243\]](#), Table 5.1] which it could not advise AEol could be excluded beyond reasonable scientific doubt, discussed separately in the Section below) it was content that sufficient information was presented in the RIAA to support a conclusion of no AEol to the European sites screened in [\[APP-174\]](#).

- 1.4.8. The ExA sought clarification from NE regarding the following sites and qualifying features for which the Applicant had concluded no AEol:
- Common tern feature of the OTE SPA;
 - Sandwich tern (breeding), avocet (breeding and non-breeding), marsh harrier (breeding), redshank (non-breeding), ruff (non-breeding) and notable assemblage of breeding and wintering wetland birds of AOE SPA;
 - Sandwich tern (breeding), common tern (breeding) and Arctic tern (breeding) of the Farne Islands SPA.
- 1.4.9. NE [\[REP8-100\]](#) stated it agreed with the Applicant's conclusions of no AEol for the above qualifying features.
- 1.4.10. Matters relating to AEol which were discussed throughout the Examination are discussed after Table 2 below. These are set out in thematically in the following order: offshore ornithology, benthic ecology, marine mammals, onshore ecology.
- 1.4.11. Based on the information provided by the Applicant and the agreement received from NE, the ExA is satisfied that the Proposed Development would not result in AEol either alone or in-combination to the qualifying features of European sites listed in Table 2 below.

Table 2: LSE to European sites and qualifying features for which AEol from the Proposed Development (alone or in-combination) can be excluded

European site(s)	Qualifying feature(s)	LSE identified from (construction (C), operation and maintenance (O&M) or decommissioning (D)):	Applicant's conclusion (alone or in-combination) on AEol
Humber Estuary SAC and Ramsar site	Grey seal	Underwater noise (C, O&M and D) Barrier effects (C, O&M and D) Collision risk (C, O&M and D) Changes to prey (C, O&M and D) Changes to water quality (C, O&M and D)	No AEol
The Wash and North Norfolk Coast SAC	Harbour seal	Underwater noise (C, O&M and D) Barrier effects (C, O&M and D) Collision risk (C, O&M and D) Changes in prey (C, O&M and D) Changes to water quality (C, O&M and D)	No AEol
AOE SPA and Ramsar site	Sandwich tern, breeding	Disturbance or displacement (O&M) Collision risk (O&M)	No AEol
	Avocet, breeding Avocet, non-breeding	Collision risk (O&M)	No AEol

	Marsh harrier, breeding Redshank, non-breeding Ruff, non-breeding		
OTE SPA	Common tern, breeding	Collision risk (O&M)	No AEoI
Foulness SPA and Ramsar site	Sandwich tern, breeding Common tern, breeding Avocet, breeding Ringed plover, breeding Bar-tailed godwit, wintering Dark bellied brent goose, wintering Grey plover, wintering Hen harrier, wintering Knot, wintering Oystercatcher, wintering Redshank, wintering, passage Waterbird assemblage	Collision risk (O&M)	No AEoI
FFC SPA	Gannet, breeding	Disturbance or displacement (O&M) Collision risk (O&M)	No AEoI
Sandlings SPA	Nightjar, breeding	Collision risk (O&M)	No AEoI

	Woodlark, breeding		
Minsmere-Walberswick SPA and Ramsar site	Avocet, breeding Marsh harrier, breeding Nightjar, breeding Shoveler, breeding Shoveler, wintering Teal, breeding Gadwall, breeding Gadwall, wintering White fronted goose, wintering Hen harrier, wintering Assemblage of rare breeding birds associated with marshland and reedbeds	Collision risk (O&M)	No AEol
Deben Estuary SPA and Ramsar site	Avocet, wintering Dark-bellied brent goose, wintering	Collision risk (O&M)	No AEol
Hamford Water SPA	Avocet, wintering Black tailed godwit, wintering	Collision risk (O&M) Disturbance with European site (direct) (C&D)	No AEol

	Dark-bellied brent goose, wintering Grey plover, wintering	Disturbance on FLL (direct) (C&D) Habitat loss on FLL (direct) (C&D) Indirect effects on FLL (direct) (C&D)	
	Little tern, breeding	Disturbance within European site (direct) (C&D) Disturbance on FLL (direct) (C&D) Habitat loss on FLL (Direct) (C&D)	No AEoI
Hamford Water Ramsar site	Black-tailed godwit, wintering Dark-bellied brent goose, wintering Grey plover, wintering Redshank, wintering, passage Ringed plover, wintering, passage	Collision risk (O&M) Disturbance within European site (direct) (C&D) Disturbance on FLL (Direct) (C&D) Habitat loss on FLL (direct) (C&D) Indirect effects on FLL (C&D)	No AEoI
Thanet Coast and Sandwich Bay SPA and Ramsar	Golven plover, wintering Turnstone, wintering	Collision risk (O&M)	No AEoI
Benacre to Easton Barents SPA	Marsh harrier, breeding	Collision risk (O&M)	No AEoI
Colne Estuary (Mid-Essex Coast Phase 2) SPA	Pochard, breeding Ringer plover, breeding	Collision risk (O&M)	No AEoI

	Dark-bellied brent goose, wintering Black-tailed godwit, wintering Hen harrier, winter Redshank, wintering Waterbird assemblage, wintering		
	Little tern, breeding Dark bellied brent goose, wintering Waterbird assemblage, wintering	Disturbance on FLL (direct) (C&D) Habitat loss on FLL (direct) (C&D) Indirect effects on FLL (C&D)	No AEoI
Colne Estuary (Mid-Essex Coast Phase 2) Ramsar site	Pochard, breeding Ringed plover, breeding Dark-bellied brent goose, wintering Black-tailed godwit, wintering Hen harrier, wintering Redshank, wintering Waterbird assemblage, wintering	Collision risk (O&M)	No AEoI

	Dark-bellied brent goose, wintering Waterbird assemblage, wintering	Disturbance on FLL (Direct) (C&D) Habitat loss on FLL (C&D) Indirect effects on FLL (C&D)	No AEoI
Broadland SPA and Ramsar site	Marsh harrier, breeding Bewick's swan, wintering Hen harrier, wintering Ruff, wintering Gadwall, wintering Shoveler, wintering Whooper swan, wintering Wigeon, wintering	Collision risk (O&M)	No AEoI
Stodmarsh SPA and Ramsar site	Gadwall, breeding, Gadwall, wintering Bittern, wintering Hen harrier, wintering Shoveler, wintering Breeding bird assemblage Waterbird assemblage, wintering	Collision risk (O&M)	No AEoI

Dengie SPA and Ramsar site	Dark-bellied brent goose, wintering Grey plover, wintering Hen harrier, wintering Knot, wintering Waterbird assemblage, wintering	Collision risk (O&M)	No AEoI
Blackwater Estuary SPA and Ramsar site	Pochard, breeding Ringer plover, breeding Black-tailed godwit, wintering Dark-bellied brent goose, wintering Dunlin, wintering Grey plover, wintering Hen harrier, wintering Waterbird assemblage, wintering	Collision risk (O&M)	No AEoI
Abberton Reservoir SPA and Ramsar site	Coot, wintering Gadwall, wintering Goldeneye, wintering	Collision risk (O&M)	No AEoI

	Great crested grebe, wintering Mute swan, wintering Pochard, wintering Shoveler, wintering Teal, wintering Tufted duck, wintering Wigeon, wintering Waterbird assemblage, late summer, passage/moult		
Crouch and Roach Estuaries SPA and Ramsar site	Dark-bellied brent goose, wintering Waterbird assemblage, wintering	Collision risk (O&M)	No AEol
Breydon Water SPA and Ramsar site	Common tern, breeding Avocet, wintering Bewick's swan, wintering Golden plover, wintering Lapwing, wintering Ruff, passage, waterbird assemblages	Collision risk (O&M)	No AEol

The Swale SPA and Ramsar site	Dark bellied brent goose, wintering Dunlin, wintering Redshank, passage, grey plover, wintering Breeding bird assemblage Waterbird assemblage, wintering	Collision risk (O&M)	No AEoI
Benfleet and Southend Marshes SPA and Ramsar site	Dark bellied brent goose, wintering Dunlin, wintering Grey plover, wintering Knot, wintering Ringed plover, wintering Waterbird assemblage, wintering	Collision risk (O&M)	No AEoI
Thames Estuary and Marshes SPA and Ramsar site	Avocet, wintering Black-tailed godwit, wintering, passage Dunlin, wintering Grey plover, wintering Hen harrier, wintering	Collision risk (O&M)	No AEoI

	Knot, wintering Redshank, wintering Ringed plover, passage Waterbird assemblages		
Medway Estuary and Marshes SPA and Ramsar site	Avocet, breeding and wintering Dark bellied brent goose, wintering Dunlin, wintering Grey plover, wintering Knot, wintering Pintail, wintering Redshank, wintering Ringed plover, wintering Shelduck, wintering Breeding bird assemblage waterbird assemblage, wintering	Collision risk (O&M)	No AEol
Breckland SPA	Nightjar, breeding Stone curlew, breeding Woodlark, breeding	Collision risk (O&M)	No AEol

Dungeness, Romney Marsh and Rye Bay SPA and Ramsar site	Sandwich tern, breeding Common tern, breeding Avocet, breeding Marsh harrier, breeding Aquatic warbler, passage Bewick's swan, wintering Bittern, wintering Golden plover, wintering Hen harrier, wintering Ruff, wintering Shoveler, wintering Mute swan, wintering Waterbird assemblage, wintering	Collision risk (O&M)	No AEoI
North Norfolk Coast SPA	Sandwich tern, breeding Common tern breeding	Collision risk (O&M)	No AEoI
Chichester and Langstone Harbours SPA	Sandwich tern, breeding Common tern breeding	Collision risk (O&M)	No AEoI
Solent and Southampton Water SPA	Sandwich tern, breeding Common tern breeding	Collision risk (O&M)	No AEoI

Teesmouth and Cleveland Coast SPA	Common tern breeding	Collision risk (O&M)	No AEoI
Coquet Island SPA	Sandwich tern, breeding Common tern breeding Arctic tern, breeding	Collision risk (O&M)	No AEoI
Farne Islands SPA	Sandwich tern, breeding Common tern breeding Arctic tern, breeding	Collision risk (O&M)	No AEoI
Forth Islands SPA	Sandwich tern, breeding Common tern breeding Arctic tern, breeding LBBG, breeding	Collision risk (O&M)	No AEoI
	Gannet, breeding	Collision risk (O&M) Disturbance and displacement (O&M)	No AEoI
Ythan Estuary, Sands of Forvie and Meikle Loch SPA	Sandwich tern, breeding Common tern breeding	Collision risk (O&M)	No AEoI
Loch of Strathbeg SPA	Sandwich tern, breeding	Collision risk (O&M)	No AEoI
The Wash SPA	Common tern breeding	Collision risk (O&M)	No AEoI

Inner Moray Firth SPA Common	Common tern breeding	Collision risk (O&M)	No AEoI
Cromarty Firth SPA Common	Common tern breeding	Collision risk (O&M)	No AEoI
Northumbria Coast SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
Pentland Firth Islands SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
Auskerry SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
Rousay SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
Fair Isle SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
	Guillemot, breeding	Disturbance or displacement (O&M)	No AEoI
West Westray SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
	Guillemot, breeding	Disturbance or displacement (O&M)	No AEoI
Papa Westray (North Hill and Holm) SPA	Arctic tern, breeding Arctic skua, breeding	Collision risk (O&M)	No AEoI
Sumburgh Head SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
Mousa SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
Foula SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI

	Great skua, breeding		
	Guillemot, breeding RTD breeding	Disturbance or displacement (O&M)	No AEoI
Papa Stour SPA	Arctic tern, breeding	Collision risk (O&M)	No AEoI
Fetlar SPA	Arctic tern, breeding Great skua, breeding	Collision risk (O&M)	No AEoI
Fowlsheugh SPA	Guillemot, breeding	Disturbance or displacement (O&M)	No AEoI
	Kittiwake, breeding	Collision risk (O&M)	No AEoI
Troup, Pennan and Lion's Heads SPA	Guillemot, breeding	Disturbance or displacement (O&M)	No AEoI
East Caithness Cliffs SPA	Guillemot, breeding Razorbill, breeding	Disturbance or displacement (O&M)	No AEoI
	Herring gull, breeding Kittiwake, breeding	Collision risk (O&M)	No AEoI
North Caithness Cliffs SPA	Guillemot, breeding	Disturbance or displacement (O&M)	No AEoI
Marwick Head SPA	Guillemot, breeding	Disturbance or displacement (O&M)	No AEoI
Noss SPA	Guillemot, breeding	Disturbance or displacement (O&M)	No AEoI
	Gannet, breeding	Collision risk (O&M)	No AEoI

		Disturbance or displacement (O&M)	
Hermaness, Saxa Vord and Valla Field SPA	Gannet, breeding	Collision risk (O&M) Disturbance or displacement (O&M)	No AEoI
	Great skua, breeding	Collision risk (O&M)	No AEoI
	RTD, breeding	Disturbance or displacement (O&M)	No AEoI
Hoy SPA	Great skua, breeding	Collision risk (O&M)	No AEoI
	RTD, breeding	Disturbance or displacement (O&M)	No AEoI
Ronas Hill - North Roe and Tingon SPA	Great skua, breeding	Collision risk (O&M)	No AEoI
	RTD, breeding	Disturbance or displacement (O&M)	No AEoI
Caithness and Sutherland Peatlands SPA	RTD, breeding	Disturbance or displacement (O&M)	No AEoI
Otterswick and Graveland SPA	RTD, breeding	Disturbance or displacement (O&M)	No AEoI
Orkney Mainland Moors SPA	RTD, breeding	Disturbance or displacement (O&M)	No AEoI
Hamford Water SAC	Fisher's estuarine moth	Indirect disturbance from noise (C&D) Indirect disturbance from visual/lighting (C&D) Indirect effects from changes in supporting surface or groundwater resources (C&D)	No AEoI

		Direct and indirect effects on ex-situ habitats (C&D)	

Offshore Ornithology

Overarching methodological concerns

- 1.4.12. NE [\[RR-243\]](#) confirmed that although it was seeking updates to the Population Viability Analysis (PVA), it did not anticipate that results of PVA analysis [\[APP-180\]](#) would be materially different due to variations in input parameters. However, it raised concerns regarding the following:
- use of a four year burn in period rather than a five year burn in period;
 - disagreed that random seeds had been matched for impact scenarios;
 - the Applicant's approach to apportioning for LBBG of AOE;
 - disturbance and displacement of guillemot and razorbill of the FFC SPA;
- 1.4.13. NE [\[RR-243\]](#) highlighted its advice that a five year burn in period should be applied to the assessment, rather than the four year burn in period applied by the Applicant. The Applicant [\[REP1-044\]](#) responded that a five year burn in period had been applied in its shadow appropriate assessment for guillemot at the Farne Islands SPA and confirmed that this would also be applied if any further PVA work is required for other European sites. At D5, NE [\[REP5-109\]](#) and [\[REP5-107\]](#) considered that this issue would be unlikely to make a material difference to the outcome of the decision-making process.

Population Viability Analysis

- 1.4.14. The displacement/mortality assessment as set out in [\[APP-180\]](#) has applied a 70% displacement and 2% mortality resulting in a reduction of population growth of 0.5%. NE [\[RR-243\]](#) queried the results of the Applicant's assessment. For the Sheringham Shoal and Dudgeon Extension Project, the use of the same figures resulted in a reduction of population growth by 1.4%. An explanation for the differing figures for reduction in population growth was provided by the Applicant [\[REP3-039\]](#). NE [\[REP5-017\]](#) welcomed the clarity provided by the Applicant regarding the differences in the PVA for guillemot and razorbill, however it raised concerns that the Applicant had not re-run the PVAs for guillemot and razorbill apportioned to FFC SPA and highlighted that certain figures used in the PVA are substantially different to those used in the original assessment. NE provided a series of figures to demonstrate the differences between assessments for the Proposed Development and other offshore wind farms and advised that the PVAs should be updated. It was acknowledged by NE [\[REP5-017\]](#) that the Applicant had used updated PVA parameters in the shadow appropriate assessment for the Farne Islands SPA. NE welcomed the commitment from the Applicant to integrate the parameters into any further PVA.
- 1.4.15. The RSPB [\[REP4-089\]](#) also advised that its preference for displacement and mortality rates would be for a single displacement rate is presented at 60% and a range of mortality rates, of 3-5% during the breeding season and 1-3% in the non-breeding season. The RSPB point out that these values were included in the matrices applied by the Applicant [\[APP-178\]](#) but were not taken forward in the PVA assessment. As acknowledged above, NE welcomed the commitment from the Applicant to integrate the parameters into any further PVA.
- 1.4.16. The ExA accepts that the Applicant has responded to NE's and RSPB concerns as far as is practicable. Most aspects have been positively addressed but technical disagreements/impasses related to the above have remained between the

Applicant, NE and RSPB respectively. The ExA have taken methodological disputes into account in reaching our overall conclusions.

Highly Pathogenic Avian Influenza (HPAI)

- 1.4.17. The RSPB [RR-294] and [REP4-089] noted the impacts of Highly Pathogenic Avian Influenza (HPAI) on UK wild bird populations. RSPB highlighted that survey work undertaken by RSPB in 2023 reported a decrease of >10% in overall counts across all sites which were surveyed. RSPB states that a further outbreak of HPAI occurred in 2023 which was after the survey counts were undertaken, therefore it is likely that the impacts of HPAI on breeding populations of seabirds would be worse than reported.
- 1.4.18. The RSPB also reported behaviour changes in seabirds subsequent to the HPAI outbreak and stated that this could affect interactions with wind farms. The RSPB raised concerns that the implications of HPAI had not been fully considered in the assessment and also raised a point regarding the potential need for reassessment of the Favourable Conservation Status of some SPA's.
- 1.4.19. The Applicant [REP1-045] argued that adequate consideration of the impacts of HPAI has been included in the RIAA for qualifying features of relevant SPA's, notably gannet, kittiwake, guillemot and razorbill of FFC SPA, red-throated diver of OTE SPA and LBBG of AOE SPA. The Applicant's assessment makes reference to the scale of effect for each species population and this is based upon annual reports on the seabird populations of relevant SPAs.
- 1.4.20. The ExA has had regard to the RSPB's comments and has taken into account all relevant examination responses including those related to the ExA's questions. The consideration of long-term effects of HPAI is a wider strategic matter. However, there are no large breeding seabird colonies where HPAI would have affected the populations recorded during the site-specific surveys. Moreover, the Applicant has followed NE's general advice, and the ExA acknowledges that no specific concerns were raised about this issue during the Examination by any of the SNCBs.
- 1.4.21. NE do not raise any objections to the Applicant's approach or indicate the consideration of HPAI undermines its assessments. The ExA finds NE's lack of objections to HPAI carry significant weight and that concerns toward HPAI raised by RSPB are consequently not compelling reasons to undermine the Applicant's overall assessments.

Digital Aerial Survey (DAS) methodology

- 1.4.22. The RSPB [RR-294] [REP4-089] and [REP5-114] raised concerns regarding the DAS methodology, stating that further detail of the methodology should be provided alongside the outputs. The Applicant [REP1-045] responded to the points raised by the RSPB explaining that the DAS method used was at a higher altitude than that recommended published guidance to reduce disturbance to sensitive species. The Applicant [REP1-045] considered transect-based surveying to be the most efficient method to enable large areas to be covered, with fewer samples required than grid-based methods whilst achieving the same survey coverage. The possibility of autocorrection had been reviewed internally and determined there was no substantive evidence of spatial autocorrection.
- 1.4.23. The RSPB [REP8-103] stated it had outstanding concerns including potential bias in survey method not addressed, consideration of disturbance and autocorrelation not

fully evaluated. It also stated that whilst the Applicant had explained its use of transect vs grid-based surveys, the RSPB stated no detail had been provided which supported these conclusions. The RSPB also had outstanding concerns regarding the statement of the Applicant that an independent external quality assurance would not currently be possible.

- 1.4.24. The Applicant [[REP8-035](#)] considers that sufficient and appropriate detail has been provided for the DAS methodology which it considers to be in line with best practice guidance. The Applicant highlighted that NE is content that the baseline has been appropriately gathered and characterised.
- 1.4.25. In conclusion of the two issues raised by RSPB (consideration of HPAI and the DAS methodology). The ExA considers that the Applicant has applied a sufficiently robust DAS methodology which is not contested by NE. Moreover, the use of a transect surveying method has enabled a larger geographical coverage with the need for fewer samples. The ExA deems this is a suitable assessment method.
- 1.4.26. The ExA finds that the Applicant has followed NE's advice in the consideration of DAS methodology and HPAI. The commentary of NE as well as absence of objections from them carries significant weight relative to the matters contested by RSPB.
- 1.4.27. Overall, whilst the ExA appreciates that scientific thought and best practice does evolve over the time, we do not find the technical arguments posed by RSPB provide sufficient reasons to invalidate the Applicant's assessments nor their robustness for the purposes of gauging the development scheme applied for.

Mitigation measures

- 1.4.28. Embedded mitigation measures for offshore ornithology are summarised in Table 4.4 of [[APP-178](#)]. This includes reduction of the number of offshore export cables, a reduction in the array area, a reduced number of turbines, from 72 to 57; an increase in minimum air gap from 22 metres, to 27 metres above mean high water springs; and, use of shipping protocol to minimise disturbance to RTDs.

Flamborough and Filey Coast SPA – northern gannet

- 1.4.29. The Applicant concluded no AEoI on the northern gannet qualifying feature of FFC SPA both alone and in-combination with other plans or projects.
- 1.4.30. The RSPB stated [[RR-294](#)] and [[REP4-089](#)] that it had concerns regarding the Applicant's application of a macro avoidance correction factor to predict gannet collision mortalities. The RSPB disputed the Applicant's choice of avoidance rate for gannet and also the use of a 70% correction factor for baseline densities.
- 1.4.31. The RSPB explained its preferred methodology for assessing mortality from collision was McGregor et al (2018) (McGregor, R.M., King, S., Donovan, C.R., Caneco, B. and Webb, A. (2018) A Stochastic Collision Risk Model for Seabirds in Flight. Report to Marine Scotland Science) which allows for uncertainty and variability of parameters to be made. The RSPB advised that a 98% avoidance rate should be presented alongside the recommended values as it considered this was more appropriate for breeding gannets.
- 1.4.32. The Applicant confirmed [[REP5-056](#)] that it had followed guidance from Natural England regarding Collision Risk Modelling, which included the application of

macro-avoidance via a reduction in 70% in the flight densities of gannet within the array area during all seasons. Avoidance rates recommended by Natural England were also used.

- 1.4.33. At the close of examination, the RSPB [REP8-07] maintained its position that AEol could not be ruled out for gannet of FFC SPA.
- 1.4.34. No HRA concerns were raised by NE regarding northern gannet.
- 1.4.35. Whilst the RSPB under [REP4-089], [REP5-113]; [REP5-114]; [REP5-115] and [REP8-07] considers that AEol cannot be ruled out for in-combination collision and displacement mortality on the northern gannet population based on methodological disagreement the ExA does not support such a finding.
- 1.4.36. This is largely because NE commented in [REP2-054], Q10.3.2 that the Applicant has demonstrated that mean (plus 95% CLs) project alone impacts lead to a 0.05% (0.00-0.12) increase in baseline mortality for the northern gannet feature of FFC SPA. Thus, the level of project alone impact is considered undetectable against natural variation. NE concluded that any contribution to an in-combination AEol would be immaterial. Furthermore, NE note that they have not yet advised any Examinations that there is a potential for AEol for gannet at FFC SPA. The ExA concurs with NE, that based on all evidence, the predicted change would not be detectable or significant.
- 1.4.37. Moreover, the Applicant via [REP7-050] provided updated offshore ornithology in-combination tables for gannet (as well as for other birds) having regard to in-combination collision risk and in-combination displacement and a combined collision risk and displacement for gannet. Which NE notes in [REP8-099]. NE's (Risk and Issues log) [REP8-050] did not comment on the updated in-combination matrices. In the two boxes related to this point, it only states that the matter is now resolved and NE welcomes the Applicants revised position as detailed in [REP6-008] which secures delivery of CM.
- 1.4.38. Overall, the ExA acknowledges that NE agrees with the Applicant's conclusions that there would be no AEol for northern gannet at the FFC SPA alone or in-combination as per RIAA Part 4 [APP-178]. Whilst scientific opinion does evolve over time the lack of objections from NE carries significant weight relative to RSPBs concerns.
- 1.4.39. Based on the information provided by the Applicant and the agreement received from NE as well all local Council responses, the ExA is satisfied that the Proposed Development would not result in AEol either alone or in-combination to the northern gannet qualifying feature of FFC SPA.

Outer Thames Estuary SPA

Red-throated diver (RTD) – disturbance and displacement

- 1.4.40. In the RIAA Part 6 Summary [APP-182] the Applicant concluded no AEol for the RTD feature of the OTE SPA both alone and in-combination. It stated that although it did not disagree that displacement effects could not be ruled out from existing offshore wind farm displacement, it did not consider that the Proposed Development would present a material contribution to any in-combination effect. The Applicant also explained [APP-178] that the western boundary of the Proposed Development had been amended post PIER which resulted in the Order limits being located

further away from the boundary of the OTE SPA. The Order limit is 4.5km away at the closest point to the OTE SPA

- 1.4.41. Both NE [\[RR-243\]](#) and the RSPB [\[RR-294\]](#) disagreed with the Applicant's conclusions and considered that the Proposed Development could result in AEol both alone and in-combination on the RTD feature of the OTE SPA.
- 1.4.42. NE [\[RR-243\]](#) raised concerns regarding disturbance and displacement of RTD during installation of the export cable. NE requested a seasonal restriction, stating that installation or decommissioning should not take place within the OTE SPA plus a 2km buffer between 1 November and 31 March (inclusive) when the area is used by over-wintering RTD. NE maintained this position at the close of Examination [\[REP8-095\]](#).
- 1.4.43. The Applicant did not consider that a seasonal restriction is required as it has determined no AEol resulting from the Proposed Development. Furthermore, the Applicant highlighted that a seasonal restriction would affect works both in and outside of 2km of the OTE SPA.
- 1.4.44. The RSPB [\[RR-294\]](#) and [\[REP4-089\]](#) considered that the Applicant had not fully considered the conservation objectives relevant to the population of RTD at OTE SPA. NE [\[RR-243\]](#) advised that the Proposed Development would contravene the SACO attributes.
- 1.4.45. The Applicant applied a 12km buffer zone and considered this was appropriate to assessing disturbance effects as it was informed by evidence from the nearby London Array OWF. Figure 4.1 of [\[APP-178\]](#) shows the 12km buffer zone for the Proposed Development, and the 12km buffer zones from other consented OWF in the vicinity. The area of the SPA OTE located in the 12km buffer zone of the Proposed Development is 108.7km² which represents 2.8% of the total area of the OTE SPA. The Applicant [\[REP1-045\]](#) considered that due to the existing level of disturbance in the 12km buffer zone as a result of shipping lanes and other offshore wind farms, the Proposed Development would not lead to a detectable effect on the distribution of RTD.
- 1.4.46. Outstanding matters regarding compensation for RTD are discussed in Section 1.7 of this Appendix.
- 1.4.47. The ExA acknowledges that the Applicant has already reduced the size of the array area during pre-application stages. That action directly sought to reduce potential for displacement effects to the species.
- 1.4.48. An overlap area for RTD displacement has been duly assessed relative to the Proposed Development by the Applicant. The overall OTE SPA covers around 3924km². Within the assessed precautionary 12km buffer around North Falls there would be a point of overlap with the OTE SPA equating to 2.8% of the SPA area. All of the 2.8% is within 12 km of an existing offshore wind farm "and/ or" overlaps with "International Maritime Organisation (IMO) shipping measures".
- 1.4.49. The IMO shipping measures referred to entail two well used shipping lanes running through the OTE SPA and to the east of the SPA boundary. This is depicted within [\[APP-178\]](#) Figures 4.1 and 4.2, as shown below.

Figure 4.1 from [APP-178]

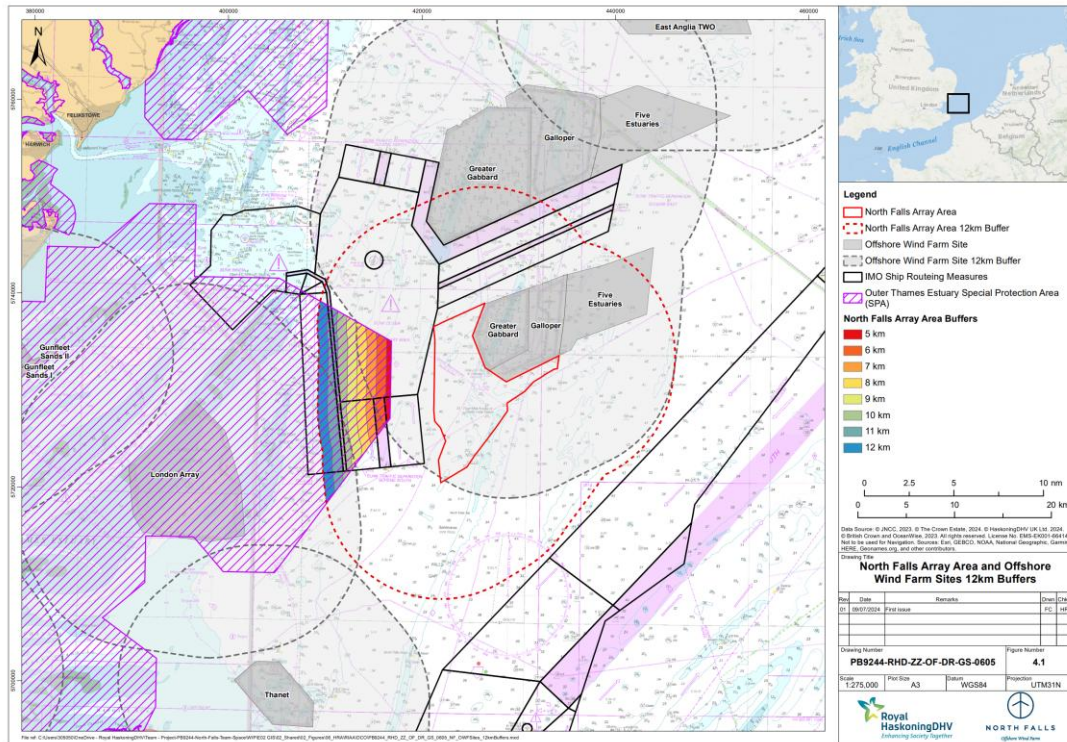
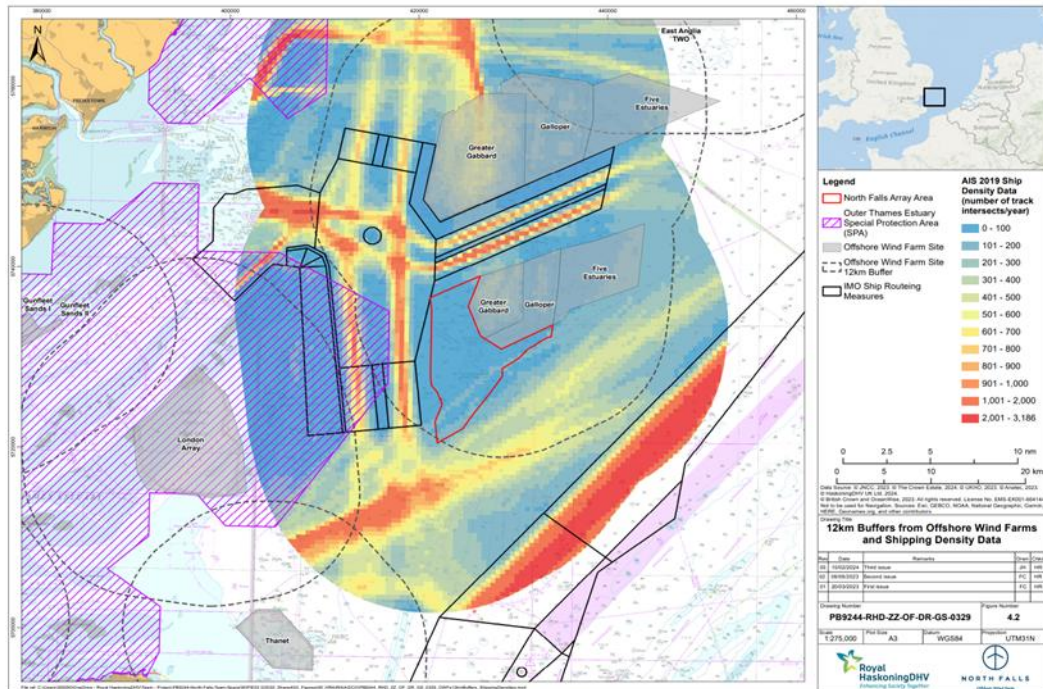


Figure 4.2 from [APP-178]



1.4.50. This means RTDs are already likely to be displaced by shipping lanes in the overlap are within the SPA inside the 12km buffer. The ExA is therefore conscious that RTDs using this area are likely to be more tolerant to disturbance as this is part of the existing baseline conditions and estimations recorded in the RIAA [APP-178] section's 4 and 4.4.

- 1.4.51. The ExA shares the Applicant's view that RTDs would not be disturbed by the position of North Falls in these circumstances as there would be no material change to numbers or their distribution within the overall OTE SPA.
- 1.4.52. It is notable that the RTD feature of the OTE SPA is assessed by NE as being in an unfavourable condition. Nevertheless, NE's 2025 condition assessment does suggest non-breeding abundance of RTD is meeting targets but supporting habitat attributes are failing. Thus, the precautionary 12km buffer around North Falls is already subject to sources of displacement for RTD. North Falls would not result in further material displacement of RTD over and above the existing sources of displacement.
- 1.4.53. Consequently, the ExA concludes in accordance with the Applicant's assessments and technical information that AEol of RTD within the SPA can be ruled out beyond reasonable scientific doubt for the project alone and in-combination. Therefore, contrary to NE's position [REP1-044] and [REP6-060] protecting the RTD via a seasonal restriction would not be necessary, as there would not be an AEol from the construction works within the cable corridor.
- 1.4.54. On the basis of the above information, the ExA is satisfied that the Proposed Development would not result in AEol to the European sites listed above by virtue of impacts to red-throated diver feature from either the Proposed Development alone or in-combination with other plans and projects.

RTD – supporting benthic habitat

- 1.4.55. The Applicant concluded a LSE on 5 benthic habitat types which it stated NE identified as supporting the OTE SPA, including subtidal coarse sediment, subtidal sand, subtidal mud, subtidal mixed sediment and circalittoral rock [REP7-013, Table 2.6] from the following impact pathways during construction, operation and maintenance, and decommissioning:
- Structure, function and supporting processes (not for circalittoral rock);
 - Extent and distribution of supporting habitat (not for circalittoral rock during construction);
 - Distribution, availability and abundance of prey;
 - Contamination;
 - Maintaining natural levels of turbidity.
- 1.4.56. A description of the site and supporting benthic habitat is provided in section 2.5 of the RIAA Part 2 [REP7-013]. The RIAA concluded no AEol on the benthic habitat types from the Proposed Development alone or in-combination with other projects and plans.

Concerns raised

- 1.4.57. NE [RR-243, P8, C3, C20, C33 and C37] initially advised that there was a lack of robustness in the Applicant's assessment of pressures and impacts on supporting benthic habitats and prey availability for SPA qualifying features. It requested updated information, modelling and assessment.
- 1.4.58. The Applicant [REP1-044] stated that impacts on supporting benthic habitats in the OTE SPA were assessed in the RIAA Part 2 [APP-175, section 2.5.3] and ES Chapter 10 [APP-024]. ES Chapter 13 [APP-027, sections 13.6.1.2, 13.6.2.4 and 13.6.2.6] assess indirect effects of changes to habitats and prey species on offshore ornithology receptors.

- 1.4.59. NE continued to record no change, with this matter unresolved in [\[REP3-064\]](#) [\[REP4-067\]](#) [\[REP5-109\]](#) [\[REP6-089\]](#). In response to a question from the ExA [\[PD-013\]](#) about what further information was needed, NE [\[REP5-110\]](#), Q10.0.12] stated that having reflected on its position any further assessment was unlikely to materially change the conclusions and confirmed that it did not require any further action on this matter by the Applicant.
- 1.4.60. NE [\[REP7-090\]](#), P8] subsequently confirmed that this matter was resolved from a benthic perspective and that the impacts to SPA supporting habitat were appropriately identified, quantified and evaluated. NE stated that its remaining concerns about AEol of the OTE SPA related to displacement effects on RTD as discussed above.
- 1.4.61. Based on the submissions from the Applicant and NE, and NE's view as ANCB that AEol can be ruled out, the ExA agrees with the conclusion that an AEol can be excluded for the five benthic habitat types that support the OTE SPA from all LSE pathways, both alone and in-combination.

Stour and Orwell Estuaries SPA and Ramsar site

- 1.4.62. The RIAA Part 5 [\[APP-181\]](#) concluded there would be no AEol to the following qualifying features of the Stour and Orwell Estuaries SPA and Ramsar site: avocet (breeding), black-tailed godwit (wintering), dark-bellied brent goose (wintering), dunlin (wintering), grey plover (wintering), knot (wintering), pintail (wintering), redshank (wintering), redshank (autumn passage), waterbird assemblage.
- 1.4.63. A response from NE, [\[REP2-054\]](#) stated that with regards to the Stour and Orwell SPA and Ramsar site, 'the features for which outstanding concerns remain are unknown as the impacts are yet to be assessed'.
- 1.4.64. This position was queried by the ExA in RIES Question 24 and in response, NE in Table 4 of [\[REP8-100\]](#) stated that it agreed with the Applicant's conclusions of no AEol for the above qualifying features.
- 1.4.65. This is because scheme wide species-specific compensation (if agreed), could meet the required compensation for the seabird assemblage as a whole. In this case, no stand-alone compensation proposal would be required.
- 1.4.66. NE considers that there will be a residual impact to the site in terms of the loss of potential off-site foraging habitat that would need to be taken into account in future in-combination assessment. However, given the nature of the farmland habitats being used by the lapwing from the SPA and the availability of similar habitats in the wider area, in this instance we are able to rule out AEol both alone and in-combination.
- 1.4.67. Based on the information provided by the Applicant and the agreement received from NE, the ExA is satisfied that the Proposed Development would not result in AEol either alone or in-combination to the qualifying features listed above of the Stour and Orwell Estuaries SPA and Ramsar site.
- 1.4.68. The ExA is satisfied on the basis of the information above that AEol on all these sites and their qualifying features can be excluded. The complete details of these sites is provided in Table 2 above.

Benthic ecology

Margate and Long Sands SAC

- 1.4.69. The Applicant concluded a LSE on the sandbanks which are slightly covered by seawater all the time feature of the MLS SAC from the following impact pathways during construction, operation and maintenance, and decommissioning:
- Changes to suspended sediment concentrations and bedload transport;
 - Smothering;
 - Remobilisation of contaminated sediments.
- 1.4.70. A description of the site and feature is provided at section 2.4 of the RIAA Part 2 [\[REP7-013\]](#). It includes confirmation of the updated NE condition assessment published in 2025 (described above under 'conservation objectives'), which confirms that coarse sediment and sand sub-features of the sandbank are in unfavourable condition and that Annex I sandbank has a restore conservation objective.
- 1.4.71. The RIAA Part 2 [\[REP7-013\]](#) concluded no AEoI on the MLS SAC from all LSE pathways assessed from the Proposed Development alone or in-combination with other projects and plans.
- 1.4.72. NE [\[RR-243\]](#) raised several concerns about the Applicant's assessment, which meant that it could not initially advise the exclusion of AEoI of MLS SAC but stated that these could potentially be resolved subject to updated information, modelling and assessment. These matters are discussed below.

Overarching matter – hydrodynamic and dispersion modelling

- 1.4.73. To address several of NE's concerns about the potential impacts to sediment transport processes and benthic ecology, the Applicant undertook hydrodynamic and dispersion modelling. It submitted a Hydrodynamic and Dispersion Modelling (HDM) Report [\[REP4-040\]](#), together with Results Interpretation [\[REP4-042\]](#) at D4. The HDM Report presented a numerical study to predict potential change of hydrodynamics and the extent of suspended sediment plume and deposition caused by construction of the Proposed Development. The hydrodynamic model was calibrated and validated using measured water level and current speed data obtained from British Oceanographic Data Centre (BODC). The dispersion model was initially run to simulate dispersion of sediment plumes arising from levelling, trenching, dredging and drilling activities. Table 6.1 of [\[REP4-040\]](#) lists the modelled activities for which suspended sediment would likely be released into the water column. Tables 6.2 to 6.6 present sediment properties of the seabed, including settling velocity and critical bed shear stress for each sediment type modelled, and sediment particle sizes for each modelling zone. Tables 6.7 and 6.8 summarise construction methods, duration and sediment release rates used for each construction activity modelled.
- 1.4.74. In response to comments from NE [\[REP5-104\]](#) [\[REP5-105\]](#) [\[REP5-109\]](#) [\[REP5-110\]](#) and to reflect additional commitments made in respect of mitigation (as discussed below), the Applicant submitted updated iterations of the modelling at D6 [\[REP6-053\]](#) and D7 [\[REP7-041\]](#). The Interpretation Report was not updated.
- 1.4.75. Key updates to the modelling of relevance to the MLS SAC included:
- In [\[REP6-053\]](#), an additional hydrodynamic scenario for cumulative effects considering all proposed and constructed OWF (section 5) and sediment

dispersal model simulations for dredging at the pilot boarding area (simulation 13, section 6.16);

- In [\[REP7-041\]](#), an additional hydrodynamic scenario with 3 lengths of cable protection near the MLS SAC (scenario 2 in section 5), and additional simulations for: a) sandwave levelling using mass flow excavation (MFE) to facilitate cable installation near the MLS SAC with sediment released on a rising tide (simulation 15, sections 6.18 and 7.16), and b) concurrent levelling of sandwaves for installation of export cable, array cable and smaller structures (simulation 16, sections 6.19 and 7.17).

1.4.76. Regarding hydrodynamic change, the HDM Report [\[REP7-041\]](#) concluded that:

- The difference in current speed and bed shear stress between the baseline and additional layout scenario 2 during spring tides and neap tides for peak flood and peak ebb is less than 2% near the MLS SAC;
- In the cumulative scenario, the change in current speed and bed shear stress in most instances would be 0.3% where contours do not overlap between OWF arrays. For the Proposed Development and VEOWF the difference would not exceed 5% for current speed and bed shear stress.

1.4.77. Regarding sediment dispersion, the HDM Report [\[REP7-041\]](#) concluded that:

- Simulation 2 (offshore export cable levelling) showed the peak of suspended sediment concentration (SSC) in relation to the MLS SAC exceeding 100mg/l and reaching levels just below 400mg/l for approximately 1 hour near the seabed (figure 7.4). Figure 7.6 showed total sediment deposition thickness greater than 5cm to occur mainly along the offshore export cable route, outside of the SAC;
- Simulation 2 (offshore export cable trenching) showed the peak of SSC in relation to the MLS SAC as below 25mg/l throughout the water column, and lasting for less than 2 hours (figure 7.10). Figure 7.12 showed all sediment deposition occurring within the export cable corridor and at a thickness of less than 5cm;
- Simulation 15 (offshore export cable levelling near to the MLS SAC) showed that at the southern end of the additional length of sandwave levelling adjacent to the SAC, there is an area of approximately 1.5km² of sediment deposition overlapping the SAC, with deposition values between 5cm and 15cm (figure 7.133). The SSC levels inside the SAC exceed 15 mg/l near the seabed for approximately 2.5 hours with a peak of 3,800 mg/l (figure 7.131);
- Simulation 16 (concurrent levelling of export cable, array cable and smaller structure) reported the same results for deposition values and SSC levels at the southern end adjacent to the MLS SAC as simulation 15 (figures 7.141 and 7.136 respectively);
- Interpretation of the modelling in [\[REP4-042\]](#) demonstrated that worst case disturbance along the export cable corridor would persist for up to 17 hours before depositing to form a layer on the seabed but under existing conditions sediment would be readily re-mobilised and reduce thickness to zero.

1.4.78. NE queried [\[REP5-104\]](#) if the model resolution was sufficient to inform the assessment. The Applicant [\[REP6-059\]](#) considered the modelling resolution of 0.1km grid along the offshore cable corridor was appropriate and consistent with the approach on other OWFs.

1.4.79. At close of Examination, NE [\[REP8-096\]](#) [\[REP8-097\]](#) did not record any outstanding concerns about the modelling in [\[REP7-041\]](#) related to the MLS SAC assessment.

- 1.4.80. Based on the information submitted to the Examination, the ExA is satisfied that the HDM Report [\[REP7-041\]](#) is an appropriate basis from which to undertake assessment of AEoI to the MLS SAC.

Overarching matter – parameters used in the assessment of seabed effects

Activities associated with the array area

- 1.4.81. The RIAA Part 2 [\[REP7-013\]](#), paragraph 13] stated that the array area is circa 11km from the MLS SAC at the closest point. ES Chapter 8 [\[APP-022\]](#) and the findings of the HDM Report [\[REP7-041\]](#) show that suspended sediment and deposition from the array area activities such as levelling, trenching, dredging and drilling (including levelling of sandwaves for array cable installation, which is stated to result in the largest plume and highest SSC) would return to ambient levels before reaching the SAC. As such, the Applicant stated that there was no pathway for LSE to Annex I sandbank of the SAC from the array area and the WCS set out in the RIAA Part 2 relates only to the offshore export cable corridor.
- 1.4.82. In its RR, NE [\[RR-243\]](#) did not dispute the Applicant's conclusion of no LSE pathway from the construction activities at the array described above. In the context of the EIA, NE did raise concerns about the proposed use of the whole Order limits as a disposal location, and the MDS and WCS for sediment disposal, including from construction activities associated with the array area. In its comments on the Outline Sediment Disposal Management Plan (oSDMP) [\[REP4-038\]](#), NE [\[REP5-105\]](#) noted that the volume of material to be disposed in the array area was up to 4 times more than previously stated. NE was mainly concerned about impacts to the Kentish Knock East MCZ but advised that the mitigation proposed by the Applicant may not be sufficient to avoid AEoI of the MLS SAC arising from use of the whole Order limits for sediment disposal. The Applicant [\[REP6-059\]](#) stated that assessment of revised disposal volumes was provided in the HDM Report [\[REP7-041\]](#), which showed no change to the conclusion. NE [\[REP8-099\]](#) retained some concerns about sediment disposal but for the MLS SAC these related to activities associated with the offshore export cable corridor as discussed below. NE did not raise any other concerns about impact pathways to the MLS SAC from activities associated with the array area.
- 1.4.83. Based on the information submitted to the examination, the ExA is satisfied that there are no LSE pathways to the MLS SAC from activities associated with the array area during construction, operation and decommissioning.

Sediment deposition, seabed mobility and sandwave recovery

- 1.4.84. NE [\[RR-243\]](#) stated there was uncertainty in the parameters used for modelling and assessment of sediment deposition during construction, seabed mobility and erosion and sandwave recovery. NE also noted that the Applicant proposed the whole order limits (offshore) for sediment disposal but did not agree with the impact assessment that informed site characterisation for the purpose of defining sediment disposal areas. It advised that the Site Characterisation Report [\[APP-261\]](#) should be updated and that further agreement was needed on the MDS and WCS.
- 1.4.85. The Applicant [\[REP3-045\]](#) provided analysis of seabed and bedform mobility based on its bathymetric surveys and interpretation of bedform geology. The Applicant did not agree that removal or modification of sandwaves could interfere with sediment transport due to failure of sandwaves to recover. It stated that their dynamic nature means direct changes to the seabed were likely to recover over short periods due to natural sediment pathways. It contended that the large size of sandwaves improves

ability to recover quickly, as supported by a review of the evidence base at Race Bank and Haisborough, Hammond and Winterton (RBHHW) SAC, which it summarised in its submission. It estimated recovery at a few days to 1 year from cable trenching and seabed levelling and stated that sediment transport processes operated at a much larger scale and would not be disrupted.

- 1.4.86. NE [\[REP4-058\]](#) advised that the evidence from RBHHW SAC showed that a trajectory towards recovery but not full recovery. It remained concerned that the Offshore In-Principle Monitoring Plan (OIPMP) [\[APP-245\]](#) did not provide specific details on the scope, method and programme for monitoring of sandwave recovery, and advised that sufficient evidence would need to be gathered pre- and post-construction to validate predictions of sandwave recovery. Matters relating to the OIPMP are discussed under the heading 'Mitigation and monitoring' below.
- 1.4.87. NE [\[REP5-104\]](#) requested clarification on WCS sediment disposal impacts near the MLS SAC, and clarified [\[REP5-110, Q10.0.11\]](#) in response to the ExA [\[PD-013\]](#) that the WCS for secondary impacts needs to be identified, quantified and evaluated in an ecological context. It [\[REP5-105\]](#) asked for predicted pressures from elevated sediment deposition to be presented using contours relevant to Marine Evidence based Sensitivity Assessment (MarESA) thresholds.
- 1.4.88. The Applicant [\[REP6-059\]](#) confirmed that the HDM Report [\[REP7-041\]](#) considered the MarESA benchmark for light deposition. The Applicant [\[REP7-051, Q10.0.11\]](#) [\[REP7-054\]](#) stated that the Report is based on sediment deposition of 5cm, which is the MarESA benchmark for light smothering. The maps of sediment deposition within the Report are therefore contours showing the predicted pressures from elevated sediment deposition relevant to the MarESA threshold.
- 1.4.89. An additional simulation for dredging at the pilot boarding area in the export cable corridor in [\[REP7-041\]](#) showed that suspended sediment concentrations would be below 20mg/l and last no longer than 2 hours.
- 1.4.90. Responding to the ExA's request [\[PD-013\]](#) for comment on the Applicant's proposal to dispose of material anywhere in the area defined on Figure 2-1 of the oSDMP, NE [\[REP5-110\]](#) referred to [\[REP5-104\]](#), where it stated that modelling had not considered sediment dispersion near the MLS SAC from disposal within the export cable corridor disposal site and requested clarification of the WCS for plume dispersion and associated deposition. NE [\[REP5-109\]](#) [\[REP6-089\]](#) requested an updated assessment based on increased disposal volumes. The modelling was further updated in [\[REP7-041\]](#) as described above under 'overarching matter – hydrodynamic and dispersion modelling.'
- 1.4.91. By close of examination, NE [\[REP8-096\]](#) advised that the modelling demonstrated that WCS for deposition at the MLS SAC due to construction, including concurrent activities, is 0.15m thickness over an area of 1.5km², which it stated was likely to represent a negligible change to seabed level and morphology. It recorded this matter as resolved.
- 1.4.92. NE [\[REP8-097\]](#) [\[REP8-099\]](#) advised that the HDM Report [\[REP7-041\]](#) had confirmed and clarified the WCS sediment deposition parameters, with cumulative impacts included in the modelling, and considered this matter to be resolved.
- 1.4.93. In response to the ExA's [\[PD-013\]](#) request for clarification as to why the modelling did not consider disposal activities related to the export cable corridor, the Applicant [\[REP5-054, Q10.0.11\]](#) stated that the model used MFE. It stated that the design

envelope includes disposal along the export cable corridor, but effects would be less than MFE. The Applicant [REP6-059] stated that MFE would not require disposal, as sediment is levelled by blasting the seabed with seawater. It updated the RIAA Part 2 [REP7-013] to confirm that MFE is the WCS for cable installation in terms of sediment dispersion and smothering, and this was used in the dispersion modelling [REP7-041].

- 1.4.94. The Applicant submitted an updated Site Characterisation Report [REP4-013] [REP7-033], which amongst other matters included updates to reflect the modelling in [REP7-041] and removal of gravity-based system foundations from the design envelope, which the Applicant stated [REP4-041] resulted in a reduced seabed footprint. NE [REP5-105] stated that it had no further comments to make on the Site Characterisation Report alone.

Offshore export cable protection and scour prevention

- 1.4.95. NE [RR-243] initially raised concerns about the MDS and WCS for cable protection adjacent to the MLS SAC. It stated that there was insufficient detail on placement of additional cable and/ or scour protection over the operational life of the Proposed Development and sought clarity on how the regulator would know the MDS was not exceeded. NE also advised that effects could be further reduced through use of cable protection other than rock protection. It requested consideration of more readily removable cable protection, with options in an outline decommissioning plan that commits to removal of all surface laid infrastructure.
- 1.4.96. The RIAA Part 2 [APP-175, Table 2.2] specified the WCS for seabed effects in the offshore cable corridor, including from permanent or long-term habitat loss due to the presence of cable protection. It stated that there would be up to 12.5km of cable protection based on 10% of the export cable length, which the Applicant stated [REP1-044] was comparable to the value used on other OWFs. A maximum width of 6m for cable protection was assumed. This resulted in a WCS of 75,240m² of cable protection, which was also the maximum seabed habitat loss from cable protection. These values are consistent with the maximum length of cable and area of cable protection specified in requirement 2(2) and Condition 12 of the Transmission Assets DML (Schedule 9 of the dDCO [REP8-005]). The Applicant confirmed [REP8-035, RIES Q9] that the authorised works must not exceed these parameters. Details of the volume and area of cable protection for each cable crossing and proposals for monitoring of offshore cables and protection during the Proposed Development's operational lifetime are also required through Condition 22(1)(h) of the Transmission Assets DML.
- 1.4.97. In response to NE's concerns, the Applicant also committed to further mitigation in the form of a 150m buffer from the MLS SAC to the closest placement of cable protection, which meant there would be no direct habitat loss in the SAC. It proposed to secure the buffer through insertion of a new Condition 36 in the Transmission Assets DML (Schedule 9 of the dDCO [REP8-005]). It updated the RIAA Part 2 [REP7-013] to incorporate this commitment.
- 1.4.98. The Applicant [REP1-044] reiterated that burial would be the primary means of protection. Key areas that might need cable protection were identified as locations of outcropping (located away from the MLS SAC based on geophysical surveys), cable crossings (the closest being Neuconnect, circa 200m southeast of the SAC) and due to unforeseen incidents, such as with vessels. The Applicant stated that the WCS was based on the full quantum of cable protection allowed within the dDCO parameters [REP8-005] being placed, and deployment restricted to within 10 years

of construction (secured in Condition 35 of the Transmission Assets DML (Schedule 9 of the dDCO). Its conclusions would be unaffected by cable protection location as ramping would occur, with sediment accumulating to protrusion height before being transported by bedload processes. As a worst-case, with cable protection at 1.4m high and a 30-degree angle of repose, the ramp footprint width would be 2.5m.

- 1.4.99. Regarding additional cable protection during the lifetime, the Applicant [\[REP1-044\]](#) stated that evidence shows the seabed is moving and as such the amount of cable burial is a challenge to predict but 4% is based on experience of other OWFs.
- 1.4.100. In response to a request from the ExA [\[PD-009\]](#) to explain how parameters were generated and confirm the anticipated number of cable crossings, the Applicant [\[REP2-020, Q1.2.3\]](#) provided further detail and stated its approach was in line with other OWFs including Sheringham and Dudgeon Extension Projects (SADEP). The number and location of proposed cable crossing locations were shown on the Export Cable Crossing Zone Plan [\[REP1-059\]](#). The WCS for cable protection included cable crossings.
- 1.4.101. NE [\[REP5-104\]](#) noted that the Applicant's updated HDM Report [\[REP4-040\]](#) used an indicative cable protection length of 400m adjacent to the MLS SAC and sought clarification if this was the WCS used. NE [\[REP7-086\]](#) stated that this would help inform its understanding of the potential for cable protection to modify sediment transport processes near to the MLS SAC. If it were not possible to update modelling during examination, NE advised that a commitment to only place cable protection within the modelled 400m section could resolve its concerns about AEoI from sediment transport process change instead.
- 1.4.102. NE [\[REP5-110\]](#) stated that if further interpretation of the Applicant's modelling demonstrated effect pathways from placement of scour prevention or cable protection, without a commitment to remove it and evidence to provide sufficient certainty that removal could be achieved, it would consider there to be a lasting impact that could hinder the conservation objectives of the SAC. It did not change its advice at D6 [\[REP6-089\]](#).
- 1.4.103. The Applicant stated [\[REP8-035, RIES Q9\]](#) that its updated HDM Report [\[REP7-041\]](#) included modelling of cable protection along the full length of the export cable corridor adjacent to the MLS SAC (with the 150m buffer). The parameters used (scenario 2 in section 5 of [\[REP7-041\]](#)) were specified in Table 5.5, and included the length (6.27km), height above seabed (1.4m), number of cables (2) and distance between cables (50m). It described this is an unlikely and conservative scenario. The updated length of circa 6km was incorporated into the WCS in the RIAA Part 2 [\[REP7-013, Table 2.2 – bedload transport\]](#). The Applicant [\[REP8-035, RIES Q11\]](#) stated that the modelling demonstrated that there would be no discernible indirect effects to the MLS SAC from placement of cable protection.
- 1.4.104. The RIAA Part 2 did not commit to specific cable protection types or consider the limitations of some methods. It stated that cable protection was likely to be left in situ on decommissioning but that an assessment of removal was included where that represented the WCS. The WCS described in ES Chapter 5 [\[APP-019, section 5.5.3.8.4\]](#) stated that a proprietary cable protection system was likely with the possibility of a retrospectively installed secondary cable protection such as rock placement or mattresses, with the exact form dependent on ground conditions and hydrodynamic processes.

- 1.4.105. To progress the matter relating to cable protection types and decommissioning, the ExA [\[PD-013\]](#), Q10.0.12] asked the Applicant to respond to NE and requested NE to clarify its advice on AEol of the MLS SAC in the absence of a commitment to removal at decommissioning.
- 1.4.106. At D4, the Applicant submitted an Outline Cable Specification and Installation Plan (oCSIP) [\[REP4-039\]](#), which stated that cable protection may consist of one or more of the methods in section 4.3, such as rock placement, concrete mattresses or protective aprons. The oCSIP was updated in [\[REP8-047\]](#) to remove protective aprons as a method, and to add polyethylene or steel pipe half shells, geotextile bags with stone, rock, or gravel, and bags of grout, concrete or other substance that cures hard over time, as suitable methods. The RIAA Part 2 [\[REP7-013\]](#), paragraph 18] was updated to include reference to these methods in the WCS description. A final CSIP, informed by the cable burial risk assessment and environmental impacts, would set out the need for, and method of, cable protection. Submission and approval by the MMO in consultation with NE (as ANCB) of a final CSIP is secured through Condition 22(1)(h) of the Transmission Assets DML Schedule 9 of the dDCO [\[REP8-005\]](#).
- 1.4.107. The Applicant [\[REP5-054\]](#) stated that ES Chapter 10 [\[APP-024\]](#) concluded leaving cable protection in situ at decommissioning would not result in significant effects and a commitment to remove it would be disproportionate. It [\[REP6-059\]](#) maintained that an outline decommissioning plan was not necessary, stating this approach was consistent with SADEP and Rampion 2 DCOs. It stated [\[REP8-035\]](#), RIES Q11] that other OWF DCOs included a requirement to decommission cable protection only where it was placed in a SAC or MCZ.
- 1.4.108. By the close of Examination, NE [\[REP7-090\]](#) [\[REP7-092\]](#), Q10.0.04] [\[REP8-096\]](#) [\[REP8-097\]](#) [\[REP8-099\]](#) [\[REP8-100\]](#), RIES Q8] was satisfied that the Applicant's updated modelling [\[REP7-041\]](#) described, and was based on, the WCS for cable protection adjacent to the MLS SAC from the Proposed Development alone and in combination during construction and operation of the Proposed Development.
- 1.4.109. NE nonetheless advised [\[REP8-100\]](#), RIES Q8] that every effort should be made to minimise the amount of cable protection deployed in the marine environment and that due consideration should be given to the nature of cable protection used, with the methods with greatest likelihood of removal at decommissioning being favoured [\[REP8-099\]](#).
- 1.4.110. NE [\[REP8-100\]](#), RIES Q12] referred to the Guidance Notes for Industry for the Decommissioning of Offshore Renewable Energy Installations under the Energy Act 2004, which set an expectation that all structures would be removed at end of life. It noted the UK's Marine Strategy for achieving good environmental status of the wider marine environment, to which the Proposed Development could contribute by returning the seabed to its pre-development status, which would be in line with OSPAR requirements. However, NE accepted that these matters were not directly linked to requirements under The Habitats Regulations and did not form part of a consideration of AEol.

ExA conclusion on the parameters used for assessment of seabed effects

- 1.4.111. The issues raised by NE with the MDS or WCS for seabed effects, including sediment deposition, seabed mobility and sandwave recovery, and cable protection, were considered in detail during the examination as summarised in the RIES [\[PD-020\]](#) and described above. Based on this information, and the advice of NE as the

ANCB that it agrees that the parameters used in the modelling [REP7-041] represent the MDS or WCS, the ExA recommends that the MDS or WCS presented in ES Chapter 5 [APP-019] and the RIAA Part 2 [REP7-013] provides a reasonable and realistic basis for the assessment of AEol to the MLS SAC. The ExA is satisfied that DML conditions in Schedule 9 of the dDCO [REP8-005] would control the placement of cable protection adjacent to the MLS SAC, in terms of location, maximum length and area, and 150m buffer, so that the modelled and assessed MDS could not be exceeded.

- 1.4.112. The ExA is satisfied that this includes a WCS of leaving the cable protection in situ at decommissioning. The ExA is also satisfied that there is a mechanism for NE to comment on the final cable installation and cable protection methods selected through a requirement to consult it before approval of a final CSIP by the MMO, as required by DML Condition 22(1)(h) of Schedule 9 of the dDCO.

Overarching matter – in-combination assessment of cable protection

- 1.4.113. NE [RR-243] [REP5-109] [REP6-089] advised that the RIAA Part 2 [APP-175] in-combination assessments may require an update once further information was provided on cable protection and related secondary impacts within the MLS SAC.
- 1.4.114. The Applicant updated its HDM Report [REP6-053] [REP7-041] to include hydrodynamic modelling of cumulative effects with other proposed and constructed OWFs but stated [REP8-035, RIES Q14] that this was only relevant to the MCZ Assessment [REP7-019]. The RIAA Part 2 [REP7-013] was updated to incorporate the findings of the sediment dispersion modelling (as described below) but no change was made regarding hydrodynamic modelling.
- 1.4.115. NE [REP8-099] recorded this matter as resolved based on the WCS for cable protection being clarified and the updated modelling of the cable protection together with the 150m buffer demonstrating that change to supporting processes and biological communities in the MLS SAC would not occur.
- 1.4.116. For the reasons set out above, the ExA is satisfied that the cable protection parameters used in the modelling [REP7-041] provide a reasonable and realistic basis for the assessment. Based on the evidence submitted and the advice of NE as ANCB, the ExA is satisfied that the Applicant's RIAA Part 2 [REP7-013] has sufficiently assessed in-combination effects arising from placement of cable protection as part of the Proposed Development.

Changes to suspended sediment concentrations (SSC), sediment deposition (smothering) and bedload transport – AEol from the Proposed Development alone or in-combination

- 1.4.117. The RIAA Part 2 [APP-175, section 2.4.3] initially assessed effects from the LSE pathways of SSC and bedload transport during construction, operation and decommissioning of the Proposed Development alone or in-combination. It updated the RIAA Part 2 [REP7-013] to include consideration of smothering from suspended sediment from the Proposed Development alone in response to NE comments. It concluded there would be no AEol based on low sensitivity of benthic communities and change from background level being indistinguishable or not measurable.
- 1.4.118. NE [RR-243] advised that there could be indirect effects from changes to bedload transport and ecological halo effects from cable protection placement, altering the structure and function of Annex I sandbanks. It requested a more detailed assessment that considered the updated MLS SAC condition assessment (as

described above in Section 1.3 conservation objectives), which identified that the feature is unfavourable condition with a restore target. NE also had concerns about potential for AEol from sediment deposition during construction, seabed mobility and erosion and sandwave recovery in the absence of clarification about parameters used in the assessment (as described above) and further modelling.

- 1.4.119. The ExA [PD-020, RIES Q5] sought clarification on which activities within this LSE impact pathway were of concern to NE, and it confirmed [REP8-100, RIES Q1 and Q5] that the ExA's understanding as set out below was correct subject to the addition of ecological implications from predicted sediment deposition:
- Construction – indirect effects from sandwave levelling to facilitate cable installation, including sediment deposition and sandwave recovery;
 - Operation – indirect effects from the presence of cable protection, leading to change in supporting processes (tidal speed and bed shear stresses) resulting in morphological change (scour accretion and sediment character change).
- 1.4.120. The Applicant [REP1-044] pointed to commitments during site selection to avoid the SAC and its additional commitment to a 150m buffer as described above. It maintained there would be no AEol from indirect effects.
- 1.4.121. NE [REP3-059] [REP3-064] welcomed the proposed 150m buffer but advised further evidence was required to demonstrate that cable protection would not modify sediment transport pathways leading to morphological change. It later requested [REP5-105] further evaluation of modelling completed by the Applicant, including for impacts on erosional and depositional processes at the MLS SAC. The MMO [REP6-082] noted but did not comment further on this request.
- 1.4.122. In response, the Applicant submitted modelling [REP4-040], updated to [REP6-053] and [REP7-041] as described above under 'overarching matter – hydrodynamic and dispersion modelling.' It stated that the MLS SAC was remote from the zone of influence on tidal current speeds and bed shear stresses; as such, no pathway exists. The Applicant [REP6-059] stated that the predicted absolute change in bed shear stress was provided in [REP4-041, figures 5.60 to 5.67], which showed change in the SAC as less than 0.05 newtons per square metre (N/m²). The Applicant updated the modelling [REP6-053, figures 5.36 to 5.43] to include baseline absolute bed shear stress. It stated that a change of 0.05N/m² on a baseline of 2N/m² would have no discernible effect on sediment sizes that could be transported.
- 1.4.123. The ExA [PD-013] sought clarification from NE as to whether the modelling [REP4-040] [REP4-042] was sufficient to justify the selection of a 150m buffer to avoid AEol. NE [REP5-110, Q10.0.11] referred to its advice in [REP5-104] [REP5-105] and stated that near-field effects should be evaluated for example cable protection blockage effects on sediment transport at the SAC. NE [REP5-110, Q10.0.12] stated that further interpretation was required to demonstrate cable protection would not modify processes on or near the SAC.
- 1.4.124. The Applicant [REP7-051, Q10.0.4] clarified that the 150m buffer was selected based on engineering review of the feasibility to offer buffers without reducing the ability to meet the project objectives, as set out in [REP7-015]. The Applicant stated that there is no available guidance for indirect effects on sediment habitats but noted NE's standard advice for sediment disposal in proximity to Sabellaria reef is for a 50m buffer, which it considered to be a conservative proxy for the Annex I sandbank of the MLS SAC.

- 1.4.125. The Applicant updated the RIAA Part 2 [REP7-013] to incorporate the results from the Hydrodynamic and Dispersion Modelling Report [REP7-041] (including sediment dispersion from activities along the export cable corridor, inclusive of the 150m buffer commitment (Simulations 15 and 16)). It also assessed smothering from sediment deposition as an additional component of this LSE pathway from the Proposed Development alone but not in-combination.
- 1.4.126. The RIAA Part 2 [REP7-013] continued to conclude no AEol based on the modelling results. Regarding construction, it stated that SSC from seabed trenching of a single cable would be less than 25mg/l within the SAC and would return to ambient levels of 15mg/l within 2 hours. Sediment from the deep water route (DWR) and pilot boarding area dredging would be deposited in the array area and not interact with the SAC. The modelling showed that deposition of sediment could result in 5cm to 15cm of sediment depth in an area of 1.5km² overlapping MLS SAC (0.23% of the total SAC area) but it would naturally be deposited in proximity to the disturbed area and be reworked by prevailing tidal currents. It stated that sediment deposition in the SAC would mostly be in an area that is not Annex I sandbank, with 0.24km² of overlap with Annex I sandbank. It stated that particle size distribution in the offshore cable corridor adjacent to the SAC is predominantly gravel/ cobble that would settle rapidly to the seabed with plume and subsequent deposition being predominantly sand fraction, comparable to the designated feature of the SAC. If levelling of sand waves is required, deposited sediment will be entrained as bedload and sandwaves would reform and continue to be dynamic and mobile. Regarding operation, SSC volumes would be less than during construction, with plumes also being less and no discernible change to seabed level. Any increases in SSC during operation would be short term and temporary. As described above, changes to current speed and bed shear stress would be less than 2% across cable protection in proximity to the MLS SAC and would not extend beyond the offshore export cable corridor.
- 1.4.127. At D7, NE [REP7-092, Q10.0.4] was satisfied the HDM Report [REP7-041] demonstrated that sediment dispersion and subsequent deposition within the MLS SAC would be below MarESA thresholds. It stated [REP8-096] that predicted change in sediment depth from construction activities represented a negligible change to seabed level and morphology and agreed [REP8-097] with the Applicant's conclusions that SSC would not result in an AEol from the Proposed Development alone or in-combination. It advised [REP7-092, Q10.0.4] that sediment deposition impacts from construction are unlikely to result in an AEol of the SAC but raised concerns [REP8-097] [REP8-099] [REP8-100, RIES Q1] about smothering due to sediment deposition during construction, including in-combination where deposition could persist beyond vessel working periods. Matters relating to smothering are discussed further below.
- 1.4.128. Regarding other in-combination effects during construction, NE [REP8-097] advised that it accepted that plumes from installation of cables for other plans or projects would not interact with the Proposed Development based on health and safety restrictions prohibiting simultaneous launch of vessels in the same location.
- 1.4.129. Regarding effects from bedload transport and ecological halo effects during operation, NE [REP8-100, RIES Q10] advised that whilst uncertainties remained with the Applicant's modelling, these did not materially impact determination of the Proposed Development. NE [REP8-096] [REP8-100, RIES Q5 and Q15] confirmed that it no longer held concerns about impacts to the MLS SAC during operation, noting that additional modelling [REP7-041] demonstrated any change to current and bed shear will remain within the offshore export cable corridor. NE [REP8-097] agreed that ecological halo effects would not extend beyond the 150m buffer. It

agreed with the Applicant's conclusion of no AEol for the operational and maintenance phase.

- 1.4.130. On the basis of evidence provided, including the advice of NE as ANCB that AEol can be excluded (aside from smothering, which is addressed separately below), and subject to the proposed mitigation of a 150m buffer being adequately secured and implemented, the ExA is satisfied that this LSE pathway will not result in AEol to the MLS SAC from the Proposed Development alone or in-combination with other plans and projects.

Smothering due to suspended sediment – AEol from the Proposed Development alone or in-combination

- 1.4.131. The RIAA Part 2 [REP7-013, section 2.4.3] assessed smothering effects during construction, operation and decommissioning from the Proposed Development alone. It stated that smothering effects were closely linked to increased SSC (as described above) and concluded no AEol based on disturbed sediment being similar to the MLS SAC sediment composition and low sensitivity of the benthic communities present. It stated that the benthic survey [APP-094] recorded subtidal sand habitat in the northern extent of the SAC (which would be affected by suspended sediment), and that the relevant biotypes used to characterise the sub features present in NE's Advice on Operations were defined as being not sensitive or having low sensitivity to changes in SSC. It stated that no Sabellaria reef was recorded (and that this was not a qualifying feature of the SAC).
- 1.4.132. Whilst the RIAA Part 2 did not include smothering as a separate LSE impact pathway for the Proposed Development in-combination, section 2.4.3.5.1 discussed smothering in the context of increased SSC and concluded no AEol due to the similarity in sediment composition of potential SSC from the zone of influence of projects considered in the in-combination assessment compared to the sediments in the SAC. It stated that the change to the form and function of the Annex I sandbank qualifying feature would still be indistinguishable and that the benthic communities in the SAC are not sensitive to smothering effects.
- 1.4.133. As noted above, NE [REP8-097] [REP8-099] [REP8-100, RIES Q1] raised concerns about potential for AEol of the MLS SAC during construction from smothering due to sediment deposition. Whilst it was satisfied that the HDM Report [REP7-041] was based on the WCS, it had concerns about conflicting information in the modelling and the RIAA Part 2 [REP7-013], noting that the modelling showed sediment deposition of up to 0.15m in areas of the MLS SAC for which the RIAA Part 2 had not considered the ecological implications. NE [REP8-100, RIES Q1] advised that this impact should have been assessed but stated that the risk of an AEol due to construction activities is low. It stated [REP8-097] that the Applicant's conclusion of no AEol was not supported by consideration of ecological implications or sensitivity of species present. Regarding in-combination effects, NE stated [REP8-097] that the assessment did not consider deposition persisting beyond vessel working periods, which could result in greater depths. It advised the Applicant to consider potential for overlapping sediment plumes and associated deposition, and to identify suitable mitigation.
- 1.4.134. In the context of assessment of ecological implications from smothering effects, NE referred to its guidance on small scale habitat loss, set out in Annex 1 of [REP8-097]. The guidance states that NE will usually consider permanent, long-lasting and irreversible loss to be an adverse effect unless it can be clearly demonstrated otherwise. It lists factors that should be considered when assessing if an impact is

likely to be an adverse effect, including the location, duration and scale of the loss in relation to the feature and the feature condition.

- 1.4.135. Due to the timing of NE's comments on this matter in the Examination, the Applicant did not have an opportunity to respond fully but stated in [\[REP8-035\]](#), RIES Q15] with regard to smothering that it had made further mitigation commitments such as a 150m buffer and that its modelling validated the conclusions that there would be no AEol of the MLS SAC.
- 1.4.136. The ExA is satisfied that the RIAA Part 2 [\[REP7-013\]](#) included an assessment of smothering effects due to sediment deposition from the Proposed Development alone and in-combination. Whilst NE's comments about contradictory information between reports are acknowledged, the ExA notes that paragraphs 50 and 55 of the RIAA Part 2 directly refer to the modelling outcome of an approximate overlapping area of 5cm to 15cm of sediment deposition of 1.5km² (equivalent to 0.23% of the total area) of the MLS SAC from concurrent construction activities as part of the assessment.
- 1.4.137. The ExA is content that whilst sediment deposition from the Proposed Development alone could exceed the MarESA threshold of 5cm for light smothering, the overlap with designated Annex I sandbank in the SAC where this might occur is limited to 0.24km² as predicted in the modelling [\[REP7-041\]](#). It also notes the Applicant's evidence that the sandbank sub-features affected are not sensitive, or have low sensitivity to smothering based on NE's advice.
- 1.4.138. The ExA notes the concerns of NE about in-combination effects if sediment deposition continues beyond working vessel working periods. However, we are not aware of any evidence to suggest that this could occur.
- 1.4.139. On the basis of the evidence provided, and noting the advice of NE as ANCB that the risk of AEol from this pathway is low, and could be mitigated to further reduce effects, the ExA is satisfied that this LSE pathway will not result in AEol of the MLS SAC from the Proposed Development alone or in-combination with other plans and projects subject to mitigation being implemented.

Remobilisation of contaminated sediments – AEol from the Proposed Development alone or in-combination

- 1.4.140. The RIAA Part 2 [\[APP-175\]](#), section 2.4.3] assessed effects from this LSE pathway of during construction, operation and decommissioning of the Proposed Development alone or in-combination. It concluded no AEol based on an absence of contaminants at levels of concern (against Cefas Action Levels) recorded during survey of the offshore export cable corridor and subsequent chemical analysis.
- 1.4.141. NE [\[RR-243\]](#) did not dispute the Applicant's conclusions of no AEol from this LSE pathway [\[REP7-013\]](#) from the Proposed Development alone or in-combination. In response to the RIES [\[PD-020\]](#), NE [\[REP8-100\]](#), RIES Q15] confirmed that it agreed no AEol from this LSE pathway during all phases of the Proposed Development.
- 1.4.142. The ExA is satisfied that this LSE pathway will not result in AEol to the European site from the Proposed Development alone or in-combination with other plans and projects based on the proposed mitigation being implemented.

Mitigation and monitoring

- 1.4.143. The Applicant proposed mitigation to avoid and reduce impacts to the MLS SAC from works in the offshore export cable corridor, including works related to cable installation and protection. Embedded measures are set out in the RIAA Part 2 [REP7-013, Table 2.3] and include a minimum buffer of 150m between the MLS SAC and installation of offshore cables and cable protection, secured by Transmission Assets DML Condition 36 in the dDCO [REP8-005, Schedule 9].
- 1.4.144. Measures were also described in the Schedule of Mitigation [REP7-004]. NE [RR-243] raised concerns about use of terms such as 'where practicable' in this document and the ExA [PD-013] sought assurance from the Applicant that the mitigation proposed to avoid AEol to the MLS SAC would not be rendered ineffective because of flexibility in the Schedule of Mitigation. The Applicant [REP5-054, Q10.012] stated that direct overlap of the SAC is avoided through the order limits and the further 150m buffer is secured as described above.
- 1.4.145. As NE [REP5-109] [REP6-089] continued to show this matter as unresolved, the ExA [PD-020, RIES Q16] sought confirmation that it was satisfied mitigation was adequately secured. NE [REP8-100] noted that the Applicant's Cable Statement [REP4-015] continued to state that up to 2 export cable circuits would be buried below the seabed where practicable. It advised that the mitigation should go further to include application of the re-burial hierarchy (a commitment to attempt cable reburial as a first option, before use of external cable protection in order to reduce the amount used), and a commitment to minimise amounts of external cable protection and to avoid the use of cable protection within or adjacent to marine protected areas (MPA) where there may be secondary pathways of effect. NE noted that these mitigation approaches are in NE and JNCC published guidance on nature conservation considerations and environmental best practices for subsea cables in English inshore and UK offshore waters (2022).
- 1.4.146. Due to the timing of NE's comments on re-burial hierarchy in the examination, the Applicant did not have an opportunity to respond fully but stated in [REP8-035, RIES Q16] that it understood NE's concerns were addressed and that AEol of the MLS SAC could be ruled out. The oCSIP [REP8-047, section 4.3] specifies that cable burial is the preferred method of installation and additional cable protection will only be used as a contingency where burial is not appropriate or achievable. It commits to defining a target burial depth post-consent. section 4.4 of the oCSIP states that details of all cable crossings, which may also require cable protection, would be set out in the final CSIP. As described above, a final CSIP is secured through the dDCO [REP8-005]).
- 1.4.147. The Applicant proposed monitoring to validate its conclusion of no AEol to the MLS SAC from indirect effects including from sandwave levelling, cable protection or scour. Table 5-2 of the OIPMP [REP8-009] set outs its commitments, which included provision for surveys and a mechanism to agree adaptive management with the MMO in consultation with the ANCB where survey results show a significant effect. Table 5-2 referred to more detail in section 5.3 of the OIPMP. Table 5-1 in section 5.3 specified that targeted surveys in the offshore export cable corridor using full seabed coverage swath-bathymetric data would be carried out for up to 3 years post-construction to monitor sandwave recovery. It specified that targeted geophysical and bathymetric surveys would be carried out to monitor effects if cable protection is deployed in proximity to the SAC. Guiding principles for adaptive management are set out in section 3 of the OIPMP.

- 1.4.148. Transmission Assets DML Conditions 22(1)(f) and (j), 26, 27 and 28 of the dDCO [REP8-005, Schedule 9] secure details of pre-construction monitoring surveys, construction monitoring and post-construction monitoring and reporting, as well as an offshore monitoring plan for the relevant stage in accordance with outline OIPMP for the transmission assets, stating that these must be approved in writing by the MMO in consultation with the relevant statutory nature conservation body (SNCB).
- 1.4.149. The ExA [PD-020] sought confirmation from NE as to whether it was satisfied that its concerns about the WCS for sediment deposition, seabed mobility and sandwave recovery were addressed by the Applicant's monitoring commitments in the OIPMP.
- 1.4.150. NE [REP8-100, RIES Q6] confirmed that its remaining concerns related to sediment deposition during construction and matters set out in its advice in [REP8-096] [REP8-097] on the OIPMP. NE noted that the commitments in Table 5-2 of the OIPMP [REP8-009] were not aligned with the related monitoring proposed in Table 5-1. It advised that if monitoring related to sandwave levelling, cable protection or scour within the order limits in proximity to MLS SAC shows significant changes to physical processes and physical environment then monitoring of the benthic community should be undertaken. It noted [REP8-097] that monitoring was not secured through the dDCO and advised that it should be appropriately secured.
- 1.4.151. In [REP8-099], NE stated that the OIPMP [REP8-009] included a commitment to review evidence of sandwave recovery in targeted locations subject to sandwave levelling to validate the conclusions in the RIAA Part 2 [REP7-013] and recorded this matter as resolved.
- 1.4.152. The Applicant [REP8-035, RIES Q6] also responded to the ExA's question, stating that if its monitoring showed significant change to physical processes, monitoring of the benthic community would be carried out but otherwise wider monitoring would be disproportionate. The Applicant [REP8-035, RIES Q11] also stated that if monitoring showed a greater impact than assessed in the RIAA Part 2 [REP7-013], an adaptive management approach would be reviewed in consultation with the MMO and ANCB, which could include publication of the monitoring results, further monitoring and remedial action or mitigation.
- 1.4.153. Based on the evidence provided, and the advice of NE as ANCB [REP8-099], the ExA is satisfied that the 150m buffer between the cable installation and protection, and the MLS SAC, is appropriate to avoid AEoI of the MLS SAC and adequately secured in the Transmission Assets DML [REP8-005, Schedule 9]. The ExA notes NE's comments regarding a reburial hierarchy but is satisfied that the provisions in the oCSIP [REP8-047, section 4.3] provide a commitment that burial is the primary method of cable protection.
- 1.4.154. The oCSIP is in outline and a final version would be submitted for approval under Transmission Asset DML Condition 22(1)(h) [REP8-005], Schedule 9 by the MMO in consultation with NE as the ANCB. This would provide an opportunity to further detail steps to achieve burial before considering placement of cable protection in proximity to the MLS SAC (beyond the 150m buffer).
- 1.4.155. NE's advice [REP8-096] at close of examination was that the OIPMP [REP8-009] should commit to monitoring of the benthic community at MLS SAC where monitoring of physical process change identifies significant effects, and this should be captured in Table 5-1 of the OIPMP. NE had outstanding concerns about the potential ecological implications of smothering from sediment deposition to benthic communities but considered the risk of AEoI was low. The ExA notes that the

OIPMP is also in outline and a final version would be submitted for approval by the MMO in consultation with NE as the ANCB in accordance with the Transmission Asset DML Conditions. The ExA is satisfied that commitments to monitoring could be clarified as needed through this process. The ExA recommends that the mitigation and monitoring required to avoid AEol of the MLS SAC is adequately secured through the dDCO.

ExA conclusions

- 1.4.156. Overall for all above circumstances and reasons addressed in paragraphs 1.4.68 to 1.4.154 combined the ExA finds that an AEol MLS SAC can be reasonably ruled out alone or in-combination with other projects.

Marine mammal species

- 1.4.157. The Applicant [[APP-176](#)] concluded LSE on the harbour porpoise feature of the SNS SAC, the grey seal feature of the Humber Estuary SAC and Ramsar site and the harbour seal feature of The Wash and North Norfolk Coast SAC. The Applicant further assessed these sites and concluded there would be no AEol on the Humber Estuary SAC and Ramsar site or the Wash and North Norfolk Coast SAC.
- 1.4.158. With regards to the Humber Estuary SAC and Ramsar site, the Applicant considered that there would be no direct effect from construction, operation, maintenance and decommissioning due to the Proposed Development being located at its closest point 230km from the Humber Estuary SAC and Ramsar site. However, the Applicant considered the potential for effects of foraging grey seal from the Humber Estuary SAC in the vicinity of the Proposed Development. Effects from underwater noise, disturbance and barrier effects from noise and construction vessels, risk of collision with construction vessels and changes to water quality were considered. The Applicant concluded there would be no AEol from these pathways to the grey seal feature of the Humber Estuary SAC and Ramsar site.
- 1.4.159. With regards to The Wash and North Norfolk Coast SAC, the Applicant considers effects from auditory injury and disturbance or behavioural impacts from underwater noise during piling, noise, disturbance from, and collision with construction vessels and changes to water quality and prey resource. The Applicant concluded there would be no AEol from these pathways to the harbour seal feature of The Wash and North Norfolk Coast SAC.
- 1.4.160. NE agreed with conclusions of no AEol for the Humber Estuary SAC and Ramsar site and The Wash and North Norfolk Coast SAC. These sites are not discussed further in this Appendix.

Overarching Issue – assessment methodology

- 1.4.161. A number of methodological issues were raised by NE [[RR-243](#)] and MMO [[RR-216](#)]. Several matters have now been resolved as is evident in NE's Risk and Issues Log [[REP8-099](#)] and the SoCG with MMO [[REP8-064](#)].
- 1.4.162. Discussion was raised in relation to the reliance on the use and conclusions of iPCoD modelling provided in the Applicant's Further Information Regarding Marine mammals [[REP1-057](#)]. NE [[RR-243](#)] did not agree with the project alone assessment of impacts from piling and recommended that the Applicant update the iPCoD modelling results provided in RIAA Part 3 [[APP-176](#)]. It stated that impact

significance should be presented on each approach taken to assessing disturbance, not just based on iPCoD modelling.

- 1.4.163. The Applicant clarified [\[REP5-055\]](#) and [\[REP5-069\]](#) that all the different approaches used (for example, iPCoD, Effective Deterrent Range (EDR), and dose response) for the marine mammal assessment had been previously presented for the project-alone impacts in the Further Information Regarding Marine Mammals [\[REP1-057\]](#). However, the Applicant [\[REP5-069\]](#) included updates to the dose response (Table 2.3) which were not previously included in [\[REP1-057\]](#). It also included Table 2.4 which sums up the outcomes of the iPCoD and dose response curve (DRC) assessments.
- 1.4.164. The Applicant [\[REP5-054\]](#) confirmed that the in-combination assessment was updated to include the EDR approach for assessing the SNS SAC for harbour porpoise, and that this is included within Further Information Regarding Marine Mammals [\[REP1-057\]](#).
- 1.4.165. This additional information was welcomed by NE [\[REP6-086\]](#) who also confirmed that after reading several iPCoD modelling reports, it considered that iPCoD modelling does not hold much value when assessing the impacts of a single proposal. Instead, it stated that in such circumstances, the dose response curve assessment should be the primary assessment method. NE advised that given the limitations of iPCoD modelling, as well as the outcomes of the DRC assessment, NAS is necessary.
- 1.4.166. The ExA is satisfied that based on the submissions from the Applicant and NE, the Applicant's assessment has been carried out according to best practice and the best available scientific data.

Mitigation measures – Passive Acoustic Monitoring (PAM) in respect of UXO clearance

- 1.4.167. In its RR, NE [\[RR-243\]](#) stated that PAM is considered as a potential mitigation measure for UXO clearance. NE stated that acoustic monitoring should be undertaken alongside visual monitoring during clearance of UXO and stated that this should be included in the MMMP as a standard mitigation measure.
- 1.4.168. In response, the Applicant provided further information regarding marine mammals [\[REP1-057\]](#), together with its response to NE's RR [\[REP1-044\]](#). The Applicant [\[REP1-044\]](#) stated it has committed to the use of PAM for UXO clearance in instances where there are unfavourable conditions such as sea state three or less. The Applicant states that the Draft MMMP would be amended to make clear the Applicant's commitments that UXO clearance would be performed during suitable conditions for both Marine Mammal Observers (MMObs) and PAM operators. The Applicant stated this change would be included in the Final MMMP post consent.
- 1.4.169. At D8, NE [\[REP8-100\]](#) stated that its advice remains that PAM is a required monitoring tool for UXO clearance especially given that the Proposed Development is within a SAC designated for harbour porpoise. NE sought for the following wording to be included in the main draft MMMP to ensure that the monitoring area would be adequately monitored:

"Alternative monitoring strategies will be considered in the final MMMP post-consent. MMO and PAM techniques are developing and changing, and technologies are already available including night vision binoculars and cameras that are already

regularly used for research and mitigation purposes, and alternative visual strategies could be considered. All options will be considered, and this will be developed in consultation with relevant stakeholders, including Natural England, post-consent."

- 1.4.170. At D8, the Applicant submitted an amended version of the draft MMMP which includes the wording set out above (paragraph 62 of [\[REP8-030\]](#)).
- 1.4.171. The draft MMMP has also been amended from "*the use of PAM is unlikely to be required*" to "*the use of PAM will be used in conjunction with Marine Mammals Observers for UXO clearance mitigation procedures*" (paragraph 1.4.3.2.2 of [\[REP8-030\]](#)).
- 1.4.172. On the basis of evidence provided, and the final wording as set out in the draft MMMP submitted at D8 [\[REP8-030\]](#) the ExA is satisfied that sufficient mitigation has been included.

Southern North Sea SAC

- 1.4.173. The Applicant's RIAA [\[APP-176\]](#) provided an assessment which addressed the potential for AEol to the harbour porpoise qualifying feature of the SNS SAC resulting from:

- Permanent auditory injury from underwater noise;
- Significant disturbance and displacement as a result of increased underwater noise levels;
- Potential increased collision risk with vessels;
- Changes in water quality and prey availability.

Management of effects from noise

- 1.4.174. NE [\[REP4-067\]](#) advised it could not agree with the Applicant's conclusion of no AEol in-combination from underwater noise without a commitment to include mitigation such as a Noise Abatement System (NAS). NE and Essex Wildlife Trust (EWT) [\[REP4-055\]](#) considered that the Applicant should commit to NAS in the Draft MMMP and SIP. NE states that NAS is still referred to as 'additional mitigation' within the MMMP. NE maintained its position that NAS should not be considered as an additional mitigation but the integral mitigation strategy for reduction of the noise at source in line with the latest Defra Policy (2025). NE advised that the Applicant reflect this in the MMMP and SIP. The ExA (Q10.0.3 [\[PD-012\]](#)) asked the Applicant if it intended to further adapt its existing submissions to the most recent national/technical advice and if it is satisfied it can demonstrate best practice in adequately managing impacts/effects.
- 1.4.175. The Applicant responded [\[REP5-057\]](#) to say it had updated the draft MMMP and outline SIP to include clarification regarding NAS. The D5 Outline SIP [\[REP5-014\]](#) and draft MMMP [\[REP5-012\]](#) included the following additional wording in respect of NAS:

"If it is deemed necessary to apply noise reduction measures and/or a NAS for piled foundations, in order to comply with Government policy on underwater sound, or it is identified (during discussions with the MMO on the final plan following the final scheme design freeze post consent) as necessary mitigation to manage any predicted significant effects due to underwater sound from piling, then North Falls

will be in a position (from a programme execution perspective) to implement such measures”

1.4.176. NE [\[REP8-100\]](#) is not content with the wording “if deemed necessary”, stating that this was not in line with Defra’s noise policy (2025) which requires that noise reduction methods are considered as the default in all English waters and should be factored in to planning of all piling activities and related environmental assessments.

1.4.177. At the close of the examination NE remained of the view that NAS is required in order to mitigate in-combination effects.

Timescales of approval

1.4.178. NE [\[REP8-099\]](#) also noted that in the Outline SIP for SNC SAC [\[REP5-014\]](#), the final SIP would be submitted for approval approximately nine to six months prior to the commencement of pile driving. NE sought confirmation from the Applicant as to whether this change was made in respect of NE’s concerns that the approach for implementing SIPs for piling impacts to the SNS SAC from OWF does not allow sufficient time for mitigation methods such as NAS to be procured by the Applicant prior to construction.

1.4.179. At D7, MMO [\[REP7-080\]](#) provided the following suggested wording to be included in the DML - Condition 22(1)(g) which had been accepted by NE and other developers during examination:

“.....in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol (in accordance with the outline marine mammal mitigation protocol), the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant SNCB and which must include details of noise reduction methods through project design (primary measures) and/or, deployment of noise mitigation systems or noise abatement systems (secondary measures) that would be utilised to manage sounds from those piling activities and such protocol must include full details and justification for the mitigation chosen or excluded for deployment.....”.

1.4.180. The MMO believes this could alleviate concern and provides commitment that the document will include these requirements post consent.

1.4.181. The ExA queried [\[PD-012\]](#) the SIP Condition in the draft DML, which was advised by NE to be no sooner than nine months and no later than six months owing to in-combination impacts.

1.4.182. The Applicant [\[REP5-054\]](#) stated in response that Table 1.2 of the Outline SIP (latest version [\[REP5-015\]](#)) provides an indicative programme for consultation on the Outline SIP around 12 months prior to foundation installation, and submission of the final SIP to the MMO for written approval by six months prior to installation. The consultation process for the SIP would ensure it is not submitted too early; therefore, in the Applicant’s view, timings are not required in the draft DCO. The Applicant’s position is that there are already adequate controls in place and the Applicant understands this matter is agreed with the MMO.

1.4.183. The MMO [\[REP5-098\]](#) noted in its D4 submission [\[REP4-079\]](#) that there is control to avoid approving a SIP document too early. The MMO explained that as part of the SIP process, it generally does a call for information eight to six months prior to the summer season and therefore this would fall into the timescale NE has requested.

The MMO stated that it may occasionally receive or request information earlier than this, but it would be unable to discharge the full document prior to the call for information and review of the in-combination impact.

- 1.4.184. The Applicant amended the wording in Table 1.2 of the Outline SIP [\[REP5-015\]](#) to reflect the agreed timeframe for the final SIP, this states that the final SIP would be submitted for approval “approximately nine months to six months prior to the commencement of pile driving for written approval from the MMO prior to any piling works commencing.”. MMO [\[REP7-080\]](#) noted that this had been updated by the Applicant in [\[REP5-015\]](#).

Vessel collision

- 1.4.185. With regard to increased risk of collision with vessels during the construction, the RIAA [\[APP-176\]](#) stated that due to harbour porpoises being small and highly mobile with a response of avoidance to vessel noise, they are largely expected to avoid vessels and therefore avoid potential vessel collisions. NE [\[RR-243\]](#) considered it was unclear how the number of marine mammals at risk of vessel collision had been calculated. The Applicant [\[REP1-057\]](#) explained that there is no agreed or recommended approach to assessing potential risk from vessel collision, however it provided justification of its approach and Table 2.3 presents calculations of the predicted number of marine mammals at risk of collision with construction vessels from the Proposed Development. Table 2.4 presents calculations of the predicted number of marine mammals at risk of collision with vessels during operation and maintenance. NE’s Risk and Issues Log at D5, [\[REP5-109\]](#) showed this matter as being resolved.

Prey availability

- 1.4.186. The Applicant explained [\[APP-176\]](#) that changes to prey populations may result from physical disturbance, loss of seabed, increased sediment. The Applicant states that these impacts are anticipated to be highly localised and would not necessarily result in prey leaving a site. The Applicant concluded that as the footprint of the Proposed Development is relatively small in comparison to the entire area of the SNS SAC, effects from changes in prey availability would not result in AEoI in relation to the conservation objectives of the harbour porpoise qualifying feature of SNS SAC. The matter of prey availability was not raised as a concern by NE or MMO.

Water quality

- 1.4.187. The Applicant identified the various reasons for changes to water quality during the construction phase which includes increased suspended sediment, or contamination. The Applicant explains that these effects would be managed through good practice techniques which would be managed through the Project Environmental Management Plan (PEMP) which would be based on the outline PEMP [\[REP6-027\]](#) and agreed with the MMO.
- 1.4.188. On the basis of evidence provided, ExA is satisfied that AEoI from all other LSE pathways assessed (other than underwater noise) can be excluded. With regards to underwater noise, the ExA is satisfied that suitable mitigation can be implemented to avoid AEoI to the harbour porpoise qualifying feature of SNS SAC from the Proposed Development alone or in-combination with other plans and projects.

- 1.4.189. The final SNS SAC SIP provides a platform for the Applicant to demonstrate to NE that it has utilised best endeavours to deliver noise reduction associated with piling. This does not preclude the implementation of NAS if evidence shows this to be necessary
- 1.4.190. The Applicant does not consider it necessary to condition NAS in the DML, as the MMMP is appropriately secured in the DML and must accord with the draft MMMP which is a certified document.
- 1.4.191. That said the MMO notes that NE does still not agree with the commitment to NAS. But this could be overcome with a change to the DML condition. The MMO proposed updating the wording in paragraph 6.1.4 of [\[REP7-080\]](#) which had been agreed with NE saying is not uncommon to apply on DCO's for wind farms. However, the Applicant also notes that its current drafting aligns with the drafting in the DCOs as made for Mona and SADEP Extension Projects.
- 1.4.192. Whilst the dDCO addresses noise reduction methods and their proposed application to the Proposed Development, including updates made to address comments raised by NE and the MMO at previous deadlines – the view of the ExA is that there remains residual risk regarding not properly securing NAS.
- 1.4.193. The ExA is content that the outline SNS SAC SIP provides a mechanism to further consider the use of NAS following any consent and could secure this if necessary. This includes whether due regard has been paid to the most recent marine noise policy issued by Defra – Reducing Marine Noise, January 2025. However, the MMO's proposed updated wording in paragraph 6.1.4 of [\[REP7-080\]](#) is preferred by the ExA on a precautionary basis to put the matter beyond doubt within the DML of the dDCO.
- 1.4.194. With such a change the ExA is satisfied that there would be no project alone or in combination AEoI for the harbour porpoise feature of the SNS SAC.

Onshore ecology

Orfordness-Shingle Street SAC

- 1.4.195. The RIAA Screening [\[APP-174\]](#) screened this site out from further assessment as it was stated that it is beyond the range of potential impact (39km). However, the Applicant had included Orfordness-Shingle Street SAC as a potential location for CM for LBBG of the AOE SPA [\[APP-188\]](#). NE raised concerns [\[RR-243\]](#) that CM suggested for LBBG could have an AEoI of the qualifying features of the Orfordness-Shingle Street SAC.
- 1.4.196. The Applicant originally planned the possibility of compensation for LBBG at the Shingle Street location within the AOE SPA in collaboration with VEOWF. That approach generated several ecological concerns owing to disturbance impacts [\[REP1-018\]](#) and [\[REP1-20\]](#). Subsequently, Shingle Street as a proposed LBBG compensation site option was removed from the table, resolving those criticisms.
- 1.4.197. It was confirmed by the Applicant [\[REP1-017\]](#) that Orfordness-Shingle Street site was no longer being considered as a potential compensation site as the site was being used by another offshore windfarm (Gallopier) and there was no longer potential for the Proposed Development to add material ecological benefit in this area.
- 1.4.198. This issue is now considered resolved at [\[REP4-067\]](#) in NE's Risk and Issues Log.

- 1.4.199. On the basis of the above information, the ExA is satisfied that this LSE pathway will not result in AEol to Orfordness-Shingle Street SAC from the Proposed Development alone or in-combination with other plans and projects.

Alde-Ore Estuary Ramsar Site

- 1.4.200. NE [\[RR-243\]](#) cited the wetland invertebrate and wetland plant assemblage as other qualifying features for the Ale-Ore Estuary Ramsar site for which it had outstanding concerns. However, this issue was not included in the Risk and Issues logs provided throughout the examination by NE.
- 1.4.201. The ExA [\[PD-009\]](#) queried whether the concerns of NE regarding this matter remained outstanding. NE responded [\[REP2-054\]](#) that evidence would be necessary to ensure that these communities along with other invertebrate and plant assemblages would not be impacted by the installation and maintenance of predator fencing and the management of the compensation area, should it be located within those parts of the Ramsar site that host these features.
- 1.4.202. The Applicant, [\[REP4-010\]](#) assessed potential for impacts resulting from CM for LBBG and provided reasoning as to why there would not be AEol to the invertebrate assemblage and overall plant assemblage of the AOE Ramsar site.
- 1.4.203. NE [\[REP8-100\]](#), RIES Q25] stated that it was unable to agree with the Applicant's conclusions with respect to impacts on invertebrate assemblage and plant assemblage of AOE Ramsar site owing to evidence gaps in the baseline characterisation. It acknowledged that the Applicant had committed to undertake surveys to address the current evidence gap. The Applicant [\[REP8-035\]](#) stated that this issue relates to the use of Lantern Marshes at a compensation site for LBBG. The National Trust [\[REP7-084\]](#) removed the Lantern Marshes site as an option for LBBG compensation on the basis that it considered the site was too small for its purposes and that a 4ha site would not be in the conservation interests of the site or species and does not align with the ambitions of the National Trust for the site.
- 1.4.205. As the Lantern Marshes site has been removed as a potential option for compensation, there is no longer a pathway for effect on the qualifying features of the Alde-Ore Estuary Ramsar site.
- 1.4.206. On the basis of the above information, the ExA is satisfied that this LSE pathway will not result in AEol to the Alde-Ore Estuary Ramsar site from the Proposed Development alone or in-combination with other plans and projects.

Sites for which the Applicant concluded AEol cannot be excluded

- 1.4.207. The Applicant's RIAA Parts 4 and 6 [\[APP-178\]](#) [\[APP-182\]](#), Table 6.3] concluded that the Proposed Development cannot exclude AEol on the AOE SPA and Ramsar site, owing to in-combination effects to LBBG from collision risk during operation.
- 1.4.208. At D6 [\[REP6-007\]](#), the Applicant accepted that based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEol could not be excluded from the Proposed Development in-combination with other plans and projects to the guillemot feature of FFC SPA and the Farne Islands SPA, and the kittiwake feature of FFC SPA. It updated its Habitats Regulations Derogation Provision of Evidence [\[REP6-007\]](#) so that the proposed CM for these features was no longer on a 'without prejudice' basis. The Without Prejudice HRA DCO Schedules were amended [\[REP6-057\]](#) to remove reference to the guillemot feature of FFC SPA and the Farne

Islands SPA and the kittiwake feature of FFC SPA. CM for RTD of OTE SPA and razorbill of FFC SPA continued to be provided for on a 'without prejudice' basis. The Applicant did not update the RIAA Part 4 [\[APP-178\]](#) or Part 6 [\[APP-182\]](#) to reflect this change in its position.

- 1.4.209. The above European sites and features were therefore the subject of a derogation case submitted by the Applicant. Further detail is provided in Sections 1.5 to 1.7 of this Appendix.

Alde-Ore Estuary SPA and Ramsar site - LBBG

- 1.4.210. The Applicant's HRA Screening [\[APP-174\]](#) concluded that the Proposed Development would result in AEol to the AOE SPA and Ramsar site as a result of the in-combination effects of collision risk during operation and maintenance on LBBG.
- 1.4.211. The RIAA Part 4 [\[APP-178\]](#) estimates the potential impact of mortalities due to collision that would occur per annum as a result of the Proposed Development alone to range from 0 to 10.6 adult birds (Table 4.23). The population viability analysis (PVA) [\[APP-179\]](#) estimates that applying a mean predicted collision mortality, would result in loss of 3.1 breeding adult birds per annum and this would result in a reduction of population growth after 30 years of 0.1%. Applying the 95% upper confidence limit (UCL) of 10.6 collisions per year would result in a median predicted reduction in the population growth of 0.2% and the reduction in population size after 30 years is predicted to be 4.9%.
- 1.4.212. Based on these figures, the Applicant determined that the PVA for the Proposed Development alone impacts predicts an extremely small reduction in the annual population growth rate of LBBG. After 30 years of operation, the Applicant concluded that this would result in a very small reduction in population size, based upon a mean annual mortality of 3.1 breeding adult birds per annum. The Applicant concluded that the Proposed Development would not have an AEol of the AOE SPA and Ramsar site in terms of the conservation objectives for LBBG.
- 1.4.213. In-combination with other plans and projects, the total number of LBBG from AOE SPA predicted to be subject to collision mortality from other offshore wind farms within foraging range, and the Proposed Development is 58.1 breeding adult birds according to the Applicant's approach. The PVA calculates that this would be a 1.1% reduction in annual population growth. The predicted reduction in population size after 30 years is 28%. The Applicant concluded that given the LBBG population is subject to a restore target, the scale of this potential reduction in population size means that there is potential for adverse effects on the AOE SPA population of breeding LBBG.
- 1.4.214. NE [\[RR-243\]](#) agreed with the Applicant's conclusion that AEol could not be excluded for the LBBG feature of AOE SPA and Ramsar site as a result of in-combination collision mortality during operation and that CM on a without prejudice basis should be provided by the Applicant.
- 1.4.215. NE [\[RR-243\]](#) commented that the population data which the Applicant had used in its assessment (1880 Apparently Occupied Nests (AON)), was larger than the figure of 1749 AON used by Five Estuaries OWF (VEOWF). NE stated that assessing impacts from the Proposed Development against a larger population could result in an underestimation of impact scale. NE advised that the Applicant should use the

same count as per VEOWF as this considers the best available contemporary data and is considered by NE to be the most appropriate count.

- 1.4.216. At D1, the Applicant submitted HRA Update to Breeding Season Apportioning of LBBG at AOE SPA [\[REP1-058\]](#) which included additional LBBG colonies within the apportioning, to align with that of VEOWF, as well as most recent count data. Based on the revised apportioning, 42.7% of adult lesser black backed gulls present in the array area during the breeding season are predicted to have come from the AOE SPA. This figure is a reduction from the 56% estimated in the more precautionary apportioning documented in RIAA Part 4 [\[APP-178\]](#).
- 1.4.217. In its Risk and Issues Log [\[REP4-067\]](#), NE recorded this matter as being resolved.
- 1.4.218. Outstanding matters regarding compensation for LBBG are discussed in Section 1.7 of this Appendix.
- 1.4.219. In light of the conservation objective to restore the size of the breeding population whilst avoiding deterioration from its current level, the ExA agrees the Proposed Development in-combination with other OWFs would give rise to an AEol on the LBBG feature of the AOE SPA and Ramsar site. The ExA considers that the scale of the impact should be set at the Applicant's preferred level.

Flamborough and Filey Coast SPA

Guillemot – disturbance and displacement

- 1.4.220. In the RIAA Part 4 [\[APP-178\]](#) the Applicant concluded no AEol for the guillemot feature of FFC SPA, both alone and in-combination with other plans and projects. NE [\[RR-243\]](#) stated that although project alone impacts are relatively small, it could still not rule out AEol from in-combination effects.
- 1.4.221. As stated above, at D6, although the Applicant maintained its position that there would be no AEol in-combination to the guillemot feature of FFC SPA, it accepted that based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEol could not be excluded by the SoS from the Proposed Development in-combination with other plans and projects on guillemot of FFC SPA.
- 1.4.222. At D8, NE [\[REP8-099\]](#) stated that it welcomed the Applicant's revised position as set out in [\[REP6-008\]](#) and [\[REP6-010\]](#) and added that as the in-combination effect of the Proposed Development is small, it considers the approach of the Applicant to be appropriate. CM for guillemot is discussed in Section 1.7 below.
- 1.4.223. The ExA considers it is material that the SoS in consenting Rampion 2 concluded AEol could not be ruled out reasonable beyond scientific doubt for in-combination effects on guillemot at the FFC SPA.

Razorbill – disturbance and displacement

- 1.4.224. In the RIAA Part 4 [\[APP-178\]](#) the Applicant concluded no AEol for the razorbill feature of FFC SPA, both alone and in-combination with other plans and projects. NE [\[RR-243\]](#) stated that although project alone impacts are relatively small, it could still not rule out AEol from in-combination effects.
- 1.4.225. The Applicant [\[REP7-050\]](#) identified it's approach of 50% displacement and 1% mortality of displaced birds. The predicted annual in-combination displacement

mortality per year for the FFC SPA breeding population of razorbill is 115 individuals based on the Applicant's approach to apportioning at Outer Dowsing OWF, and 129 individuals based on the NE advised apportioning for Outer Dowsing OWF. The respective predicted increases in the baseline mortality rate of the FFC SPA breeding population are 1.8% and 2.0%. Under the NE approach of 70% displacement and 2% mortality of displaced birds, the predicted annual in-combination displacement mortality per year for the FFC breeding population of razorbill is 323 individuals based on the Outer Dowsing OWF Applicant approach to apportioning, and 362 individuals based on the NE apportioning.

- 1.4.226. The respective predicted increases in the baseline mortality rate of the FFC SPA breeding population are 5.0% and 5.6%. These compare with predicted annual in-combination mortalities to the FFC SPA breeding population of razorbill, based on the in-combination totals in the RIAA ([\[APP-178\]](#), Table 4.57) of 84 at 50% displacement and 1% mortality, and 235 at 70% displacement and 2% mortality, respectively equivalent to increases of 1.3% and 3.7% in the baseline mortality.
- 1.4.227. In response, to NE, the Applicant prepared a 'without prejudice' HRA DCO schedule [\[REP7-043\]](#) which can be secured in the DCO if required.
- 1.4.228. CM for razorbill is discussed in Section 1.7 below.
- 1.4.229. The Applicant maintains at D8 there would be no project alone or in-combination AEol in respect to razorbill of the FFC SPA. Nevertheless, a without prejudice derogation and compensatory measures case is available to the ExA and SoS via: RIAA [\[APP-178\]](#); Habitats Regulations Derogation Provision of Evidence (Rev 2) [\[REP7-015\]](#); and Appendix 5 Guillemot and Razorbill Compensation Document (Rev 2) [\[REP6-023\]](#). Compensation measures referred to for razorbill can potentially be secured via applying the Applicant's without prejudice HRA/MCZA Schedules (Rev 3) [\[REP8-049\]](#) to any final consented DCO.
- 1.4.230. In the consents given for the Hornsea Four Project, Sheringham Shoal Extension Project and Dudgeon Extension Project (SADEP) and Rampion 2, the SoS disagreed with NE's position regarding razorbill at FFC SPA and concluded that AEol could be ruled out for those projects, alone and in-combination (DESNZ 2023a, 2024, 2025).
- 1.4.231. Considering the recently consented Rampion 2 has similarly small and comparable predicted impact levels to North Falls, and that North Falls was included in the Rampion 2 in-combination assessment, the Applicant considers there is substantial evidence and precedent from previous decisions of the SoS to support ruling out AEol beyond reasonable scientific doubt.
- 1.4.232. The information within the Applicant's updated offshore ornithology in-combination tables (Rev 0) [\[REP7-050\]](#) as discussed above, is relevant.
- 1.4.233. It is acknowledged by the ExA that in consenting recent offshore wind farms in the Southern North Sea (Hornsea Project Four, SADEP and Rampion 2), the SoS has applied a more precautionary scenario of 70% displacement and 2% mortality in all cases.
- 1.4.234. The ExA is mindful the Applicant does make the argument the scenario of 70% displacement and 2% mortality is overly precautionary. However, the Applicant also seems to imply in its submissions that a crucial factor would be if similar

displacement and mortality rates were applied to the Proposed Development by the ExA or SoS.

1.4.235. The ExA finds the use of 70% displacement and 2% mortality identified by NE and used by the SoS on other offshore windfarms is reasonable and not overly precautionary in this case.

1.4.236. The conclusion of the ExA on this matter is that there is compelling evidence suggesting there would be an in-combination AEol on razorbill from FFC SPA contrary to the Applicant's submissions within paragraphs 10.1.8 -10.1.19 [REP8-036] .

1.4.237. If the SoS agrees with the ExA in those circumstances, the Applicant's preferred wording to secure compensation via an amendment to the dDCO (this is applied in the ExA's rDCO) should be applied to any consented DCO.

Collision risk - kittiwake

1.4.238. In the RIAA Part 4 [APP-178] the Applicant concluded no AEol for the kittiwake feature of FFC SPA, both alone and in-combination with other plans and projects. Although NE [RR-243] agreed that the project alone impacts for kittiwake were relatively small, it could not rule out AEol from in-combination effects.

1.4.239. As stated above, at D6 [REP6-007] although the Applicant maintained its position that there would be no AEol in-combination to the kittiwake feature of FFC, it accepted that based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEol would not be excluded by the SoS from the Proposed Development in-combination with other plans and projects on kittiwake of FFC SPA.

1.4.240. The Applicant amended the without prejudice HRA DCO schedule [REP7-043] to remove reference to the kittiwake features of FFC SPA. CM for kittiwake of FFC SPA is secured in Schedule 15 Part 3 of the dDCO.

1.4.241. CM for this feature is discussed in Section 1.7 below.

1.4.242. NE noted that the Proposed Development apportioned 0.8 collisions for kittiwake per year as a result of the Proposed Development and none of these are during the breeding season and therefore the contribution of the Proposed Development to the in-combination contribution is small. NE referred to the Supplementary Advice on Conservation Objectives (SACO) attribute target which is to restore the breeding population and the potential for the impacts from Proposed Development to be considered with other offshore wind projects.

1.4.243. Regarding in-combination effects for FFC SPA, the Applicant [REP2-011] estimated 0.76 collision mortalities per annum using a central impact value (CIV) and 2.72 collision mortality per annum using an upper confidence level (UCL). At D4, NE [REP4-062] advised that the Hornsea 3 Part 2 method should be applied and scaled with respect to the UCL impact. Use of the UCL increases confidence levels in the adequacy of CM if the impacts exceed those of the central impact value (CIV). NE [REP4-062] agreed with the Applicant's calculated CIV of 0.76 and UCL of 2.72 collision mortalities apportioned to the FFC SPA population per annum. NE advised that although the impact from the Proposed Development would make a small contribution to the in-combination total, it still could not rule of AEol.

- 1.4.244. The RSPB [RR-294] and [REP4-089] raised concerns regarding the assessment of in-combination effects undertaken for the Proposed Development. It stated that the assessment for kittiwake was not adequate as it did not include impacts from the breeding season, nor potential impacts which may arise as a result of distributional change. The Applicant [REP5-056] responded and stated that it had considered a number of studies which tracked kittiwakes from FFC SPA in the breeding season. The studies were carried out yearly between 2010 and 2017 and found that none of the tracked birds flew further south in latitude than Lowestoft. The Applicant therefore considered that this provided sufficient evidence that kittiwake of FFC SPA would not travel into the array area of the Proposed Development. The Applicant determined there was no connectivity during the breeding season to the Proposed Development and FFC SPA and therefore considered non-breeding season impacts for kittiwake.
- 1.4.245. The ExA considers the combined advice from NE and the RSPB as well as the position taken by the SoS in the Rampion 2 decision are material. Bringing all points together the ExA finds that an in-combination AEoI of kittiwake of FFC SPA and kittiwake as part of the FFC SPA seabird assemblage cannot be ruled out.

Seabird assemblage

Flamborough and Filey Coast SPA - seabird assemblage

- 1.4.246. NE was asked if it agreed [PD-020] with the conclusion of the Applicant of no AEoI on the seabird assemblage of FFC SPA. NE [REP8-100] highlighted its conclusions for both Hornsea Four and Sheringham and Dudgeon Extensions, where NE could not rule out AEoI in-combination impacts for the FFC SPA seabird assemblage. NE notes additional impacts from the Proposed Development, taken together with those of other proposed North Sea OWF, would mean further reductions to the population size of kittiwake, guillemot and razorbill are likely. As these species are key components of the assemblage feature, NE was unable to rule out a conclusion of AEoI for the in-combination impacts to the seabird assemblage at FFC SPA.
- 1.4.247. NE did note however, that species-specific compensation (if agreed), would also meet the required compensation for the seabird assemblage as a whole. In this case, no stand-alone compensation proposal would be required.
- 1.4.248. Based on the information provided by the Applicant and the agreement received from NE, the ExA finds that the Proposed Development would result in an in-combination AEoI to the seabird assemblage qualifying feature of FFC SPA.
- 1.4.249. The ExA also acknowledges that NE have confirmed any CM for individual species would also be sufficient to cover those species as part of the seabird assemblage.

Farne Islands SPA

In-combination effects - guillemot

- 1.4.250. In its RIAA Part 4 [APP-178] the Applicant concluded that there would be no AEoI on the Farne Islands SPA, either alone or in-combination. It identified that in-combination mortality based on 50% displacement and 1% mortality would result in less than 0.1% deaths.
- 1.4.251. NE [RR-243] did not agree with the conclusions of no AEoI and stated that it considered that the Proposed Development would have in-combination effects with

other plans and projects, on the guillemot feature of the Farne Islands SPA. NE requested that the Applicant undertook a full in-combination assessment of impacts on guillemot at the Farne Islands SPA.

- 1.4.252. The Applicant submitted a HRA Shadow Appropriate Assessment for guillemot of the Farne Islands SPA [\[REP1-056\]](#). This included a full in-combination assessment with displacement matrices as well as consideration of displacement and mortality rates of 50% and 1% and 70% and 2%, the latter being requested by NE. The Applicant's assessment concluded that by applying a 70% displacement and 2% mortality rate, between one and three adult guillemots would be predicted to die as a result of displacement from the Proposed Development alone. The Applicant's in-combination assessment concluded that by applying a 70% displacement and 2% mortality rate, 240 adult guillemots would be predicted to die as a result of displacement from the Proposed Development including the Berwick Bank OWF and 173 excluding the Berwick Bank OWF.
- 1.4.253. NE responded at D4 [\[REP4-063\]](#) stating it was content with the general approach of the in-combination assessment, and it welcomed the inclusion of displacement matrices. However, NE considered there had been some inconsistency with population counts considered for offshore wind farms projects for the guillemot feature of the Farne Islands SPA which therefore affected the calculation of baseline mortality rate and predicted changes to that rate. NE noted that the baseline characterisation data used by the Applicant was collected over 2019 and 2020 breeding seasons, however the breeding colony at the Farne Islands was heavily impacted by HPAI in 2022 and 2023. NE advised that colony counts used for the assessment should be at the same time as baseline characterisation data.
- 1.4.254. NE noted that the Applicant had applied a correction factor of 0.67. NE considered that this data is now dated, and it was not aware that ongoing monitoring had taken place at the Farne Island SPA which could ascertain if the correction factor applied is appropriate. NE considered that application of a generic correction factor is more appropriate to estimate an indicative number of breeding pairs at a colony unless a colony specific correction factor has been derived, for example from photographed productivity plots or mapping.
- 1.4.255. NE advised that the 'corrected' Farne Islands SPA guillemot population estimate used in the Applicant's assessment can be justified but also considered that an assessment against the Seabirds Count figure of 64,042 (uncorrected individuals) in line with other recent OWF projects would have represented a suitably precautionary approach. NE confirmed that it would not expect to draw different conclusions even if the smaller population had been considered in the Applicant's assessment.
- 1.4.256. NE stated that it considered that AEoI could be excluded from the Proposed Development alone but maintained its position that there would be an AEoI resulting from in-combination effects. NE advised that the CM proposed by the Applicant for guillemot at the FFC SPA could be sufficiently scaled to also compensate for impacts on guillemot at the Farne Island SPA and therefore a separate derogation for Farne Islands SPA would not be necessary.
- 1.4.257. As considered above, at D6 the Applicant maintained its position that there would be no AEoI in-combination to the guillemot feature of the Farne Islands SPA, however, it accepted that based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEoI would not be excluded by the SoS from

the Proposed Development in-combination with other plans and projects on guillemot of the Farne Islands SPA.

- 1.4.258. The Applicant amended the without prejudice HRA DCO schedule [[REP6-057](#)] to remove reference to the guillemot feature of the Farne Islands SPA. CM for guillemot of the Farne Islands SPA is discussed in Section 1.7 and is secured in Schedule 15 Part 2 of the dDCO.
- 1.4.259. The ExA considers the position outlined by NE toward guillemot at the Farne Island SPA is more plausible, also acknowledging the materiality of the Rampion 2 decision where similar issues are broached and determined. Overall, there would be an AoEI resulting from in-combination effects and it is appropriate that dDCO Schedule 15 Part 2 of the dDCO secures CM provision.

AEol Assessment Outcomes- Summary

- 1.4.260. The Applicant's RIAA (Parts 2 to 5 [[APP-175](#) to [APP-181](#)], as updated during the examination) concluded that AEol can be excluded for the features and impact pathways listed for each European site listed in Table 2 of this Appendix from the Proposed Development alone, or in-combination with other plans and projects. These conclusions were agreed by NE [[RR-243](#)] [[REP8-099](#)] [[REP8-100](#)]. The ExA has no reason to recommend that AEol cannot be excluded for these features and impact pathways on this basis.
- 1.4.261. Based on the evidence discussed in Section 1.4 of this Appendix, the ExA is satisfied that there would be no AEol from the Proposed Development alone or in-combination for:
- AOE SPA (wetland invertebrate assemblage);
 - AOE Ramsar site (wetland invertebrate assemblage and wetland plant assemblage);
 - Farne Islands SPA (seabird assemblage, including razorbill)
 - SNS SAC (harbour porpoise);
 - OTE SPA RTD.
- 1.4.262. Whilst NE disputed the Applicant's conclusions, the ExA is satisfied that there would be no AEol from the Proposed Development alone or in-combination for the following European sites for the reasons described in Section 1.4 of this Appendix:
- MLS SAC – sandbanks which are slightly covered by seawater all the time;
 - Orfordness – Shingle Street SAC (coastal lagoons and perennial vegetation of stony banks);
 - Southern North Sea SAC;
 - Stour and Orwell Estuaries SPA (avocet, black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, knot, pintail, redshank and waterbird assemblage).
- 1.4.263. The ExA has found that an AEol from the Proposed Development cannot be excluded beyond reasonable scientific doubt for the following European sites and qualifying features:
- AOE SPA and Ramsar site – LBBG (in-combination collision risk);
 - FFC SPA – kittiwake (in-combination collision risk) and guillemot (in-combination disturbance and displacement);
 - Farne Islands SPA – guillemot (in-combination disturbance and displacement);
 - Farne Islands SPA (razorbill);
 - FFC SPA (razorbill and seabird assemblage).

Engaging with the HRA Derogations

- 1.4.264. If the competent authority cannot conclude the absence of an AEol, such that no reasonable scientific doubt remains, then under The Habitats Regulations the project can proceed only if there are no alternative solutions and there are IROPI why the project must be carried out. Suitable CM must also be secured to ensure the overall coherence of the UK NSN.
- 1.4.265. The Applicant's original DCO application included a derogations case relating to the LBBG feature of AOE SPA, with information in the Habitats Regulations

Derogations Provision of Evidence [\[APP-183\]](#), Appendix 1 Compensatory Measures Overview [\[APP-184\]](#) and Appendix 2 LBBG Compensation Document [\[APP-188\]](#), updated to [\[REP8-021\]](#).

- 1.4.266. The Applicant submitted ‘without prejudice’ derogations cases for other offshore ornithological features of the OTE SPA, FFC SPA and the Farne Islands SPA as described in the RIES [\[PD-020\]](#). At D6, maintained its position that there would be no AEol in-combination to the guillemot feature of FFC SPA and the Farne Islands SPA, and the kittiwake feature of FFC SPA, however, it accepted that based on the competent authority’s decision in the Rampion 2 DCO, it was likely that an AEol would not be excluded by the SoS from the Proposed Development in-combination with other plans and projects on these features
- 1.4.267. The Applicant updated its Habitats Regulations Derogation Provision of Evidence [\[REP6-007\]](#) so that the proposed CM for these features was no longer on a ‘without prejudice’ basis. Details of the CM were provided in [\[REP6-007\]](#), Appendix 1 Compensatory Measures Overview [\[REP6-009\]](#), Appendix 4 Kittiwake Compensation Document [\[REP6-019\]](#) and Appendix 5 Guillemot and Razorbill Compensation Document [\[REP6-024\]](#).
- 1.4.268. The CM proposed is secured in Schedule 15 Part 1 for LBBG, Schedule 15 Part 2 for guillemot and Schedule 15 Part 3 for kittiwake [\[REP8-005\]](#).
- 1.4.269. Despite its position that AEol could be excluded for the RTD feature of the OTE SPA, the razorbill feature of FFC SPA, and the Annex I sandbanks feature of MLS SAC, the Applicant also submitted a ‘without prejudice’ derogations case for these features in its Habitats Regulations Derogations Provision of Evidence [\[REP7-015\]](#). Details of the ‘without prejudice’ potential CM were provided in Appendix 1 Compensatory Measures Overview [\[REP8-015\]](#), Appendix 3 RTD Compensation Document [\[REP6-015\]](#) and for Annex I sandbanks in [\[REP7-015\]](#). The Applicant submitted ‘without prejudice’ wording [\[REP8-049\]](#) that could be inserted into Schedule 15 of the dDCO [\[REP8-005\]](#) to secure CM for these features if found necessary.
- 1.4.270. The Applicant described the legal framework and guidance that the derogation case is based on in section 2 of the Habitats Regulations Derogations Provision of Evidence [\[REP7-015\]](#).
- 1.4.271. Whilst the ExA recommends that AEol can be excluded for the MLS SAC based on the reasons described in Section 1.4 of this Appendix, it has reported on the Applicant’s ‘without prejudice’ derogation case for the Annex I sandbank qualifying feature if the SoS reaches a different conclusion.

1.5. CONSIDERATION OF ALTERNATIVES

- 1.5.1. The wider examination of alternatives to the Proposed Development in terms of the Overarching National Policy Statement (NPS) for Energy (EN-1) is reported in Chapter 3 of this Report. This includes consideration of the Applicant’s need case for the Proposed Development. This Section addresses the examination of the alternative solutions test under the requirements of The Habitats Regulations.
- 1.5.2. Relevant guidance including ‘Duty to protect, conserve and restore European sites: Competent authorities must take action to help protect, conserve and restored the protected habitats and species of European sites’ (Defra, Welsh Government, NE, Natural Resources Wales (2021)) states that alternatives must be financially,

legally, and technically feasible, and capable of achieving the objectives of the Proposed Development and demonstrate a lesser adverse effect or avoid AEoI on the European site in question. This guidance is referred to in the Applicant's Habitats Regulations Derogations Provision of Evidence [REP7-015, section 5]. The ExA has considered the alternatives solutions test in line with the requirements of The Habitats Regulations with reference to this guidance and the examination submissions.

- 1.5.3. The Applicant provided its no alternative solutions case in the Habitats Regulations Derogation Provision of Evidence [REP7-015]. This sets out the overall objectives of, and need for, the Proposed Development.
- 1.5.4. Section 5.2 of [REP7-015] describes the objectives as delivering low carbon electricity in support of decarbonisation of the UK electricity supply, supporting commitments of the UK offshore wind generation and to coordinate and optimise generation and export capacity whilst delivering employment and investment.
- 1.5.5. Section 5.4 of [REP7-015] describes the identification and consideration of a long list of potential alternative solutions, such as a smaller array area, or fewer turbines. This was further refined to produce a short list for consideration.
- 1.5.6. The alternatives considered in the original Habitats Regulations Derogations Provision of Evidence [APP-183] included alternative offshore wind farm locations, a smaller rotor or swept area, increased air gap, alternative scale, design, method and timing. A 'do nothing' scenario was considered. The feasibility of the various alternatives is discussed in Section 5.5.
- 1.5.7. At D7, given its submission of a 'without prejudice' derogations case for the Annex I sandbank feature of MLS SAC (related to LSE pathways arising from placement of cable protection adjacent to the SAC), the Applicant updated its alternative solutions assessment in [REP7-015] to include consideration of alternative offshore cable corridor or grid connection locations, reduction in sandwave levelling volume and additional alternative installation methods in respect of offshore export cable installation and cable protection.

Alternative offshore cable corridor or grid connection location

- 1.5.8. The Applicant stated that alternative routes for the cable are limited due to sensitivity to shipping and navigation stakeholders, and that the cable corridor was located as far north as possible to avoid the MLS SAC whilst working in the constraints of the pilot boarding area and requirement to cross the main sunk Traffic Separation Scheme (TSS) south shipping channel as close as practicable to perpendicular. Chapter 5.3 of this Report sets out the ExA's consideration of shipping and navigation matters in detail. It concluded that the proposed route is the only radial solution that avoids a direct effect on the MLS SAC and minimises potential for indirect effects. The Applicant discounted an offshore connection option following the decision of the SoS for DESNZ not to grant further funding to explore offshore cable and grid connection coordination as part of the Offshore Transition Network Review (OTNR) on 3 September 2024. It stated a radial connection was essential to meet the project objectives.

Reduction in sandwave levelling volume

- 1.5.9. The Applicant stated that to reduce sandwave levelling adjacent to the MLS SAC, it would be necessary to have fewer export cables or less sandwave levelling, which would not meet the project objectives for the following reasons:

- The number of export cables was reduced from 4 to 2 during pre-application and further reduction (to one) would be a significant risk as it would limit the size of the wind farm, and any cable failure would stop the Proposed Development from exporting electricity (in support of the UK commitments to offshore wind generation and security of supply).
- The volume of sandwave levelling has been reduced through engineering analysis of geophysical data and some sandwave levelling is essential to facilitate cable burial adjacent to the MLS SAC.

Method for cable installation and placement of cable protection

- 1.5.10. The Applicant stated that its hydrodynamic modelling [[REP7-041](#)] demonstrated that cable protection would have no discernible effect on the MLS SAC. It stated that cable would be buried where practicable but there remained a risk of encountering situations that would prevent burial to a sufficient depth. In such situations, the Applicant stated that surface laid cable protection would be required to protect from damage for example from shipping traffic. Cable damage would represent a significant risk to achieving the project objectives to export electricity to the national grid (in support of the UK commitments to offshore wind generation and security of supply).
- 1.5.11. Whilst there was considerable NE commentary throughout the Examination as well as ExA questions ExAWQ2-3 combined on cables installation and cable protection design details relative to achieving sufficient ecological protection – the discussion of alternatives to broad cable routing was not considered a practical option.

Applicant's conclusions on alternative solutions

- 1.5.12. The Applicant concluded that the identified alternatives are either not feasible or do not meet the project objectives and therefore there are no alternative solutions to the Proposed Development.

ExA conclusions

- 1.5.13. Importantly, cables would be 150m or more MLS SAC. Secured by Schedule 9, Part 2, Condition 36. At D8 NE (via [[REP8-095](#)]; [[REP8-096](#)]; [[REP8-097](#)] [[REP8-098](#)]; [[REP8-099](#)]; [[REP8-100](#)] maintained that in relation to plumes from cable installation sediment, that the Applicant should consider potential concurrent construction activities due to other nearby Projects, and the potential for overlapping sediment plumes and associated deposition. On grounds of lack of quantification and evaluation, NE was unable to completely agree at D8 that sediment deposition/smothering in-combination would not result in the potential for an AEoI to the MLS SAC (Table 2 [[REP8-098](#)]). No alternatives were considered feasible to the Applicants general layout and routing proposed which features built in buffers away from sensitive areas.
- 1.5.14. The ExA is satisfied that no alternative locations or sites exist for the Proposed Development that would present a feasible alternative solution. A compelling need case for the Proposed Development has been established and the ExA is satisfied that the 'do nothing' option is not a feasible alternative. In HRA terms the 'do nothing' option would fail to meet the objectives of the Proposed Development and is not considered an alternative solution.
- 1.5.15. Considering the information submitted by the Applicant, the ExA is satisfied that no alternative design parameters are known to be implementable that would present a feasible alternative solution. The ExA considers that the alternatives assessed

would not constitute an alternative solution to the objectives of the Proposed Development. The ExA is satisfied that no alternative solutions exist which would deliver appreciable benefits in terms of the adverse effects on European sites that have been identified.

1.6. IMPERATIVE REASONS OF OVERRIDING PUBLIC INTEREST (IROPI)

- 1.6.1. The need for the Proposed Development is discussed in Chapter 3 of this Report. This Section addresses the examination of the IROPI test under the requirements of The Habitats Regulations.
- 1.6.2. The Applicant's case for IROPI under the HRA process is presented in [\[APP-183\]](#). Section 6 sets out the Applicant's reasoning that there is an imperative need for the Proposed Development, with reference to the urgent need to establish a secure energy supply and meet decarbonisation targets. The Applicant states that the Proposed Development would help meet the targets of the UK Government with an indicative capacity of 850MW. This would help to reduce the UK's reliance upon imported energy and generate enough clean energy to power over 400,000 typical UK households per year [\[APP-183\]](#).
- 1.6.3. Section 6 of [\[APP-183\]](#) states that the use of low carbon renewable resources such as offshore wind, will substantially reduce carbon emissions, and the Proposed Development would make a significant contribution both to the achievement of UK decarbonisation targets and to global commitments mitigating climate change.
- 1.6.4. The Applicant also stated there is public interest in the Proposed Development proceeding in terms of:
- Increasing energy security will result in more stable energy prices, combatting climate change is in the public interest due to associated risks of flooding, water supply shortages, health impacts and food security;
 - Furthermore, the Applicant highlights the economic growth associated with the Proposed Development with regards to provision of investments and job opportunities.
- 1.6.5. Section 6.5 [\[APP-183\]](#) states that the information presented in section 6 shows that there are clear imperative reasons of public interest for the Proposed Development that override the potential AEol.
- 1.6.6. The Proposed Development will not affect any priority habitats or species (as identified in The Habitats Regulations) and therefore the IROPI can include consideration of social and economic reasons [\[APP-183\]](#).
- 1.6.7. As identified above, the case for Development Consent is addressed in Chapter 3 of this Report which concludes that there is a compelling need for the Proposed Development. Taking into account the information surrounding the need for the proposed development, the public interests presented when measured against the adverse effects on such as on the AOE SPA and Ramsar site, OTE SPA, FFC SPA and the Farne Islands SPA, the ExA is of the opinion that IROPI for the Proposed Development could be established when measured against the adverse effects on these sites, the ExA is of the opinion that IROPI for the Proposed Development could be established.

1.7. COMPENSATORY MEASURES

- 1.7.1. The Applicant submitted proposed CM for the European sites and features listed below, in appendices 2 to 5 of its Habitats Regulations Derogation Provision of Evidence [\[REP7-015\]](#). It provided an overview of the proposed CM in Appendix 1 Compensatory Measures Overview [\[REP8-015\]](#).
- Annex I sandbanks which are slightly covered by seawater all the time feature of the MLS SAC ('without prejudice');
 - LBBG feature of the AOE SPA and Ramsar site;
 - kittiwake feature of FFC SPA;
 - guillemot feature of FFC SPA and the Farne Islands SPA;
 - razorbill feature of FFC SPA ('without prejudice');
 - RTD feature of OTE SPA ('without prejudice').
- 1.7.2. The CM relied upon for LBBG, kittiwake and guillemot are secured by Schedule 15 of the dDCO [\[REP8-005\]](#). The Applicant provided 'without prejudice' drafting in a form that could be inserted into Schedule 15 of the dDCO for razorbill, RTD and Annex I sandbanks [\[REP7-043\]](#) if deemed necessary. The submitted wording provides for CM through project-led proposals or strategic compensation through contribution to the MRF or other equivalent fund.
- Annex I sandbanks – MLS SAC**
- 1.7.3. As the Applicant was not able to confirm an agreed position with NE that AEoI could be excluded for the MLS SAC by D7, in response to the ExA's request [\[PD-017, Q10.0.09\]](#) [\[PD-020, RIES Q26\]](#) it submitted a 'without prejudice' derogation case, with potential CM described in Appendix 1 HRA CM Overview [\[REP8-015\]](#) and Appendix 6 Outline Benthic Compensation/ measures of equivalent environmental benefit (MEEB) IMP [\[REP8-037\]](#).
- 1.7.4. The Applicant identified potential project-led and strategic CM in section 1.2 of [\[REP8-037\]](#) as follows:
- Project-led compensation could comprise:
 - removal of marine litter or debris within the affected site or another site;
 - site extension;
 - designation of feature in a different location;
 - fisheries management measures;
 - enhanced biodiversity, for example planting of biogenic features;
 - Strategic compensation delivered by Defra in conjunction with NE and JNCC in the form of an extension or new designation of a MPA, through contribution to the MRF, which the Applicant stated should be available from late 2025.
- 1.7.5. The Applicant stated [\[REP8-037\]](#) that the primary measure would be strategic compensation through the MRF, but it would consider project-led options in consultation with the ANCB.
- 1.7.6. The Applicant stated [\[REP8-037\]](#) that the project-led measures were based on options identified in a screening exercise for potential MEEB undertaken in relation to the Kentish Knock East MCZ during the pre-application stage (subsequently not taken forward), which could also be applied to HRA compensation.

- 1.7.7. Details of project-led CM and associated monitoring would be provided in a Benthic CIMP. The Benthic CIMP would be produced post-consent if required; the information it would contain is outlined in [\[REP8-037\]](#).
- 1.7.8. Regarding strategic compensation, the Applicant stated [\[REP8-037\]](#) that designation and/ or extension of MPAs to compensate for effects on benthic habitats was included in the library of strategic CM (LoSCM) published by Defra. It noted that interim guidance was published by DESNZ, together with a written ministerial statement (WMS) from Defra, in January 2025, which confirmed that the MRF would be in place by in late 2025 to provide an optional mechanism for developers to fund strategic CM. The DESNZ guidance explained how developers could refer to strategic CM in advance of the MRF becoming operational, noting that it requires the final DCO to include post-consent evidence that an agreed contribution has been paid and that a high-level IMP would be provided by Defra. It confirmed that projects which received a seabed lease from The Crown Estate under the 2017 extensions round were eligible to participate.
- 1.7.9. Table 3.4 in Appendix 1 HRA CM Overview [\[REP8-015\]](#) described the scale of effect for Annex I sandbank, being a localised and temporary indirect effect from sediment deposition of approximately 5cm to 15cm overlapping with up to 0.24m².
- 1.7.10. NE [\[REP8-098\]](#) provided comments on the Outline Benthic Compensation/ MEEB IMP [\[REP8-037\]](#), stating that it considered the risk of an AEol of the MLS SAC to be low and with further consideration of temporal and spatial impacts, and mitigation, likely to be removed. It therefore provided its detailed advice on the 'without prejudice' CM on a without prejudice basis to assist the SoS.
- 1.7.11. NE [\[REP8-098\]](#) was supportive of strategic compensation in the form of a MPA designation or extension through the MRF and advised that a condition securing the compensation should be secured in the DCO or DML.
- 1.7.12. NE [\[REP8-098\]](#) advised that it no longer believed that a project-level CIMP was needed and that the Applicant's potential project-led CM were invalid from an ecological and delivery perspective. It provided detailed comments on each of the project-led options based on experience from other OWFs and consideration in the Round 4 Plan Level Benthic Compensation Steering Group to support its position.
- 1.7.13. As discussed above, the ExA recommends that AEol of the MLS SAC can be excluded. If the SoS reaches a different conclusion and determines that a derogation is required, regarding CM the ExA notes the position of the Applicant and the advice of NE as the ANCB and considers that a strategic CM has the greatest likelihood of maintaining the coherence of the NSN. It is satisfied that the WMS provides assurance that Defra has committed to providing new or extended MPA designations with sufficient capacity to compensate for the identified effects from 2017 OWF extensions, which would include the Proposed Development. The ExA is satisfied that financial contribution to the MRF or equivalent fund could result in delivery of a strategic CM that is additional to normal practice.
- 1.7.14. The ExA notes that Defra-led monitoring of the strategic CM to demonstrate its appropriateness and efficacy is proposed. The ExA cannot recommend a compensation ratio to the SoS as there is currently no guidance about how this is to be established, but is satisfied that inclusion of the 'without prejudice' wording submitted by the Applicant in [\[REP7-043\]](#) in Schedule 15 of the DCO would provide a mechanism through which this matter could be agreed post-consent, and that this could include consideration of any time lag between the impact occurring and

compensation being implemented. The ExA considers that there is sufficient information for the SoS to establish that appropriate CM (in the form of strategic CM) can be implemented for MLS SAC Annex I sandbank, in order to fulfil their duty under the requirements of The Habitats Regulations. The ExA concludes that the proposed strategic CM is feasible, appropriate and would ultimately ensure the overall coherence of the UK NSN.

- 1.7.15. Noting the advice of NE as ANCB, and the limited information provided by the Applicant about project-led CM, the ExA cannot be certain that these options would be feasible to deliver, or provide sufficient compensatory value. The ExA considers that uncertainty remains as to whether these would be successful in ensuring overall coherence of the UK NSN. If the SoS wished to place reliance on project-led CM, the ExA suggests that the SoS should require significant additional work from the Applicant to demonstrate additionality, feasibility, appropriateness and efficacy.

Offshore ornithology

LBBG – AOE SPA and Ramsar site

- 1.7.16. As stated previously in this Appendix, the Applicant concluded that the Proposed Development could result in AEoI in-combination to the LBBG feature of the AOE SPA and Ramsar site and that CM would be required. The Applicant identified the following potential CM in the LBBG Compensation Document [\[APP-188\]](#):
- Project-led compensation comprising breeding enhancement via predator exclusion, habitat management and/or disturbance management;
 - Strategic compensation delivered by Defra with the Applicant making appropriate contributions to the MRF.
- 1.7.17. The Applicant has proposed that details of the measures and associated monitoring would be provided in the LBBG Compensation Implementation and Monitoring Plan (CIMP). The LBBG CIMP would be produced post-consent and the information it would contain is outlined in [\[REP8-019\]](#) and includes steps to deliver the CM such as selection of location for CM, development of the LBBG CIMP and monitoring of the effectiveness of the CM.
- 1.7.18. A LBBG Compensation Steering Group (LBCSG) consisting of members of relevant stakeholders such as NE, the RSPB, the relevant Local Planning Authority (LPA) and the Applicant would be convened post consent. The LBCSG would oversee the CM to be delivered by the Applicant.
- 1.7.19. The LBBG CIMP would be developed in accordance with the Outline CIMP [\[REP8-019\]](#) and would be submitted to the SoS for approval. After sign-off of the final LBBG CIMP by the SoS, fence installation and habitat improvement would be undertaken by the contractor. The Applicant states that these works may be planned for the non-breeding season, however if works would not cause disturbance to existing breeding birds, it may not need to be undertaken outside of the breeding season.
- 1.7.20. CM for LBBG of AOE SPA is secured in Schedule 15 Part 1 of the dDCO [\[REP8-005\]](#).
- 1.7.21. A number of issues were raised by IPs relating to compensation for LBBG and these were examined by the ExA.

Scale/extent of measure

- 1.7.22. The Applicant has applied the Hornsea 4 approach to identify the scale of compensation needed. Initially NE advised use of the Hornsea 3 Part 2 approach, but it was later recognised [REP4-060] that use of the Hornsea 3 Part 2 method for LBBG can produce disproportionate requirements for the scaling of CM. It also highlighted an issue with demographic information not necessarily being well evidenced. NE therefore agreed the most appropriate method for determining the scale of CM was the Hornsea 4 method.
- 1.7.23. It was considered by NE [REP4-060] that CM should be scaled using the UCL impact value, applying the H4 method with additional consideration of philopatry (if necessary) to derive the quantum. Application of a 3:1 ratio to generate the number of pairs the measure should, theoretically, be able to accommodate and likely nesting densities should be considered to define a minimum area.
- 1.7.24. The Applicant welcomed advice from NE on the acceptability of use of the Hornsea 4 method and provided updated compensation scales based on this value, alongside the mean or central impact value (CIV) at D6 [REP6-011]. However, it stated at D8 [REP8-021] that it considered a ratio of 2:1 was appropriate and was applied for Rampion 2.
- 1.7.25. The Applicant [REP8-021] (table 5.2) presented calculations of the quantification of nesting pairs required. When taking into account natal philopatry as recommended by NE, and using 2:1 ratio, 37 breeding pairs would be required. Using a 3:1 ratio the number of breeding pairs is 56. If philopatry is discounted, the numbers for number of breeding pairs using a 2:1 ratio is 20 and using a 3:1 ratio the number of breeding pairs is 30. The Applicant's preferred scale of compensation is a 2:1 ratio taking into account natal philopatry resulting in 37 breeding pairs.
- 1.7.26. The Applicant states that based on predicted nesting density of 0.04-0.047 pairs per m², within or adjacent to the SPA, an area of 0.05ha would be required. However, the Applicant confirmed in [REP6-011] that an area of at least 4ha would be selected if predator fencing is adopted. The Applicant also explained [REP6-025] the potential for collaboration between the Proposed Development and other proposed OWFs such as VEOWF, Outer Dowsing, Rampion 2 and Dogger Bank D. Collaboration could be undertaken through deployment and maintenance of measures across sites identified with potential for sharing and also for shared monitoring. Consideration is also being given to a shared monitoring programme for separate sites for each project; and also for a regional compensation package led by a delivery partners as set out in [REP3-010] from Cornwall Wildlife Trust.
- 1.7.27. NE [REP8-100] stated it was content with the approach of the Applicant to calculate the scale and target for measure of CM and agreed that a minimum area of 4ha is likely to be required. NE had outstanding concerns over apportionment of benefits if collaborative measures were to be used as this would result in a proposed contribution of 0.2ha. NE was concerned that delivery of 0.2ha in place of a project alone site of 4ha would not be sufficient.
- 1.7.28. NE noted the statement in [REP6-012] that, "Should a shared location be taken forward, the scale and North Falls contribution would be discussed with the LBBG Compensation Steering Group". NE considered this to be a sensible way forward but retained some concerns about CM under a collaborative delivery model. NE advised that if the measure is to be delivered in collaboration, it would be appropriate to increase the scale of implementation in terms of the area of nesting

habitat provided. This might best be achieved by progressing multiple sites that could each, in theory, compensate for the total impacts of both projects. This could reduce the risk of delayed or non-colonisation at one location, noting that the Norfolk Vanguard and Boreas/East Anglia One North and Two LBBG compensation site has again failed to attract breeding birds in the 2025 breeding season.

Timing and mortality debt

- 1.7.29. NE [\[RR-243\]](#), G31] explained that there is potential for a delay in LBBG using the compensation sites which could lead to a mortality debt accruing if the CM were implemented. NE advised that the compensation site should be made available prior to LBBGs returning to nesting sites in late February and before Year 1 to allow pairs to scope the areas before nesting commences (April). NE advised that paragraph 5 of Schedule 15 should be amended to reflect that compensation should be in place four full breeding seasons prior to operation. The Applicant at D7 [\[REP7-051\]](#) did not agree with NE and reiterated its position of implementing CM three breeding seasons prior to operation. It argued that a difference of one year would result in a mortality debt of 2.3 collisions, and this can already be compensated for as a result of the proposed 4ha compensation site. The position of both parties remained unchanged at the close of Examination, and paragraph 6 of the dDCO [\[REP8-005\]](#) still refers to the implementation of three breeding seasons.
- 1.7.30. The Applicant [\[REP7-051\]](#) considers that CM should remain as long as adverse impacts continue. NE [\[REP7-092\]](#) advised that CM must remain in place at least for the operational lifespan of the OWF and that it may be necessary for the measure to persist beyond this timeframe if monitoring suggests that the impacts estimated as arising at the OWF have not been adequately compensated, leading to the accrual of mortality debt which must be addressed by the measure.
- 1.7.31. If compensation is deemed to be required, the scale and duration would be agreed with LBCSG and set out in the CIMP. This would ensure that a sufficient number of adult birds can enter the population to ensure no net level impacts on the affected species. Calculations would include the anticipated start of the Proposed Development to ensure adult birds will enter the population prior to effects occurring. An allowance would be included for 'mortality debt'.
- 1.7.32. The Applicant stated that these measures would ensure that at the point of decommissioning, there would be no differences in predicted population without implementation of the Proposed Development and hence why CM would not be required beyond the lifetime of the Proposed Development.
- 1.7.33. The Applicant has proposed the following (without prejudice) condition wording is: "the compensation measures implemented in accordance with the [xxx] CIMP must not be decommissioned without written approval of the SoS in consultation with the relevant SNCB".

Compensation site location and landowner agreement

Lantern Marshes

- 1.7.34. The potential for locating CM for LBBG at Lantern Marshes was considered in [\[APP-188\]](#) and [\[REP1-018\]](#). NE [\[REP4-060\]](#) considered this site was a viable option in principle.

- 1.7.35. It was recognised by IPs that use of sites for LBBG compensation could result in effects on designated sites which had not previously been assessed. In response, the Applicant submitted Lesser Black-backed Gull Compensation Effects on Designated Sites [REP4-010] which assesses potential for effects on AOE SPA and Ramsar site and Orfordness-Shingle Street SAC should the Lantern Marshes option be selected.
- 1.7.36. Concern was raised by NE [REP5-108] that the assessment had been based on assumptions and therefore NE did not consider the conclusions to be evidence based or robust. NE raised concerns specifically in relation to works relating to installation of culverts for ditch crossings which would require tracking of heavy machinery through designated habitats. NE was also concerned that installation of fencing was suggested to take place outside of LBBG breeding season, yet no consideration of effects on over wintering birds had taken place. Further concerns related to lifespan of the fencing and lack of surveys being undertaken to support conclusions regarding 'low quality' habitat.
- 1.7.37. The National Trust initially showed support for the selection of this site, however at D7 [REP7-090] the NT withdrew from discussion on this site on the basis that a site of 4ha would not be in the conservation interests of the site and does not align with the ambitions NT has for the site. In light of the position of the National Trust, the Applicant removed Lantern Marshes from the outline LBBG CIMP and is no longer pursuing this site for CM.

Outer Trial Bank /VE2

- 1.7.38. The potential for locating CM for LBBG at Outer Trial Bank was considered in [APP-188] and [REP1-018] and the preferred option for VEOWF known as VE2 was considered as a potential adaptive management and/or collaboration site. The RSPB [RR-294] and [REP4-089] expressed concern regarding a lack of information available to inform understanding of the ecology of Outer Trial Bank, current influences on LBBG productivity and the implications of rat eradication and management. At the point of its D5 submission, the RSPB [REP5-114] did not consider that Outer Trial Bank was capable of progression as suitable compensation.
- 1.7.39. At D8, the Applicant [REP8-019] confirmed that Outer Trial Bank and VE2 remained as options under consideration for potential adaptive management and /or collaboration options.
- 1.7.40. At D8, NE [REP8-099] stated there was no change at D8 from its previous concerns that the sites have not been secured or identified as the preferred option. The RSPB [REP8-103] stated that assessment is required both in terms of understanding the gull colony population dynamics and the implications of the proposal on the surrounding suite of designated sites, including The Wash SPA and The Wash and North Norfolk SAC. The RSPB noted that the Applicant is undertaking survey work in summer 2025.

Gedgrave Marshes

- 1.7.41. The potential for locating CM for LBBG at Gedgrave Marshes was considered in [APP-188] and [REP1-018]. The RSPB [REP4-089] considered that the site was unsuitable due to levels of disturbance by walkers and dog walkers.

- 1.7.42. NE [\[REP4-060\]](#) considered this site was a viable option in principle. However, NE [\[REP5-110\]](#) raised concerns regarding the potential for Gedgrave Marshes to be functionally linked to designated sites and considered it could be used by waterbird qualifying features if those sites are SPAs. The ExA sought clarification from the Applicant as to whether the implementation of CM at Gedgrave Marshes may result in LSE/AEol on nearby designated sites. The HRA Lesser Black-backed Gull Compensation – Gedgrave Marshes Impact Assessment [\[REP5-072\]](#) provided by the Applicant, did not identify any pathways for direct or indirect effects on any designated sites considered within 1km of Gedgrave Marshes. The Impact Assessment concluded no AEol on any of the designated sites identified.
- 1.7.43. At D6, NE [\[REP6-088\]](#) considered this matter had progressed but was not yet resolved. It considered that the conclusion of the impact assessment of no LSE/AEol is based on a site visit and desk-based studies and is therefore not an evidenced based conclusion. The Applicant [\[REP6-059\]](#) confirmed that baseline surveys would be undertaken post consent/pre-construction.
- 1.7.44. In response to the concerns set out by NE, the Applicant [\[REP8-035\]](#) explained that the Outline LBBG CIMP [\[REP6-014\]](#) was updated at D6. This included a commitment that construction of the fence would take place outside the nesting seasons of relevant bird species present on Gedgrave Marshes to avoid causing serious disturbance, where possible. This would be informed by pre-construction surveys and further impact assessment prior to construction. The CIMP, including scope and timing of surveys, and mitigation measures, would be discussed with the LBCSG.
- 1.7.45. NE [\[REP6-088\]](#) also raised concerns that the impact assessment had not considered the implications of fence installation and maintenance on the adjacent RSPB Wader Project. The Applicant [\[REP8-035\]](#) explained that it has considered the Boyton and Hollesley Marshes RSPB reserve and determined that CM at Gedgrave Marshes would not increase risk to the waders at this reserve.
- 1.7.46. At D8, NE [\[REP8-099\]](#) reiterated its previous concerns that CM sites have not been secured or properly investigated.

Selection of final location for LBBG CM

- 1.7.47. The Applicant [\[REP8-022\]](#) states that Gedgrave Marsh and Outer Trial Bank are ecologically feasible. The final site selection will therefore focus on further consideration of the effects of compensation on other receptors, the practical feasibility of delivering compensatory measures at each site and ongoing landowner discussions.
- 1.7.48. Consideration of the Outer Trial Bank will be informed by further site surveys during the 2025 breeding season to provide further evidence of LBBG numbers and predator impacts.
- 1.7.49. The Applicant states [\[REP8-022\]](#) that it is still consideration collaboration with VEOWF for the provision of CM and discussions are ongoing.
- 1.7.50. An option for strategic compensation is also still being considered by the Applicant.

Monitoring

- 1.7.51. The Applicant's approach to monitoring as set out in [\[REP1-018\]](#) was queried by NE [\[REP4-060\]](#) who considered the approach to be insufficient. It considered that the approach to monitoring should be discussed and agreed with the LBCSG.
- 1.7.52. The LBBG CIMP [\[REP6-013\]](#) explains that compensation would be overseen by the LBCSG, and that monitoring would be undertaken until such time that the compensatory measure is found to be delivering the scale of required compensation. Adaptive management would be undertaken if deemed necessary.
- 1.7.53. At D8, NE [\[REP-100\]](#) stated it was content with the approach to monitoring as detailed in [\[REP6-013\]](#).

ExA conclusions

- 1.7.54. The ExA notes that at the close of Examination, no sites for LBBG CM had been secured which does count against the Applicants proposals. The ExA has confidence through [\[REP8-022\]](#) that Gedgrave Marsh and Outer Trial Bank are ecologically feasible. The final site selection would turn to consideration of the effects of compensation on other receptors and the practical feasibility of delivering compensatory measures at each site. In particular, consideration of the Outer Trial Bank would be informed by further site surveys during the 2025 breeding season to provide further evidence of LBBG numbers and predator impacts.
- 1.7.55. The Applicant may be able to deliver CM via collaboration with VEOWF as per the content of [\[REP8-022\]](#). And the option of strategic compensation cannot be ruled out at this stage.
- 1.7.56. However, the ExA considers that negotiations are advancing and there is sufficient information from the Applicant for the SoS to establish that appropriate compensatory measures could be implemented, in order to fulfil their duty under the requirements of the Habitats Regulations. This is subject to the proviso of the SoS being satisfied that strategic compensation can be either be implemented and/or that relevant sites are capable of being secured.
- 1.7.57. With such proviso the ExA concludes that the LBBG package of proposed compensation measures is feasible, appropriate and would ultimately ensure the overall coherence of the UK NSN.
- 1.7.58. The ExA considers that the CM proposed by the Applicant are sufficient for the level of impact anticipated from the Proposed Development, and the implementation of the LBBG CIMP secured via Schedule 15 Part 1 has the potential to deliver a proportionate level of benefit.
- 1.7.59. The monitoring obligations described by the CIMP are not in dispute with NE.
- 1.7.60. In light of evidence presented, the ExA recommends to the SoS that the following parameters are appropriate to use to calculate the compensation quantum for LBBG of the AOE SPA required as a result of the Proposed Development.
- Ratio of 2:1 resulting in requirement for 37 breeding pairs (based on the rationale applied in Rampion 2);
 - CM to be in place a minimum of three breeding seasons prior to operation of the Proposed Development given that the CIMP would allow for adaptive management if four is necessary;

- Monitoring to be undertaken in agreement with the LGCSG and until the CM is found to be delivering the scale of required compensation.

Guillemot of the Farne Islands SPA

- 1.7.61. At D6, the Applicant maintained its position that there would be no AEoI in-combination to guillemot of the Farne Islands SPA, however it accepted that, based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEoI could not be excluded from the Proposed Development in-combination with other plans and projects to the guillemot feature of the Farne Islands SPA. The Applicant updated its Habitats Regulations Derogation Provision of Evidence [\[REP6-007\]](#) so that the proposed CM for guillemot was no longer on a 'without prejudice' basis. The Without Prejudice HRA DCO Schedules were amended [\[REP6-057\]](#) to remove reference to the guillemot feature of the Farne Islands SPA.

Scale of compensation

- 1.7.62. In its D4 submission NE [\[REP4-063\]](#) stated it may be possible that the CM proposed by the Applicant for guillemot of FFC SPA could be scaled to also compensate for the impact on the guillemot feature of the Farne Islands SPA. NE advised that a separate derogations case for guillemot of the Farne Islands would no longer be required. The ExA [\[PD-013\]](#) asked NE to confirm the approach it considered was appropriate for scaling up the CM and in response, NE explained [\[REP5-110\]](#) that the approach of the new compensation should account for the level of total mortality from both colonies.
- 1.7.63. The Applicant's preferred scale of compensation is set out in the Guillemot and Razorbill Compensation Document [\[REP6-023\]](#). This is based on a ratio of 50% displacement and 1% mortality, resulting in nine breeding pairs of guillemot for the Farne Islands SPA. Using a scenario of 70% displacement and 2% mortality (NE's preferred approach), the figure increased to 25 (24.7) pairs for the Farne Islands SPA.
- 1.7.64. Details regarding locations for compensation and number of guillemot to be compensated for is discussed above regarding guillemot of FFC SPA.
- 1.7.65. At D6, the Applicant [\[REP6-005\]](#) included compensation for guillemot of the Farnes Islands SPA and FFC SPA in Schedule 15 Part 2 of the DCO [\[REP6-005\]](#).
- 1.7.66. At D8, NE [\[REP8-100\]](#) agreed that the CM proposed could be implemented at an appropriate scale to address impacts from the Proposed Development under its preferred parameters (relating to both the impact estimate and scale of the measure) on the Farne Islands SPA populations of guillemot in addition to the impacts on FFC SPA populations of guillemot.

ExA conclusions

- 1.7.67. The ExA recognises that CM for guillemot of FFC SPA could be scaled up to also provide CM for guillemot of the Farne Islands SPA.
- 1.7.68. The ExA finds that NE's preferred approach of determining the scale of compensation from 70% displacement and 2% mortality is more persuasive when applying precautionary principles. The ExA recommends to the SoS that the CM for

guillemot of the Farne Islands SPA is combined with that for guillemot of FFC SPA at a scale of provision of 25 pairs.

Guillemot and razorbill of FFC SPA

- 1.7.69. The Examination considered effects on guillemot and razorbill of FFC SPA. At D6, the Applicant accepted that, based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEoI could not be excluded from the Proposed Development in-combination with other plans and projects to the guillemot feature of the FFC SPA. The Applicant updated its Habitats Regulations Derogation Provision of Evidence [REP6-007] so that the proposed CM for guillemot was no longer on a 'without prejudice' basis. The Without Prejudice HRA DCO Schedules were amended [REP6-057] to remove reference to the guillemot feature of FFC SPA. CM for guillemot of FFC SPA secured in Schedule 15 Part 2 of the dDCO
- 1.7.70. CM for razorbill of FFC SPA continues to be provided for on a 'without prejudice' basis [REP7-043].
- 1.7.71. The Applicant identified the following potential CM options in the Guillemot and Razorbill Compensation Document [REP6-019]:
- Project-led compensation consisting of measures to reduce recreational disturbance at one or more breeding colonies in the south-west;
 - Strategic compensation delivered by Defra in the form of contribution to the MRF.
- 1.7.72. NE [RR-243] and the RSPB [RR-294] and [REP4-09] considered that the Applicant had not evidenced occurrences of recreational disturbances at the auk colonies referred to in the Guillemot and Razorbill Compensation Document [APP-194]. This document was updated at D1 to include ecological evidence to demonstrate the ways in which recreational activities can result in disturbance to guillemot and razorbill. The Applicant explained that it was planning to conduct surveys of breeding guillemot and razorbill during 2025 which would inform the final guillemot and razorbill CIMP. Surveys would continue in future years either for the Proposed Development alone or in collaboration with other OWF developers.
- 1.7.73. Concerns were also raised by NE in relation to the date of colony counts (dated 2017). To further inform the baseline, the ExA [PD-013] requested the Applicant provide information regarding colony counts and disturbance monitoring. The Applicant confirmed it had commissioned surveys of the short-listed auk colonies set out in [REP1-027] during the 2025 breeding season and that the surveys would update baseline counts, productivity and monitoring of disturbance and reaction of auks to disturbance.
- 1.7.74. NE [REP7-090] advised that it was encouraged by the baseline data surveys being undertaken by the Applicant but stated that the issue was unlikely to be resolved by close of examination.

Scale of compensation

- 1.7.75. The Applicant's preferred scale of compensation is set out in the Guillemot and Razorbill Compensation Document [REP6-023]. This is based on a ratio of 50% displacement and 1% mortality, resulting in 11 pairs of breeding guillemot for FFC SPA. Using a scenario of 70% displacement and 2% mortality (NE's preferred approach), the figures increase to 30 (29.2) pairs for guillemot for FFC SPA.

- 1.7.76. If the SoS considers that compensation for razorbill is necessary, the Applicant states that five breeding pairs of razorbill should be provided for, based on a ratio of 50% displacement and 1% mortality. Using a scenario of 70% displacement and 2% mortality, the figures increase 11 (10.8) pairs for razorbill at FFC SPA.
- 1.7.77. NE [\[RR-243\]](#) disagreed with the Applicant's compensation quantum and advised use of a 70% displacement and 2% mortality scenario. The RSPB [\[REP4-089\]](#) stated its preferred approach of 60% displacement and a range of mortality rates of between 3% and 5% during the breeding season and 1% to 3% in the non-breeding season.
- 1.7.78. The Applicant [\[REP1-027\]](#) presented NE's displacement and mortality values, though it continued to present the 50% displacement and 1% mortality scenario as it considered this was the most precautionary scenario and was based on available evidence and expert opinion. The Applicant stated that it was possible for compensation to be scaled to 70% and 2% if required. At D8, NE [\[REP8-100\]](#) maintained its disagreement with the Applicant's preferred parameters, however, it welcomed the presentation of the scale required to address impacts at its advised reference rates for displacement (70%) and mortality (2%) at ratios of 2:1 and 3:1. Furthermore, NE advised that CM should be able to compensate for the 95% UCL of the mortality impact estimate which would address the uncertainty of that impact estimate. The Applicant, [\[REP5-055\]](#) noted the points raised by NE, however it referred to the Rampion 2 OWF where the SoS considered that use of the CIV was an appropriate basis for the compensation quota.

Timescales of compensation

- 1.7.79. The Applicant [\[REP6-025\]](#) proposes deployment of CM three breeding seasons prior to operation of the Proposed Development. NE considered that this approach could result in mortality debt on guillemot and razorbill populations as these birds do not reach breeding age maturity until approximately six years old and therefore it would take seven breeding seasons after CM are implemented for young birds produced to enter the breeding population. NE suggested that the scale of CM be increased to address the risk of 'mortality debt' accruing in the early years of the Proposed Development. In the outline Guillemot and Razorbill CIMP submitted at D6 [\[REP6-025\]](#), the position of the Applicant remained that deployment of CM would be three breeding seasons prior to the operation of the Proposed Development.

Landowner agreement

- 1.7.80. NE [\[RR-243\]](#) raised concern that the proposed compensation sites had not yet been secured with relevant landowners. The Applicant stated that it was confident suitable compensation could be achieved if required, and confirmed it is in discussion with other offshore windfarms to discuss the potential for collaboration.
- 1.7.81. At D8, the Applicant [\[REP8-035\]](#) explained that its engagement with landowners is ongoing regarding access for surveys supporting site selection for guillemot and razorbill CM. At D8, access had been agreed for surveys to be undertaken across ten distinct locations.
- 1.7.82. The Habitats Regulations Assessment Land Rights Tracker [\[REP8-051\]](#) confirms that a number of initial site walkovers were undertaken in May 2025 across some of the Applicant's short listed sites. The HRA Land Rights Tracker [\[REP8-051\]](#) confirms that the Applicant is seeking to further licences for land interests in order to

facilitate additional survey work. No information regarding specific location of surveys or findings of the surveys was provided during the Examination.

Monitoring and adaptive management

- 1.7.83. A Guillemot Compensation Steering group (GCSG) consisting of members of relevant stakeholders such as NE, RSPB, the relevant LPA and the Applicant would be convened post consent. The GCSG will oversee the CM to be delivered by the Applicant.
- 1.7.84. Strategic long-term monitoring longer than the three years proposed by the Applicant was requested by NE. The Applicant [REP5-054] agreed that longer term monitoring post implementation may be required and confirmed in the outline Guillemot and Razorbill CIMP [REP6-025] that annual monitoring would be undertaken for the first three years or until the CM is found to be successful. Monitoring would be undertaken for the lifetime of the Proposed Development and the frequency of the monitoring would be agreed with the Guillemot and Razorbill Compensation Steering Group (GRCSG) (or Guillemot Compensation Steering Group (GCSG) if the SoS concludes no AEoI for razorbill) and agreed with the SoS.
- 1.7.85. At the request of the ExA [PD-013] the Applicant provided an updated outline Guillemot and Razorbill CIMP [REP6-025] which provides additional information regarding possible adaptive management measures, it is stated that this could include identifying alternative sites for compensation or pursuing a collaborative or strategic measure.
- 1.7.86. NE [REP8-100] stated that due to uncertainties around certain critical aspects of the measure (e.g., final locations, collaboration with other projects, etc) NE are satisfied that discussing and agreeing monitoring proposals with the GRCSG/GCSG is an appropriate approach and proportionate to the level of risk in this instance.

ExA conclusions

- 1.7.87. The ExA considers that there is sufficient information for the SoS to establish that appropriate compensatory measures could be implemented, in order to fulfil their duty under the requirements of the Habitats Regulations. Nonetheless, further consultation may be required on the agreement of sites. With such confirmation the ExA concludes that the guillemot and razorbill package of proposed compensation measures would be feasible, appropriate and would ultimately ensure the overall coherence of the UK NSN subject to CM being secured in line with NE's preferred scaling (i.e. 70% displacement and 2% mortality scenarios). If the SoS deems it necessary, further information could be obtained from the Applicant regarding sites secured.
- 1.7.88. The ExA considers that the CM proposed by the Applicant are sufficient for the level of impact anticipated from the Proposed Development, and the implementation of the Guillemot and Razorbill CIMP secured via Schedule 15 Part 2 has the potential to deliver a proportionate level of benefit.
- 1.7.89. In light of all evidence presented, the ExA recommends to the SoS that the following parameters are appropriate to use to calculate the compensation quantum for guillemot of FFC SPA and the Farne Islands required (as detailed above) as a result of the Proposed Development:-

- 1.7.90. A 70% displacement and 2% mortality, resulting in a total of 54 pairs for guillemot (30 (29.2) for FFC SPA and 25 (24.7) pairs for the Farne Islands). (This matches the approach taken in HP4; SADEP and Rampion 2 which is material);
- CM to be in place three breeding seasons prior to operation of the Proposed Development;
 - Monitoring to be undertaken in agreement with the GCSG and for the lifetime of the Proposed Development to ensure that CM is successful and implement adaptive management if CM proves to be unsuccessful.
- 1.7.91. With regards to the razorbill feature of FFC SPA, the ExA recommends that AEoI of the razorbill feature of FFC SPA cannot be excluded and the drafted text included in HRA DCO schedule [\[REP7-043\]](#) should be inserted into Schedule 15 of the DCO securing razorbill CM.
- 1.7.92. For razorbill the compensation quantum for the FFC SPA and Farne Islands should be:
- A 70% displacement and 2% mortality, resulting in 11 pairs for razorbill for FFC SPA and Farne Islands SPA collectively;
 - CM to be in place three breeding seasons prior to operation of the Proposed Development;
 - Monitoring to be undertaken in agreement with the Razorbill Consultative Steering Group (RCSG) and for the lifetime of the Proposed Development to ensure that CM is successful and implement adaptive management if CM proves to be unsuccessful.

Kittiwake of FFC SPA

- 1.7.93. The Applicant accepted that based on the competent authority's decision in the Rampion 2 DCO, it was likely that an AEoI could not be excluded from the Proposed Development in-combination with other plans and projects to the kittiwake feature of FFC SPA. The Applicant updated its Habitats Regulations Derogation Provision of Evidence [\[REP6-007\]](#) so that the proposed CM for kittiwake was no longer on a 'without prejudice' basis. The Without Prejudice HRA DCO Schedule was amended [\[REP6-057\]](#) to remove reference to the kittiwake feature of FFC SPA.
- 1.7.94. The Applicant identified the following potential CM options in the Kittiwake Compensation Document [\[APP-192\]](#) The Applicant initially identified the following potential CM in the Kittiwake Compensation Document [\[APP-192\]](#) updated by [\[REP2-011\]](#) and [\[REP6-019\]](#).
- Project led compensation comprising of use of an existing artificial nesting structure (ANS) constructed by RWE in Gateshead;
 - Strategic compensation delivered by Defra in the form of contribution to the MRF.
- 1.7.95. The Applicant has set out that it would adopt responsibility for its portion of the ANS at least three breeding seasons prior to operation of the Proposed Development. It also stated that an agreement would be secured with RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited as the current owners [\[APP-192\]](#).

- 1.7.96. The details of project-led measures and associated monitoring would be provided in a Kittiwake Compensation Implementation and Monitoring Plan (CIMP). The kittiwake CIMP would be produced post-consent and the information it would contain is outlined in [\[REP6-021\]](#).
- 1.7.97. The Applicant proposed a 1:1 compensation ratio (based on Hornsea 4) for kittiwake which would result in the requirement for an additional seven to ten breeding pairs.
- 1.7.98. NE [\[RR-243\]](#) advised that the use of a 3:1 compensation ratio (Hornsea 3 Part 2 approach) which would be in line with advice commissioned by The Crown Estate to inform the Round 4 strategic plan for kittiwake. NE considered this would result in a greater number of nesting pairs and offer a more realistic prospect of the CM delivering benefits. NE [\[REP4-062\]](#) provided calculations of its preferred approach (Hornsea 3 Part 2) to the level of compensation it considered is required. This identified that use of a 2:1 or 3:1 ratio would result in the measure of provision being 34 or 51 nest space respectively. Whereas use of a 1:1 ratio would result in 5 pairs.
- 1.7.99. At D6 [\[REP6-019\]](#) the Applicant provided updated compensation calculations to include the Hornsea 3 Part 2 method alongside the Hornsea 4 method it concluded that the Proposed Development should provide ten nesting spaces at the ANS. The Applicant clarified that its recommendation is based on the mean predicted collisions of kittiwakes from FFC SPA at the Proposed Development, the Hornsea 3 method, and a ratio of 2:1. The Applicant explained that its recommendation takes account of the SoS's decision on Rampion 2 that 10 nesting pairs was appropriate, also based on the mean or central impact value (CIV) of predicted collisions and a 2:1 ratio.
- 1.7.100. As a result of uncertainty raised by NE [\[RR-243\]](#) and the RSPB [\[REP4-089\]](#) regarding collaboration and agreement between the Applicant and other offshore wind projects, the Applicant confirmed that there are 240 nesting spaces available at the ANS which are expected to be shared equally between the Proposed Development and four other offshore wind farms. The Applicant confirms [\[REP6-019\]](#) that the Proposed Development would therefore secure 48 nesting spaces at the ANS. The Applicant pointed out that this figure is expected to exceed the level of compensation it considers is required for this species from the Proposed Development.
- 1.7.101. NE [\[REP8-100\]](#) consider that provision of 48 nests (a 20% share) is likely to be a suitable scale to compensate for the predicted impacts over the project's lifetime. However, NE highlighted that monitoring data will ultimately inform the assessment of the measure against the success criteria.

Monitoring and adaptive management

- 1.7.102. The success of CM would be monitored through observation of bird numbers and breeding successes. Counts for large chicks would be made once on an annual basis in mid-July prior to fledging. It is proposed that monitoring would continue to take place on an annual basis until it is sufficiently demonstrated that the CM has been successful. If it is found that CM is not successful after three consecutive years of the Proposed Development being in operation, the Applicant will consider the need for adaptive management in discussion with the Kittiwake Compensation Steering Group (KCSG). The KCSG will consist of members of relevant stakeholders such as NE, Gateshead Council, the RSPB, the Tyne Kittiwake Partnership and the Applicant and would be convened post consent. The KCSG will

oversee the CM to be delivered by the Applicant together with monitoring and adaptive management measures.

- 1.7.103. In the event that the ANS is not successful, the Applicant [\[REP6-021\]](#) would implement adaptive management measures such as seeking to attract kittiwake to the ANS by playing kittiwake calls and selection of an alternative CM such as contribution to strategic measures. The Applicant [\[REP6-021\]](#) has also expressed its consideration of a contribution to the local Tyne kittiwake group and for colour ringing of chicks which NE advised was essential to understanding philopatric recruitment at the ANS.

ExA conclusions

- 1.7.104. The ExA considers that there is sufficient information for the SoS to establish that appropriate compensatory measures can be implemented, in order to fulfil their duty under the requirements of the Habitats Regulations. The ExA concludes that the kittiwake package of proposed compensation measures is feasible, appropriate and would ultimately ensure the overall coherence of the UK National Site Network.
- 1.7.105. The ExA finds that the project led CM proposed by the Applicant are sufficient for the level of impact anticipated from the Proposed Development, and the implementation of the Kittiwake CIMP secured via Schedule 15 Part 3 has the potential to deliver a proportionate level of benefit.
- 1.7.106. In the event that the SoS is minded to agree with the ExA recommendation, Schedule 15 Part 3 has been inserted into the DCO to secure CM for the kittiwake feature of FFC SPA. Part 3 Schedule 15 (24) requires a final Kittiwake CIMP to be in accordance with the Outline Kittiwake CIMP and should be submitted to the SoS for approval in consultation with the relevant SNCB and the relevant planning authority.
- 1.7.107. In light of evidence provided by the Applicant and comments from NE, the ExA recommends to the SoS the following parameters as set out in the Outline Kittiwake CIMP [\[REP6-021\]](#) are appropriate to calculate the compensation quanta for kittiwake of FFC SPA from the Proposed Development:
- Applicant's – 2:1 ratio based on a CIV resulting in 10 pairs.
- 1.7.108. The Applicant has confirmed that the existing ANS at Gateshead has capacity to accommodate 48 nesting spaces as a precaution which can be secured by the DCO through a minor modification. This is in the context of NE's preferred option of 2:1 ratio and 34 nests or 3:1 ratio and 51 nests may trigger adaptive management considerations at a later stage if the quanta is unsuccessful.
- 1.7.109. Moreover, in consenting Rampion 2, the SoS considered that use of the CIV, the HP3 methodology, and a 2:1 ratio was appropriate to calculate compensation scale. Based on a mean predicted collision risk of 0.72 birds per annum at Rampion 2, the SoS concluded a compensation quantum of 9.32 breeding pairs of kittiwake and the provision of 10 nesting spaces on an ANS would be sufficient to compensate for the impact of Rampion 2 on the kittiwake feature of the FFC SPA.
- 1.7.110. In the context of that decision, it is noted that mean predicted collisions at North Falls, 0.76 birds per annum, is very similar, and, connectivity between North Falls and the kittiwake population of the FFC SPA is identified only in the non-breeding season. Using the method adopted by the SoS in determining the compensation

scale for Rampion 2, a compensation quantum of 9.72 breeding pairs of kittiwake and the provision of 10 nesting spaces on an ANS is proposed for North Falls.

- 1.7.111. The ExA considers it to be acceptable that the Applicant would adopt responsibility for its portion of the ANS “at least” three breeding seasons prior to operation of the Proposed Development as set out in Schedule 15 Part 3 of the DCO.

Red-throated diver of OTE SPA

- 1.7.112. As discussed earlier in this Appendix, NE and the RSPB disagreed with the conclusion of the Applicant of no AEol of the RTD qualifying feature of OTE SPA. In response, the Applicant prepared a ‘without prejudice’ HRA DCO schedule [\[REP7-043\]](#) which can be secured in the DCO if required.
- 1.7.113. The Applicant initially identified the following CM in the Red-throated Diver Compensation Document [\[APP-190\]](#) and latest update [\[REP6-015\]](#)
- enhanced breeding habitat for example through nesting rafts/habitat management;
 - creation of sanctuary or reserve areas within the OTE SPA;
 - contribution to a strategic fund, though the Applicant noted that compensation for red-throated diver is not currently listed on the Defra (2024b) library of measures.
- 1.7.114. The details of project-led measures and associated monitoring would be provided in a Red-throated Diver Compensation Implementation and Monitoring Plan (CIMP) which would be produced post-consent if required. The information it would contain is outlined in [\[REP6-017\]](#). If CM is required, a Red-throated Diver Compensation Steering Group (RTDCSG) would be established post consent to refine CM. CM would be agreed with the SoS.
- 1.7.115. CM proposed by the Applicant includes installation of nesting rafts/habitat measures at 20 lochs in Scotland which could result in five to seven additional RTD juveniles entering the population each year. NE [\[REP3-061\]](#) and the RSPB [\[REP4-089\]](#) considered that the CM proposed would not result in sufficient gains for the RTD population. NE [\[REP3-061\]](#) argued that a further calculation should be run regarding juvenile survival rates as it considered that based on the assumption that six chicks would fledge, only two of these would survive into adulthood. The Applicant [\[REP4-028\]](#) agreed with NE regarding the number of RTD which would survive into adulthood and noted there was potential for increased benefits from peatland management measures. The Applicant outlined that habitat management at 20 lochs could result in an estimated additional 4.3 adult birds per annum.
- 1.7.116. NE [\[REP8-100\]](#) stated that its interpretation of the information provided by the Applicant [\[REP6-015\]](#) would result in a potential benefit of 4.3 additional adult birds per year from peatland habitat management at 20 sites in Scotland. NE agree that this scale of benefit is possible.
- 1.7.117. Initial locations for CM proposed by the Applicant [\[APP-190\]](#) in Finland were discounted due to concerns over lack of sufficient control of the rafts deployed there. The Applicant focused efforts on identifying suitable lochs located in Scotland and habitat management. Details of habitat management and peat restoration at locations in Shetland were provided in [\[REP6-015\]](#).

- 1.7.118. The updated outline RTD CIMP submitted by the Applicant at D6 [\[REP6-017\]](#) explained that surveys to confirm the presence of suitable locations for RTD compensation have started in 2025. Further surveys will continue in 2025 and post consent.
- 1.7.119. NatureScot [\[REP7-097\]](#) raised concerns over site selection due to its remote location and how landowner permission would be secured. It also explained that it had additional concerns over peatland restoration and how this is linked or could be linked to Scotland's peatland restoration programme. Furthermore, NatureScot [\[REP7-097\]](#) considered that the Applicant should take impacts from predators such as mink and stoat into account. NatureScot also raised a concern that the implementation of CM for RTD may have effects on nearby SPAs and other SPA designated birds. It considered that monitoring should be undertaken in agreement with NatureScot and NE.
- 1.7.120. NE raised concerns [\[REP7-090\]](#) over a lack of properly short listed or secured sites and as negotiations with landowners were ongoing, there was uncertainty if sufficient sites can be secured for the lifetime of the project. This concern was echoed by RSPB [\[REP4-089\]](#) who considered greater detail was needed regarding arrangements of access and permissions.
- 1.7.121. NE [\[REP3-061\]](#) raised concerns regarding the monitoring arrangements set out by the Applicant. NE disagreed with the statement that monitoring would be required 'for the first three years or until the measure is deemed to be operating successfully'. NE sought longer term monitoring to ensure that CM remained effective for the lifetime of the Proposed Development. NatureScot [\[REP7-097\]](#) expressed agreement with NE that a monitoring period of three years is too short.
- 1.7.122. The Applicant emphasised that the need for longer term monitoring is set out in the outline RTD CIMP [\[REP4-036\]](#) and explained [\[REP6-017\]](#) that monitoring would be undertaken yearly to ensure breeding success. However, the frequency of monitoring may reduce after three years and should be balanced against unnecessary disturbance. Nesting rafts would be checked yearly outside of the breeding season to ensure they remain in good condition.
- 1.7.123. If, after three years of monitoring, CM were identified to be unsuccessful, the Applicant would adopt adaptive management measures as set out in [\[REP4-036\]](#). The Applicant explained that adaptive management measures would be reactive to reasons for failure as identified during monitoring.
- 1.7.124. The Applicant, at D6 [\[REP6-017\]](#) provided an updated outline RTD CIMP which states that where required, 20 control lochs would be considered to facilitate monitoring. A comparison would be made between control lochs and lochs with rafts, to establish breeding success. Data from breeding success on the Scottish mainland would be used to assess the success of the rafts. The updated outline RTD CIMP confirms that control lochs would not be required for peatland management.
- 1.7.125. Further detail is provided in [\[REP6-017\]](#) regarding adaptive management techniques. It is stated that adaptive management is likely to be undertaken on a loch-by-loch basis. Remote cameras may be used to observe nests in lochs which have not been successful to help determine the cause for failure. Adaptive management may then include predator control or mitigation, measures to reduce disturbance, further peatland management/restoration and vegetation management. The Applicant [\[REP8-035\]](#) states that the Outline RTD CIMP [\[REP6-018\]](#) includes

monitoring throughout the operational life of the Proposed Development and the frequency of this monitoring would be agreed with the RTDCSG.

- 1.7.126. In response to RIES Q43 [\[PD-020\]](#) NE confirmed it did not have any outstanding concerns relating to the Applicant's proposed approach to monitoring or adaptive management for RTD CM.
- 1.7.127. At the close of examination, the Applicant maintains that the Proposed Development will not result in AEol of RTD of OTE SPA and that no compensation is required. However, it considers the scale of compensation proposed is sufficient to deliver benefits if required.

ExA conclusions

- 1.7.128. The Applicant maintains at D8 there would be no AEol in respect to razorbill from FFC SPA or RTD from the OTE SPA. Nevertheless, a without prejudice derogation and compensatory measures case is available to the ExA and SoS via: RIAA [\[APP-178\]](#); Habitats Regulations Derogation Provision of Evidence (Rev 2) [\[REP7-015\]](#); Red Throated Diver Compensation Document (Rev 2) [\[REP6-015\]](#) and Appendix 5 Guillemot and Razorbill Compensation Document (Rev 2) [\[REP6-023\]](#). Compensation referred to can be secured via applying the Applicant's without prejudice HRA/MCZA Schedules Rev 3 [\[REP8-050\]](#) to any final consented DCO.
- 1.7.129. The ExA has concluded in accordance with the Applicant's assessments and technical information that AEol of RTD within the SPA can be ruled out beyond reasonable scientific doubt for the Project alone and in-combination. Therefore, contrary to NE's position [\[REP1-044\]](#) protecting the RTD via a seasonal restriction on the installation of the export cable within the OTE SPA and a 2km buffer during construction would not be necessary. As there would not be an AEol from the construction works within the cable corridor. It is also noted that a seasonal restriction within 2km of the SPA boundary would affect works within the export cable corridor in areas where it does not pass through the SPA, but close to the SPA. Nonetheless, the SoS may wish to further consider applying such a restriction if there is disagreement with the ExA's finding through further change to the rDCO.
- 1.7.130. The ExA notes that at the close of examination, no sites for RTD CM had been secured.
- 1.7.131. The ExA considers that there is presently insufficient information from the Applicant for the SoS to establish that appropriate compensatory measures could be implemented, in order to fulfil their duty under the requirements of the Habitats Regulations. The ExA concludes that whilst the overall package of proposed compensation measures is possible, substantial pre-consent information would be required.
- 1.7.132. RTD and Razorbill compensation implementation and monitoring details are found within: [\[REP8-015\]](#); [\[RE8-017\]](#); [\[REP6-015\]](#); [\[REP6-017\]](#) / [\[REP6-023\]](#); and [\[REP6-025\]](#). Notwithstanding that and the Applicant's closing position, with respect to RTD without prejudice compensation details progress was made with NE technical points by the Applicant adapting its proposals.
- 1.7.133. In [\[REP6-015\]](#) the Applicant details a range of potential outcomes in terms of the number of additional adult birds that could arise from habitat management, nest raft installation, or a mixture of both (table 5.1). NE's interpretation of this information is that the Applicant estimates a potential benefit of 4.3 additional adult birds per year

arising from peatland habitat management at 20 sites in Shetland (originally proposed within Finland).

- 1.7.134. Responses to without prejudice compensation include that from NatureScot [\[REP7-097\]](#). NatureScot accepted that the detail of the measures is still relatively at an early stage, dependent on the outcome of surveys being carried out during the breeding season this year. The measures currently being proposed have a geographical focus in Scotland with a particular emphasis on Shetland. And discussions are indicated as ongoing.
- 1.7.135. NE agreed that the scale of benefit set out by the Applicant is possible. However, it is not completely clear across the submitted documents if the Applicant intends to restore (or even create) habitat and make it suitable for breeding RTD, make interventions to protect existing habitat with breeding RTDs, or a mixture of both. In cases where breeding birds would fail if not for habitat management interventions a direct additional productivity benefit can be attributed to the measure.
- 1.7.136. NE agreed with the Applicant that there is no robust way to scale the level of compensation to be delivered due to the mismatch between the expected benefits (increased productivity) and the impact (habitat loss/degradation). Nevertheless, they do consider that the scale of impact is significant. Therefore, in very broad terms, they would expect that significant benefits should be expected to arise from any delivery of a compensation measure (or package of measures). Accordingly, NE recommend a more ambitious approach to the nest raft measure, as part of a commitment to a clearly defined package of measures.
- 1.7.137. NE's principal concerns at the close of the Examination related to the scale of the measure proposed at 20 rafts would not produce significant RTD gains or represent a meaningful impact to the coherence of the site network, as previously detailed in [\[REP3-061\]](#) and [\[REP5-110\]](#).
- 1.7.138. NE also supported the representations of NatureScot regarding the proposed compensatory measures on Shetland in [\[REP7-097\]](#). In addition, they retain some concerns around the Applicant's ability to secure suitable sites and collect baseline data within the required time frames, should the measure be required. With Applicant survey work currently ongoing and no sites yet secured.
- 1.7.139. The information provided by the Applicant [\[REP5-054\]](#) regarding monitoring and adaptive management for RTD did not attract concerns from NE by the close of the Examination.
- 1.7.140. Overall, the ExA finds that the SoS would be entirely reliant on the agreement of further details incorporating relevant expert steering group/statutory advice secured by the DCO. Because of the lack of clarity or agreement with NE on the scale of CM there is inadequate evidence to confirm its ecological effectiveness if it was sought by the SoS. The present details are too nascent and would be ineffective. Relevant landowner agreements would only be possible once the scale of compensation is able to be agreed by the relevant SNCB. Albeit discussions are said to be ongoing between the Applicant and NE.
- 1.7.141. In the event that the SoS decides that CM are required, the without prejudice HRA DCO schedule for RTD (provided in [\[REP8-049\]](#)) could be inserted into Schedule 15 of the DCO. But given the lack of clarity or agreement available the ExA finds it would be necessary for the SoS to first ensure that the scale of compensation is agreed with the SNCB before any determination to give consent.

1.8. HRA CONCLUSIONS

- 1.8.1. The Proposed Development is not directly connected with, or necessary to, the management of a European site, and therefore the implications of the project with respect to adverse effects on potentially affected sites must be assessed by the SoS
- 1.8.2. The European sites and their qualifying features considered in the Applicant's assessment of LSE are listed in the HRA Screening [\[APP-174\]](#). LSE were identified for a number of these sites from the Proposed Development (including the proposed CM for LBBG) alone and in-combination with other plans or projects.
- 1.8.3. The methodology and outcomes of the Applicant's screening for LSE on European sites was subject to some discussion and scrutiny, however, the sites and features for which LSE were identified were not disputed by any IP. The ExA is satisfied that the correct European sites and qualifying features have been identified for the purposes of assessment, and that all potential impacts which could give rise to significant effects have been identified.
- 1.8.4. The ExA considers that there is sufficient information before the SoS to enable an appropriate assessment to be undertaken. The ExA's findings are that, subject to the mitigation measures to be secured in the dDCO and DML, AEol from the Proposed Development when considered alone or in-combination with other plans or projects can be excluded from the impact-effect pathways assessed for the European sites listed in Table 2 of this Appendix, plus the following that were disputed by NE and/or IPs for the reasons described in Section 1.4 of this Appendix:
- AOE SPA (wetland invertebrate assemblage);
 - AOE Ramsar site (wetland invertebrate assemblage and wetland plant assemblage);
 - Farne Islands SPA (seabird assemblage);
 - FFC SPA (razorbill, gannet);
 - MLS SAC (sandbanks which are slightly covered by seawater all the time);
 - Orfordness – Shingle Street SAC (coastal lagoons and perennial vegetation of stony banks);
 - OTE SPA (RTD);
 - SNS SAC (harbour porpoise);
 - Stour and Orwell Estuaries SPA (avocet, black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, knot, pintail, redshank and waterbird assemblage).
- 1.8.5. While the ExA cannot exclude AEol from these European sites, based on the evidence discussed in Section 1.4 of this Appendix, it is satisfied that there would be no AEol from the Proposed Development alone and in-combination for the following qualifying features:
- avocet, black-tailed godwit, dark-bellied brent goose, dunlin, grey plover, knot, pintail, redshank and waterbird assemblage of Stour and Orwell Estuaries SPA;
 - harbour porpoise of SNS SAC.
- 1.8.6. However, the ExA's findings are that AEol cannot be excluded beyond reasonable scientific doubt on the following European sites and qualifying features from the Proposed Development:
- AOE SPA and Ramsar site – LBBG (in-combination);
 - FFC SPA – kittiwake (collision risk, in-combination), guillemot and razorbill (displacement, in-combination);

- Farne Islands SPA – guillemot (displacement, in-combination).

- 1.8.7. The Applicant submitted a formal derogation case [\[REP7-015\]](#) that included an assessment of alternative solutions, a case for IROPI, and proposed compensation on a without prejudice basis for razorbill of FFC SPA, RTD of OTE SPA and Annex I sandbank of MLS SAC. CM for the guillemot feature of the Farne Islands SPA is set out in the Guillemot and Razorbill Compensation document [\[REP6-023\]](#).
- 1.8.8. The subjects of alternative solutions, IROPI, and compensation were given substantial consideration during examination. The ExA is satisfied that no feasible alternative solution exists that would represent a lesser adverse effect to the Proposed Development. Given the evidence available, with regards to the case for IROPI the ExA is of the opinion that IROPI for the Proposed Development could be established.
- 1.8.9. The findings of the Examination are that compensation packages required would be feasible and appropriate and is adequately secured in the dDCO/DML but only with further changes to be agreed, as highlighted.
- 1.8.10. The ExA recommends that Schedule 15 Part 2 of the Applicant's dDCO received at D8 [\[REP8-005\]](#) is further altered to include a revised collective schedule for guillemot and razorbill (as per the additional wording within [\[REP7-043\]](#)). Without such an alteration Part 2 would only secure compensation measures for guillemot. The ExA also recommends the other remaining parts of Schedule 15: Part 1 (LBBG) and Part 3 (kittiwake) should be included in the final DCO.
- 1.8.11. The ExA considers that there is sufficient information before the SoS to enable them to undertake an appropriate assessment and to apply the derogation tests of The Habitats Regulations of alternative solutions, IROPI, and compensation in order to fulfil their duty under the requirements of The Habitats Regulations.

APPENDIX D: RECOMMENDED DEVELOPMENT CONSENT ORDER

202[] No. 0000

INFRASTRUCTURE PLANNING

The North Falls Offshore Wind Farm Order 202[]

Made - - - - ***

Coming into force - - ***

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An application has been made to the Secretary of State under section 37 of the Planning Act 2008 (“the 2008 Act”)(a), and in accordance with the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009(b) for an order granting development consent.

The application was examined by the Examining Authority, appointed by the Secretary of State pursuant to section 61(c) and section 65(d) of Part 6 of the 2008 Act and carried out in accordance with Chapter 4 of that Act and with the Infrastructure Planning (Examination) Procedure Rules 2010(e). The Examining Authority has submitted a report to the Secretary of State under section 74(2)(f) of the 2008 Act.

The Secretary of State has considered the report and recommendation of the Examining Authority, has taken into account the environmental information in accordance with regulation 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(g) and, as a national policy statement has effect in relation to the proposed development, has had regard to the documents and matters referred to in section 104(2)(h) of the 2008 Act.

-
- (a) 2008 c. 29. Section 37 was amended by Chapter 6 of Part 6 of, and Schedule 13 to, the Localism Act 2011 (c. 20).
(b) S.I. 2009/2264.
(c) Section 61 was amended by section 128(2) and Schedule 13, paragraph 18 to the Localism Act 2011 (c. 20) and by section 26 of the Infrastructure Act 2015 (c. 7).
(d) Section 65 was amended by Schedule 13 paragraph 22(2) and Schedule 25, paragraph 1 to the Localism Act 2011 (c. 20) and by section 27(1) of the Infrastructure Act 2015 (c. 7).
(e) S.I. 2010/103, amended by S.I. 2012/635.
(f) Section 74 was amended by sections 128(2) and 237 and by Schedule 13, paragraph 29 and Schedule 25, paragraph 1, to the Localism Act 2011 (c. 20).
(g) S.I. 2017/572.
(h) Section 104 was amended by section 58(5) of the Marine and Coastal Access Act 2009 (c. 23) and by section 128(2) of the and Schedule 13, paragraphs 1 and 49(1) to (6) of the Localism Act 2011 (c. 20).

The Secretary of State, having decided the application, has determined to make an Order granting development consent for the development described in the application on terms that in the opinion of the Secretary of State are not material different from those proposed in the application.

The Secretary of State is satisfied that open space within the Order land, when burdened with any new rights authorised for compulsory acquisition under the terms of this Order, will be no less advantageous than it was before such acquisition, to the persons in whom it is vested, other persons, if any, entitled to rights of common or other rights, and the public, and that, accordingly, section 132(2)(a) of the 2008 Act applies.

The Secretary of State, having decided the application, has determined to make an Order granting development consent for the development described in the application with modifications which in the opinion of the Secretary of State do not make any substantial changes to the proposals comprised in the application.

The Secretary of State, in exercise of the powers conferred by sections 114, 115, 120, 122, 123, 140 and 149A of the 2008 Act, makes the following Order—

PART 1

PRELIMINARY

Citation and commencement

1. This Order may be cited as the North Falls Offshore Wind Farm Order 202[] and comes into force on [] 202[].

Interpretation

2.—(1) In this Order—

“the 1961 Act” means the Land Compensation Act 1961(b);

“the 1965 Act” means the Compulsory Purchase Act 1965(c);

“the 1980 Act” means the Highways Act 1980(d);

“the 1981 Act” means the Compulsory Purchase (Vesting Declarations) Act 1981(e);

“the 1984 Act” means the Road Traffic Regulation Act 1984(f);

“the 1989 Act” means the Electricity Act 1989(g);

“the 1990 Act” means the Town and Country Planning Act 1990(h);

“the 1991 Act” means the New Roads and Street Works Act 1991(i);

“the 2000 Act” means the Countryside and Rights of Way Act 2000(j);

“the 2003 Act” means the Communications Act 2003(k);

“the 2004 Act” means the Energy Act 2004(l);

(a) Section 132 was amended by section 24(3) of the Growth and Infrastructure Act 2013 (c. 27).

(b) 1961 c. 33.

(c) 1965 c. 56.

(d) 1980 c. 66.

(e) 1981 c. 66.

(f) 1987 c. 27.

(g) 1989 c. 29.

(h) 1990 c. 8.

(i) 1991 c. 22.

(j) 2000 c. 37.

(k) 2003 c. 21.

“the 2008 Act” means the Planning Act 2008(a);

“the 2009 Act” means the Marine and Coastal Access Act 2009(b);

“the 2016 Regulations” means the Environmental Permitting (England and Wales) Regulations 2016(c);

“access to works plan” means the plan or plans certified as the access to works plan or plans by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“address” includes any number or address used for the purposes of electronic transmission;

“ancillary works” means the ancillary works described in Part 2 of Schedule 1 (ancillary works) and any other works authorised by this Order and which are not development within the meaning of section 32 of the 2008 Act;

“apparatus” has the same meaning as in Part 3 (street works in England and Wales) of the 1991 Act;

“archaeological mitigation strategy” means the document certified as the archaeological mitigation strategy by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“authorised development” means the development and associated development described in Part 1 of Schedule 1 (authorised development) and any other development authorised by this order that is development within the meaning of section 32 of the 2008 Act;

“the book of reference” means the document certified by the Secretary of State as the book of reference for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“build option 1” means the scenario in which the undertaker only constructs those works required for the North Falls Offshore Wind Farm grid connection and does not construct Work Nos. 6B or 12B;

“build option 2” means build option 2A or build option 2B”;

“build option 2A” means the scenario in which the authorised development will deliver works to support grid connection co-ordination, including the laying of onshore cable ducts (Work Nos. 6B and/or 12B), for transfer to and/or use by another generating station or transmission licence holder under the 1989 Act, as part of co-ordination for grid connection works for offshore generation;

“build option 2B” means the scenario in which the undertaker pulls cables through onshore cable ducts constructed by another generating station or transmission licence holder under the 1989 Act, as part of co-ordination for grid connection works for offshore generation;

“build option 3” means the scenario in which the undertaker constructs only Work No.1 and Work No. 2;

“buoy” means any floating device used for navigational purposes or measurement purposes, including LIDAR, wave buoys and guard buoys;

“cable circuit” means a number of electrical conductors necessary to transmit electricity between two points, comprising one or more conductors which may be bundled as one cable or take the form of separate cables, and in either case the circuit may include one or more auxiliary cables for the purpose of control, monitoring, protection or general communications;

“cable crossings” means the crossing of existing cables, pipelines or other existing infrastructure by the cables authorised by this Order together with cable protection;

“cable ducts” means conduits for the installation of cables;

(l) 2004 c. 20.
 (a) 2008 c. 29.
 (b) 2009 c. 23.
 (c) S.I. 2016/1154.

“cable protection” means physical measures for the protection of cables including but not limited to concrete mattresses, split pipe system, and/or rock placement (including material used for cable crossings);

“carriageway” has the same meaning as in the 1980 Act;

“Chart Datum” means the level below which the tide will not normally fall at a given location, usually the lowest astronomical tide;

“commence” means—

- (a) in relation to works seaward of MHWS, the first carrying out of any licenced marine activities authorised by the deemed marine licences, save for operations consisting of preconstruction surveys and monitoring approved under the deemed marine licences; or
- (b) in respect of any other works comprised in the authorised development, the first carrying out of any material operation (as defined in section 155 of the 2008 Act) forming part of the authorised development other than onshore site preparation works,

and the words “commencement” and “commenced” must be construed accordingly;

“commissioning” means the process of assuring that all systems and components of the authorised development are tested to verify that they function and are operable in accordance with the specifications and operational requirements of the undertaker;

“deemed marine licences” means the marine licences set out in Schedules 8 (deemed marine licence under the 2009 Act – generation assets), 9 (deemed marine licence under the 2009 Act – transmission assets), and 10 (deemed marine licence under the 2009 Act – transmission assets – offshore converter station);

“Deep Water Route Cable Installation Area (Future Dredging Depths) Plan” means the document certified as such by the Secretary of State under article 41 (certification of plans, etc.) for the purposes of this Order;

“design vision” means the document certified as the design vision by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“discharging authority” for the purposes of Part 3 (requirements) and Part 4 (procedure for discharge of requirements) of Schedule 1 means Essex County Council;

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“environmental statement” means the documents listed in Part 1 and Part 2 of Schedule 12 (documents forming the environmental statement) and certified as the environmental statement by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“Five Estuaries” means the nationally significant infrastructure project known as Five Estuaries Offshore Wind Farm, being an offshore electricity generating station approximately 37 kilometres (km) from the coast of Suffolk, and being the authorised development consented by the Five Estuaries Offshore Wind Farm Order 2021[];

“foundation” means any of— monopile, mono suction bucket, multi-leg pin pile jacket or multi-leg suction bucket jacket;

“Galloper recommended route” means the recommended shipping routing measure included as part of the Sunk area traffic routeing scheme adopted by resolution of the International Maritime Organization during the 82nd session of the Maritime Safety Committee and recorded in circular COLREG.2/ Circ.58 Annex II., to enable ferry traffic sailing to and from the Port of Oostende an option to enter and leave the SUNK Outer Precautionary Area, and connecting the following geographical positions—

(1)	(2)
<i>Latitude</i>	<i>Longitude</i>
51° 44'.93N	001° 50'.93E

“Outline Guillemot and Razorbill compensation implementation and monitoring plan” or “Outline Guillemot and Razorbill CIMP” means the document certified as the outline guillemot and razorbill compensation implementation and monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“highway” and “highway authority” have the same meaning as in the 1980 Act^(a);

“Historic England” means the Historic Buildings and Monuments Commission for England;

“HVAC” means high voltage alternating current;

“HVDC” means high voltage direct current;

“inter-array cable” means the network of offshore subsea cables connecting the wind turbine generators in Work No. 1 with each other and with the offshore substation platform(s) and/or offshore converter platform forming part of Work No. 2;

“jacket foundation” means a lattice type structure constructed of steel and additional equipment such as, J-tubes, corrosion protection systems and access platforms attached to the seabed at 3 or more points with pin piles or suction buckets;

“joint bay” means an excavation located at regular intervals along the cable route consisting of a concrete flat base slab constructed beneath the ground to facilitate the jointing together of the cables;

“Outline Kittiwake compensation implementation and monitoring plan” or “Outline Kittiwake CIMP” means the document certified as the outline kittiwake compensation implementation and monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“land plans” means the plan or plans certified as the land plan or land plans by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“Outline LBBG compensation implementation and monitoring plan” or “Outline LBBG CIMP” means the document certified as the outline LBBG compensation implementation and monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“link box” means the underground metal box placed within a plastic or concrete pit where the metal sheaths between adjacent export cable sections are connected and earthed and installed within a ground level manhole or inspection chamber to allow access to the link box for regular maintenance or fault-finding purposes;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace any component of any offshore work including any cable, and the onshore works described in Part 1 of Schedule 1 (authorised development), to the extent assessed in the environmental statement and any derivative of maintain must be construed accordingly;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH who is the body created under the 2009 Act and who is responsible for the monitoring and enforcement of the deemed marine licences;

“MCA” means the Maritime and Coastguard Agency;

“mean high water springs” or “MHWS” means the highest level which spring tides reach on average over a period of time;

(a) “highway” is defined in section 328(1), “highway authority” is described in section 1. Section 1 was amended by sections 8 and 102 and Schedules 4, paragraph 1 and Schedule 17 to the Local Government Act 1985 (c. 51), by section 21 of the 1991 Act and by section 1(6) and Schedule 1, paragraphs 1 to 4 of the Infrastructure Act 2015 (c. 7). There are other amendments which are not relevant to this Order.

“mean low water springs” or “MLWS” means the lowest level which spring tides reach on average over a period of time;

“monopile foundation” means a steel pile, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“monopile suction bucket foundation” means a steel cylindrical structure which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential, and may include additional equipment such as J-tubes, corrosion protection systems and access platforms;

“MSC” means the International Maritime Organization’s Maritime Safety Committee, or any successor body or committee of the International Maritime Organization performing an equivalent function;

“offshore converter platform” means a structure above MHWS and attached to the seabed by means of a foundation, with equipment to convert three-phase HVAC power generated by the wind turbine generators into HVDC power;

“offshore in-principle monitoring plan” means the plan or plans certified by the Secretary of State as the offshore in-principle monitoring plan for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“the offshore order limits and boundary co-ordinates plan” means the plan or plans certified by the Secretary of State as the offshore order limits and boundary co-ordinates plan for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“offshore platform” means the offshore substation platform(s) and/or the offshore converter platform;

“offshore substation platform” means a structure above MHWS and attached to the seabed by means of a foundation, with one or more decks, whether open or fully clad, accommodating electrical power transformers, switchgear, instrumentation, protection and control systems, and other associated equipment and facilities to enable the transmission of electronic communications and for electricity to be collected at, and exported from, the platform;

“offshore works” means Work Nos. 1 to 4B and any related further associated development in connection with those works;

“onshore site preparation works” means operations consisting of site clearance including vegetation clearance, pre-planting of landscaping works, ecological mitigation works, archaeological investigations, intrusive and other environmental surveys, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, preparatory works to existing infrastructure and diversion and laying of services, erection of any temporary means of enclosure, site security works, creation of temporary hardstanding creation of temporary means of access and the temporary display of site notices or advertisements;

“onshore works” means Work Nos. 4B to 14 and any related further associated development in connection with those works;

“the Order land” means the land shown on the land plans which is within the limits of land to be acquired or used and described in the book of reference;

“the Order limits” means the limits shown on the works plans within which the authorised development may be carried out;

“outline biodiversity net gain strategy” means the document certified as the outline biodiversity net gain strategy by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline cable specification and installation plan” means the document certified as the outline cable specification and installation plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline code of construction practice” means the document certified as the outline code of construction practice by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline construction traffic management plan” means the document certified as the outline construction traffic management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline horizontal directional drill method statement and contingency plan” means the document certified as the outline horizontal directional drill method statement and contingency plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline landscape and ecological management strategy” means the document certified as the outline landscape and ecological management strategy by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline navigation and installation plan” means the document certified by the Secretary of State as the outline navigation and installation plan for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore operations and maintenance plan” means the document certified as the outline offshore operations and maintenance plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore written scheme of investigation” means the document certified as the outline offshore written scheme of investigation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline onshore written scheme of investigation” means the document certified as the outline onshore written scheme of investigation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline operational drainage strategy” means the document certified as the outline operational drainage strategy by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline project environmental management plan” means the document certified as the outline project environmental management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline public rights of way management plan” means the document certified as the outline public rights of way management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline sediment disposal management plan” means the document certified as the outline sediment disposal management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline site integrity plan for the southern north sea special area of conservation” means the document certified as the outline site integrity plan for the southern north sea special area of conservation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline skills and employment plan” means the document certified as the outline skills and employment plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline vessel traffic monitoring plan” means the document certified as the outline vessel traffic monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“platform interconnector cable” means a cable circuit between the offshore platforms;

“public rights of way plan” means the plan or plans certified as the public rights of way plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“relevant planning authority” means Tendring District Council, or any successor to it as the planning authority for the land in question;

“requirements” means, or a reference to a numbered requirement is a reference to, those matters set out in Part 3 of Schedule 1 (requirements) to this Order;

“scour protection” means measures to prevent loss of seabed sediment around any structure placed in or on the seabed by use of protective aprons, mattresses, or rock and gravel placement;

“SNCB” means statutory nature conservation body, being the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017^(a) or its equivalent in the Conservation of Offshore Marine Habitats and Species Regulations 2017^(b);

“special category land” means the land shown on the special category land plan and described in the book of reference;

“special category land plan” means the plan certified as such by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“statutory undertaker” means any person falling within section 127(8) of the 2008 Act and a public communications provider as defined in section 151 of the 2003 Act;

“street” means a street within the meaning of section 48 of the 1991 Act^(c), together with land on the verge of a street or between two carriageways, and includes any footpath and any part of a street;

“street authority”, in relation to a street, has the same meaning as in Part 3 of the 1991 Act^(d);

“streets plan” means the plan or plans certified as the streets plan or plans by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“suction bucket” means a steel cylindrical structure attached to the legs of a jacket foundation which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential;

“temporary traffic regulation order plan” means the plan or plans certified as the temporary traffic regulation order plan or plans by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“transition joint bay” means the underground concrete bays in Work No. 4D where the offshore export cable circuits are jointed to the onshore export cable circuits;

“transition piece” means the metal structure attached to the top of the foundation where the base of the wind turbine generator is connected and may include additional equipment such as J-tubes, corrosion protection systems, boat access systems, access platforms, craneage, electrical transmission equipment and associated equipment;

“tree preservation order and hedgerow plan” means the plan or plans certified as the tree preservation order and hedgerow plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“trenchless installation techniques” means the installation of electrical cable circuits by means of boring techniques for installing cable ducts including horizontal directional drilling, pipe jacking/horizontal auger boring and micro-boring;

(a) S.I. 2017/1012.

(b) S.I. 2017/1013.

(c) Section 48 was amended by section 124(2) of the Local Transport Act 2008 (c. 26).

(d) “street authority” is defined in section 49, which was amended by paragraph 117 of Schedule 1 to the Infrastructure Act (c. 7).

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“undertaker” means, subject to article 5 (benefit of the Order), North Falls Offshore Wind Farm Limited (company number 12435947);

“Upper Tribunal” means the Lands Chamber of the Upper Tribunal;

“vessel” means every description of vessel, however propelled or moved, and includes a non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

“watercourse” includes all rivers, streams, ditches, drains, cuts, culverts, dykes, sluices, basins, sewers and passages through which water flows except a public sewer;

“wind turbine generator” means a structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment, fixed to a foundation or transition piece;

“working day” means a day which is not a weekend, bank holiday or public holiday in England;

“works plans” means the works plans (offshore) and the works plans (onshore);

“works plans (offshore)” means the plan or plans certified as the works plans (offshore) by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.); and

“works plans (onshore)” means the plan or plans certified as the works plans (onshore) by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.).

(2) References in this Order to rights over land include references to rights to do or restrain or to place and maintain, anything in, on or under land or in the air-space above its surface and to any trusts or incidents (including restrictive covenants) to which the land is subject and references in this Order to the imposition of restrictive covenants are references to the creation of rights over the land which interfere with the interests or rights of another and are for the benefit of the land which is acquired under this Order or which is an interest otherwise comprised in the Order land.

(3) All distances, directions, capacities, volumes and lengths referred to in this Order are approximate save in respect of the parameters referred to in—

- (a) requirements 2, 6, and 17 in Part 3 of Schedule 1 (requirements);
- (b) conditions 10 and 11 in Part 2 of Schedule 8 (deemed marine licence under the 2009 Act – generation assets);
- (c) conditions 10 to 12 in Part 2 of Schedule 9 (deemed marine licence under the 2009 Act – transmission assets); and
- (d) conditions 10 and 11 in Part 2 of Schedule 10 (deemed marine licence under the 2009 Act –transmission assets (offshore converter platform)).

(4) Any reference in this Order to a work identified by the number of the work is to be construed as a reference to the work of that number authorised by this Order.

(5) The expression “includes” is to be construed without limitation unless the contrary intention appears.

(6) A reference to any statute, order, regulation or similar instrument is construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

PART 2

PRINCIPAL POWERS

Development consent etc. granted by this Order

3.—(1) Subject to the provisions of this Order and to the requirements, the undertaker is granted—

- (a) development consent for the authorised development; and
- (b) consent for the ancillary works, to be carried out within the Order limits.

(2) Work Nos. 1 to 4B must be constructed within the Order limits seaward of MHWS and Work Nos. 4C to 14 must be constructed within the Order limits landward of MHWS.

Power to maintain the authorised development

4.—(1) The undertaker may at any time maintain the authorised development, except to the extent that this Order or an agreement made under this Order provides otherwise.

(2) The power to maintain conferred under paragraph (1) does not relieve the undertaker of any requirement to obtain any further licence under Part 4 of the 2009 Act (marine licensing) for offshore works not covered by the deemed marine licences.

Benefit of the Order

5.—(1) Subject to this article, the provisions of this Order have effect solely for the benefit of the undertaker.

(2) Subject to paragraph (5) the undertaker may with the written consent of the Secretary of State—

- (a) transfer to another person (“the transferee”) any or all of the benefit of the provisions of this Order (excluding the deemed marine licences referred to in paragraph (3) below) and such related statutory rights as may be agreed between the undertaker and the transferee; and
- (b) grant to another person (“the lessee”) for a period agreed between the undertaker and the lessee any or all of the benefit of the provisions of this Order (excluding the deemed marine licences referred to in paragraph (3) below) and such related statutory rights as may be so agreed.

except where paragraph (8) applies, in which case the consent of the Secretary of State is not required.

(3) Subject to paragraphs (5) and (6) the undertaker may with the written consent of the Secretary of State—

- (a) transfer to the transferee the whole of any of the deemed marine licences and such related statutory rights as may be agreed between the undertaker and the transferee; or
- (b) transfer to the lessee for the duration of the period mentioned in paragraph (2)(b), the whole of any of the deemed marine licences and such related statutory rights as may be so agreed.

(4) Where an agreement has been made in accordance with paragraph (2) or (3), references in this Order to the undertaker, except in paragraphs (7) and (9), include references to the transferee or the lessee.

(5) The undertaker must consult the Secretary of State before making an application for consent under this article by giving notice in writing of the proposed application.

(6) The Secretary of State must consult the MMO before giving consent to the transfer or grant to another person of the benefit of the provisions of the deemed marine licences.

(7) Where the undertaker has granted any benefit, or for the duration of any period during which the undertaker has granted any benefit, under paragraph (2) or (3)—

- (a) the benefit transferred or granted (“the transferred benefit”) includes any rights that are conferred, or any obligations that are imposed, by virtue of the provisions to which the benefit relates;
- (b) the transferred benefit resides exclusively with the transferee or, as the case may be, the lessee and the transferred benefit is not enforceable against the undertaker save in the case of a deemed marine licence transferred or granted in respect of any breach of an obligation by the undertaker which occurs prior to the transfer or grant or which occurs as a result of any activity carried out by the undertaker on behalf of the transferee; and
- (c) the exercise by a person of any benefits or rights conferred in accordance with any transfer or grant under paragraphs (2) or (3) is subject to the same restrictions, liabilities and obligations as would apply under this Order if those benefits or rights were exercised by the undertaker.

(8) The consent of the Secretary of State is required for the exercise of powers under paragraphs (2) or (3) except where—

- (a) the transferee or lessee is the holder of a licence under section 6 (licences authorising supply, etc) of the 1989 Act;
- (b) in relation to the transfer or lease of any or all of Work No. 9 or any other works within a highway, the transferee or lessee is a highway authority responsible for the relevant highway; or
- (c) the time limits for claims for compensation in respect of the acquisition of land or effects upon land under this Order have lapsed and—
 - (i) no such claims have been made,
 - (ii) any such claim has been made and has been compromised or withdrawn,
 - (iii) compensation has been paid in full and final settlement of any such claim,
 - (iv) payment of compensation into court has taken place in lieu of settlement of any such claim, or
 - (v) it has been determined by a tribunal or court of competent jurisdiction in respect of any such claim that no compensation is payable.

(9) Section 72(7) and (8) of the 2009 Act (variation, suspension, revocation and transfer) do not apply to a transfer or grant of the whole of the benefit of the provisions of the deemed marine licences to another person by the undertaker pursuant to an agreement under paragraph (3) save that the MMO may amend any deemed marine licence granted under Schedule 8, Schedule 9 or Schedule 10 of the Order to correct the name of the undertaker to the name of the transferee or lessee under this article 5 (benefit of the Order).

Application and modification of legislative provisions

6. The following provisions are modified to the extent specified, or do not apply, in relation to the construction or works carried out for the purpose of, or in connection with, the construction or maintenance of the authorised development—

- (a) regulation 6 of the Hedgerows Regulations 1997 is modified so as to read for the purposes of this Order only as if there were inserted after paragraph (1)(j) the following—

“or

 - (k) for carrying out development which has been authorised by an order granting development consent pursuant to the Planning Act 2008.”.
- (b) the provisions of the Neighbourhood Planning Act 2017 insofar as they relate to the temporary possession of land under article 31 (temporary use of land for carrying out the authorised development) and article 32 (temporary use of land for maintaining the authorised development) of this Order.

- (c) regulation 12 (requirement for an environmental permit) of the 2016 Regulations in respect of a flood risk activity only;
- (d) the provisions of any byelaws made under, or having effect as if made under, paragraphs 5, 6 or 6A of Schedule 25 of the Water Resources Act 1991 that require consent or approval for carrying out the works;
- (e) section 23 of the Land Drainage Act 1991 (prohibition of obstructions etc. in watercourses);
- (f) sections 6 (grass verges etc) and 30 (unauthorised structures on seashore) of the Essex Act 1987(a);
- (g) Holland Haven Country Park local nature reserve byelaws made by Tendring District Council on 5 July 1995 under sections 20, 21(4) and 106 of the National Parks and Access to the Countryside Act 1949(b) in accordance with section 236 of the Local Government Act 1972(c);
- (h) the provisions of any byelaws made under section 66 of the Land Drainage Act 1991 (power to make byelaws) that require consent or approval for the carrying out of works; and
- (i) sections 28E and 28H of the Wildlife and Countryside Act 1981.

Defence to proceedings in respect of statutory nuisance

7.—(1) Where proceedings are brought under section 82(1) of the Environmental Protection Act 1990 (summary proceedings by persons aggrieved by statutory nuisances) in relation to a nuisance falling within paragraphs (d), (fb), (g) and (ga) of section 79(1) (statutory nuisances and inspections therefor) of that Act no order is to be made, and no fine is to be imposed, under section 82(1) of that Act if—

- (a) the defendant shows that the nuisance—
 - (i) relates to premises used by the undertaker for the purposes of or in connection with the construction, maintenance or decommissioning of the authorised development and that the nuisance is attributable to the carrying out of the authorised development in accordance with a notice served under section 60 (control of noise on construction sites), or consent given under section 61 (prior consent for work on construction sites) of the Control of Pollution Act 1947; or
 - (ii) is a consequence of the construction, maintenance or decommissioning of the authorised development and that it cannot reasonably be avoided; or
- (b) the defendant shows that the nuisance—
 - (i) relates to premises used by the undertaker for the purposes of or in connection with the use of the authorised development and that the nuisance is attributable to the use of the authorised development which is being used in compliance with requirement 17 (control of noise during operational phase); or
 - (ii) is a consequence of the use of the authorised development and that it cannot reasonably be avoided.

(2) Section 61(9) of the Control of Pollution Act 1974 does not apply where the consent relates to the use of premises by the undertaker for the purposes of or in connection with the construction, maintenance or decommissioning of the authorised development.

(a) 1987 c. xx.

(b) 1949 c. 97. Section 20 was amended by Schedule 11 to the Natural Environment and Rural Communities Act 2006 (c.16). There are other amendments which are not relevant to this Order. Sections 21 and 106 were amended by Schedule 11 to the Natural Environment and Rural Communities Act 2006 (c.16) and Schedule 20 to the Local Government Act 1972 (c. 70). There are other amendments which are not relevant to this Order.

(c) 1972 c. 20. Section 236 was amended by section 84 of the Local Government Act 1985 (c.51), Schedule 6 to the Local Democracy, Economic Development and Construction Act 2009 and section 55 of the Levelling-up and Regeneration Act 2023. There are other amendments which are not relevant to this Order.

PART 3

STREETS

Street works

8.—(1) The undertaker may, for the purposes of the authorised development, enter on so much of any of the streets specified in Schedule 2 (streets and public rights of way subject to street works) as is within the Order limits and may—

- (a) break up or open the street, or any sewer, drain or tunnel within or under it;
- (b) tunnel or bore under the street;
- (c) remove or use all earth and materials in or under the street;
- (d) place and keep apparatus in or under the street;
- (e) maintain apparatus in or under the street or change its position; and
- (f) execute any works required for or incidental to any works referred to in sub-paragraphs (a) to (e).

(2) The authority given by paragraph (1) is a statutory right for the purposes of sections 48(3) (streets, street works and undertakers) and 51(1) (prohibition of unauthorised street works) of the 1991 Act.

Application of the 1991 Act

9.—(1) The provisions of the 1991 Act mentioned in paragraph (2) that apply in relation to the carrying out of street works under that Act and any regulations made or code of practice issues or approved under those provisions apply (with all necessary modifications) in relation to—

- (a) the carrying out of works under article 8 (street works); and
- (b) the temporary closure, temporary alteration or temporary diversion of a street by the undertaker under article 11 (temporary closure of public rights of way) and article 12 (temporary restriction of use of streets),

whether or not the carrying out of the works or the closure, alteration or diversion constitutes street works within the meaning of the Act.

(2) The provisions of the 1991 Act^(a) are—

- (a) subject to paragraph (3), section 55 (notice of starting date of works);
- (b) section 57 (notice of emergency works);
- (c) section 60 (general duty of undertakers to co-operate);
- (d) section 68 (facilities to be afforded to a street authority);
- (e) section 69 (works likely to affect other apparatus in the street);
- (f) section 76 (liability for cost of temporary traffic regulations);
- (g) section 77 (liability for cost of use of alternative route); and
- (h) all provisions of that Act that apply for the purposes of the provisions referred to in sub-paragraphs (a) to (g).

(3) Section 55 of the 1991 Act as applied by paragraph (2) has effect as if references in section 57 of that Act to emergency works included a reference to a closure, alteration or diversion (as the case may be) required in a case of emergency.

^(a) Sections 55, 57, 60, 68 and 69 were amended by the Traffic Management Act 2004 (c. 18).

Construction and maintenance of new or altered highway

10.—(1) Any highway to be constructed under this Order must be completed to the reasonable satisfaction of the relevant highway authority and, unless otherwise agreed in writing with the highway authority, the highway including any culverts or other structures laid under it must be maintained by and at the expense of the relevant highway authority from its completion.

(2) Where a highway is altered or diverted under this Order, the altered or diverted part of the highway must be completed to the reasonable satisfaction of the relevant highway authority and, unless otherwise agreed in writing with the relevant highway authority, that part of the highway including any culverts or other structures laid under it must be maintained by and at the expense of the relevant highway authority from its completion.

Temporary closure of public rights of way

11.—(1) The undertaker may, in connection with the carrying out of the authorised development, temporarily close each of the public rights of way specified in column (1) of Part 2 (public rights of way to be temporarily closed or restricted) of Schedule 3 (traffic regulation) to the extent specified in column (2), by reference to the letters shown on the temporary closure of public rights of way plan.

(2) The public rights of way specified in Part 2 (public rights of way to be temporarily closed or restricted) of Schedule 3 may not be temporarily closed under this article unless a diversion for the closed section of that public right of way, is first provided by the undertaker to the standard defined in the public access management plan forming part of the code of construction practice to be approved in accordance with the requirements set out in Part 3 (requirements) of Schedule 1, to the reasonable satisfaction of the highway authority.

(3) The relevant diversion route provided under paragraph (2) will be subsequently maintained by the undertaker until the re-opening of the relevant right of way specified in paragraph (1).

(4) Any person who suffers loss by the suspension of any private right of way under this article is entitled to compensation to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

Temporary restriction of use of streets

12.—(1) The undertaker, during and for the purposes of constructing or maintaining the authorised development, may temporarily close, alter or divert any street and may for any reasonable time—

- (a) divert the traffic or a class of traffic from the street;
- (b) authorise the use of motor vehicles on classes of highway where, notwithstanding the provisions of this article, there is otherwise no public right to use motor vehicles; and
- (c) subject to paragraph (3), prevent all persons from passing along the street.

(2) Without limiting paragraph (1), the undertaker may use any street temporarily closed under the powers conferred by this article within the Order limits as a temporary working site.

(3) The undertaker must provide reasonable access for pedestrians going to or from premises abutting a street affected by the alteration or diversion of a street under this article if there would otherwise be no such access.

(4) The undertaker must not temporarily close or use as a temporary working site any street without the consent of the street authority, which may attach reasonable conditions to the consent.

(5) Any person who suffers loss by the suspension of any private right of way under this article is entitled to compensation to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(6) If a street authority fails to notify the undertaker of its decision within 56 days of receiving an application for consent under paragraph (5), that street authority is deemed to have granted consent.

Access to works

13.—(1) The undertaker may, for the purposes of the authorised development—

- (a) form, lay out and maintain a means of access, or improve or maintain an existing means of access, in the locations specified in columns (1) and (2) of Schedule 4 (access to works); and
- (b) with the approval of the relevant planning authority after consultation with the highway authority in accordance with requirement 10 (permanent highway accesses), form and lay out such other means of access or improve existing means of access, at such locations within the Order limits as the undertaker reasonably requires for the purposes of the authorised development.

(2) If the relevant planning authority fails to notify the undertaker of its decision within 56 days of receiving an application for approval under paragraph (1)(b) that relevant planning authority is deemed to have been granted.

Traffic regulation

14.—(1) Subject to the provisions of this article, the undertaker may, in so far as may be expedient or necessary for the purposes of or in connection with, or in consequence of, the construction of the authorised development, temporarily—

- (a) permit, prohibit or restrict the stopping, parking, waiting, loading or unloading of vehicles on any road;
- (b) make provision as to the direction or priority of vehicular traffic on any road;
- (c) permit, prohibit or restrict the use of any road;
- (d) permit, prohibit or restrict vehicular access to any road;
- (e) place traffic signs and signals in the extents of the road specified in column (2) of Part 1 (streets to be temporarily closed or restricted), column (2) of Part 2 (public rights of way to be temporarily close or restricted) and column (3) of Part 3 (speed limits) of Schedule 3 (traffic regulation), and the placing of those traffic signs and signals is deemed to have been permitted by the traffic authority for the purposes of section 65 of the 1984 Act and the Traffic Signs Regulations and General Directions 2016(a).

(2) The undertaker must notify the chief officer of police and the traffic authority in whose area the road is situated of the intended date of commencement of development under this Order and the intended date of commencement of any maintenance works where the exception set out in paragraph (1) will apply not less than 14 days before such work are commenced.

(3) On and after the date notified by the undertaker in accordance with paragraph (4) no person is to drive any motor vehicle at a speed exceeding the limit specified in column (3) of Part 3 (speed limits) of Schedule 3 along the lengths of road identified in the corresponding row of column (2) of that Part. No speed limit imposed by or under this Order applies to vehicles falling within regulation 3(4) of the Road Traffic Exemptions (Special Forces) (Variation and Amendment) Regulations 2011(b) when in accordance with regulation 3(5) of those regulations.

(4) The undertaker must notify the chief officer of police and the traffic authority in whose area the road is situated of the date upon which paragraph (3) takes effect not less than 14 days before that date.

(5) Before exercising the power conferred by paragraph (1) the undertaker must—

- (a) consult with the chief officer of police in whose area the road is situated; and
- (b) obtain the written consent of the traffic authority in whose area the road concerned is situated.

(a) S.I. 2016/362.

(b) S.I. 2011/935.

(6) Subject to the provisions of this article, and the consent of the traffic authority in whose area the road concerned is situated, which consent must not be unreasonably withheld, the undertaker may, for the purposes of the authorised development revoke, amend or suspend in whole or in part any order not listed in Schedule 4 (access to works) made, or having effect as if made, under the 1984 Act, either at all times or at times, on days or during such periods as may be specified by the undertaker.

(7) The power conferred by paragraph (6) may be exercised at any time prior to the expiry of 12 months from the commencement of operation of the authorised development but subject to paragraph (10) any prohibition, restriction or other provision made under this article may have effect both before and after the expiry of that period.

(8) Before exercising the powers conferred by paragraph (1) the undertaker must consult such persons as it considers necessary and appropriate and must take into consideration any representations made to it by any such person.

(9) The undertaker must consult the chief officer of police and the traffic authority in whose area the road is situated before complying with the provisions of paragraph (8).

(10) Unless otherwise stated, the undertaker must not exercise the powers conferred by this article unless it has—

- (a) given to the chief officer of police and to the traffic authority in whose area the road is situated not less than—
 - (i) 12 weeks' notice in writing of its intention so to do in the case of a prohibition, restriction or other provision intended to have effect permanently; or
 - (ii) 4 weeks' notice in writing of its intention so to do in the case of a prohibition, restriction or other provision intended to have effect temporarily, and
- (b) advertised its intention in such manner as the traffic authority may specify in writing within 28 days of its receipt of notice of the undertaker's intention in the case of sub-paragraph (a)(i), or within 7 days of its receipt of notice of the undertaker's intention in the case of sub-paragraph (a)(ii).

(11) Any prohibition, restriction or other provision made by the undertaker under this article—

- (a) has effect as if duly made by, as the case may be—
 - (i) the traffic authority in whose area the road is situated, as a traffic regulation order under the 1984 Act; or
 - (ii) the local authority in whose area the road is situated, as an order under section 32 (power of local authorities to provide parking places) of the 1984 Act, and the instrument by which it is effected may specify specific savings and exemptions to which the prohibition, restriction or other provision is subject; and
- (b) is deemed to be a traffic order for the purposes of Schedule 7 (road traffic contraventions subject to civil enforcement) to the Traffic Management Act 2004(a).

(12) Any prohibition, restriction or other provision made under this article may be suspended, varied or revoked by the undertaker from time to time by subsequent exercise of the powers conferred by this article within a period of 24 months from the opening of the authorised development.

(13) In this article, expressions used in this article and in the 1984 Act have the same meaning.

(14) The powers conferred on the undertaker by this article with respect to any road have effect subject to any agreement entered into by the undertaker with any person with an interest in (or who undertakes activities in relation to) premises served by the road.

(15) Save for any application made to National Highways, if the traffic authority fails to notify the undertaker of its decision within 56 days of receiving an application for consent under this article, the traffic authority is deemed to have granted consent.

(a) 2004 c. 18. There are amendments to this Act not relevant to this Order.

Agreements with street authorities

- 15.—(1) A street authority and the undertaker may enter into agreements with respect to—
- (a) any temporary closure, alteration or diversion of a street authorised by this Order; or
 - (b) the carrying out in the street of any works referred to in article 8 (street works).
- (2) Such agreement may, without prejudice to the generality of paragraph (1)—
- (a) make provision for the street authority to carry out any function under this Order which relates to the street in question;
 - (b) include an agreement between the undertaker and street authority specifying a reasonable time for the completion of the works; and
 - (c) contain such terms as to payment and otherwise as the parties consider appropriate.

Power to alter layout etc. of streets

16.—(1) Subject to paragraphs (2) and (3), the undertaker may, in so far as may be expedient or necessary for the purposes of or in connection with constructing, operating or maintaining the authorised development alter the layout of any street and, without limitation on the scope of this paragraph, the undertaker may—

- (a) alter the level or increase the width of the street including any kerb, footway, cycle track or verge; and
- (b) make and maintain passing place(s).

(2) The undertaker must restore any street that has been temporarily altered under this article to the reasonable satisfaction of the street authority.

(3) The powers conferred by paragraph (1) must not be exercised without the consent of the street authority.

(4) Paragraphs (2) and (3) do not apply where the undertaker is the street authority for a street in which the works are being carried out.

PART 4

SUPPLEMENTAL POWERS

Discharge of water

17.—(1) Subject to paragraphs (3) and (4) below, the undertaker may use any watercourse or any public sewer or drain for the drainage of water in connection with the carrying out or maintenance of the authorised development and for that purpose may inspect, lay down, take up and alter pipes and may, on any land within the Order limits, make openings into, and connections with, the watercourse, public sewer or drain.

(2) Any dispute arising from the making of connections to or the use of a public sewer or drain by the undertaker pursuant to paragraph (1) is determined as if it were a dispute under section 106 of the Water Industry Act 1991(a) (right to communicate with public sewers).

(3) The undertaker must not discharge any water into any watercourse or any public sewer or drain, except with the consent of the person to whom it belongs; and such consent may be given subject to such terms and conditions as that person may reasonably impose, but must not be unreasonably withheld.

(4) The undertaker must not carry out any works to any public sewer or drain pursuant to paragraph (1) except—

(a) 1991 c. 56. Section 106 was amended by sections 35(8)(a) and 43(2) of and paragraph 1 of Schedule 2 to the Competition and Service (Utilities) Act 1992 (c. 43) and sections 36(2) and 99(2), (4), (5)(a), (5)(b), (5)(c) of the Water Act 2003 (c. 37) and section 32, and paragraph 16(1) of and Schedule 3 to the Flood and Water Management Act 2010 (c. 29).

- (a) in accordance with plans approved by the person to whom the sewer or drain belongs, but such approval must not be unreasonably withheld; and
- (b) where that person has been given the opportunity to supervise the making of the opening.

(5) The undertaker must not, in carrying out or maintaining works pursuant to this article damage or interfere with the beds or banks of any watercourse forming part of a main river as defined under section 113(1) of the Water Resources Act 1991, or within 16 metres of a tidally influenced main river without the prior written consent of the Environment Agency.

(6) The undertaker must take such steps as are reasonably practicable to secure that any water discharged into a watercourse or public sewer or drain pursuant to this article is as free as may be practicable from gravel, soil or other solid substance, oil or matter in suspension.

(7) This article does not authorise any water discharge or groundwater activity for which an environmental permit is required by regulation 12 (requirement for an environmental permit) of the 2016 Regulations.

(8) In this article—

- (a) “public sewer or drain” means a sewer or drain which either belongs to a sewerage undertaker, the Environment Agency, an internal drainage board or a local authority; and
- (b) other expressions, excluding watercourse, used both in this article and in the 2016 Regulations have the same meaning as in those Regulations.

(9) If a person who receives an application for consent or approval fails to notify the undertaker of a decision within 28 days of receiving an application for consent under paragraph (3) or approval under paragraph (4)(a) that person is deemed to have granted consent or given approval, as the case may be.

Protective works to buildings

18.—(1) Subject to the following provisions of this article, the undertaker may at its own expense carry out such protective works to any building lying within the Order limits as the undertaker considers necessary or expedient.

(2) Protective works may be carried out—

- (a) at any time before or during the carrying out of any part of the authorised development in the vicinity of the building; or
- (b) after the completion of that part of the authorised development in the vicinity of the building at any time up to the end of the period of five years beginning with the day on which that part of the authorised development is commissioned.

(3) For the purposes of determining how the powers under this article are to be exercised, the undertaker may enter and survey any building falling within paragraph (1) and any land within its curtilage.

(4) For the purposes of carrying out protective works under this article to a building, the undertaker may (subject to paragraphs (5) and (6))—

- (a) enter the building and any land within its curtilage; and
- (b) where the works cannot be carried out reasonably conveniently without entering land that is adjacent to the building but outside its curtilage, enter the adjacent land (but not any building erected on it).

(5) Before exercising—

- (a) a power under paragraph (1) to carry out protective works to a building;
- (b) a power under paragraph (3) to enter a building and land within its curtilage;
- (c) a power under paragraph (4)(a) to enter a building and land within its curtilage; or
- (d) a power under paragraph (4)(b) to enter land,

the undertaker must, except in the case of emergency, serve on the owners and occupiers of the building or land not less than 14 days' notice of its intention to exercise the power and, in a case falling within sub-paragraph (a) or (c), specifying the protective works proposed to be carried out.

(6) Where a notice is served under paragraph (5)(a), (5)(c) or (5)(d), the owner or occupier of the building or land concerned may, by serving a counter-notice within the period of 10 days beginning with the day on which the notice was served, require the question of whether it is necessary or expedient to carry out the protective works or to enter the building or land to be referred to arbitration under article 42 (arbitration).

(7) The undertaker must compensate the owners and occupiers of any building or land in relation to which powers under this article have been exercised for any loss or damage arising to them by reason of the exercise of the powers.

(8) Where—

- (a) protective works are carried out under this article to a building; and
- (b) within the period of five years beginning with the day on which the part of the authorised development carried out in the vicinity of the building is commissioned it appears that the protective works are inadequate to protect the building against damage caused by the carrying out or use of that part of the authorised development,

the undertaker must compensate the owners and occupiers of the building for any loss or damage sustained by them.

(9) Nothing in this article relieves the undertaker from any liability to pay compensation under section 152 of the 2008 Act (compensation in case where no right to claim nuisance).

(10) Any compensation payable under paragraph (7) or (8) must be determined, in case of dispute, under Part 1 of the 1961 Act (determination of questions of disputed compensation).

(11) Section 13 (refusal to give possession to acquiring authority) of the 1965 Act applies to the entry onto, or possession of land under this article to the same extent that it applies to the compulsory acquisition of land under this Order by virtue of section 125 (application of compulsory acquisition provisions) of the 2008 Act.

(12) In this article, “protective works”, in relation to a building, means—

- (a) underpinning, strengthening and any other works the purpose of which is to prevent damage that may be caused to the building by the carrying out, maintenance or use of the authorised development; and
- (b) any works the purpose of which is to remedy any damage that has been caused to the building by the carrying out, maintenance or use of the authorised development.

Authority to survey and investigate the land onshore

19.—(1) The undertaker may for the purposes of this Order enter on any land shown within the Order limits or any land which may be affected by the authorised development and—

- (a) survey or investigate the land;
- (b) without prejudice to the generality of sub-paragraph (a), make trial holes or bore holes in such positions on the land as the undertaker thinks fit to investigate the nature of the surface layer, subsoil and groundwater and remove soil and groundwater samples;
- (c) without prejudice to the generality of sub-paragraph (a), carry out ecological or archaeological investigations on such land, including the digging of trenches; and
- (d) place on, leave on and remove from the land apparatus for use in connection with the survey and investigation of land and making of trial holes, bore holes or trenches.

(2) No land may be entered or equipment placed or left on or removed from the land under paragraph (1) unless at least 14 days' notice has been served on every owner and occupier of the land.

(3) Any person entering land under this article on behalf of the undertaker—

- (a) must, if so required on entering the land, produce written evidence of their authority to do so; and
 - (b) may take with them such vehicles and equipment as are necessary to carry out the survey or investigation or to make the trial holes, bore holes or trenches.
- (4) No trial holes, bore holes or trenches may be made under this article—
- (a) in land location within the highway boundary without the consent of the highway authority; or
 - (b) in a private street without the consent of the street authority,
- but such consent must not be unreasonably withheld or delayed.
- (5) The undertaker must compensate the owners and occupiers of the land for any loss or damage arising by reason of the exercise of the authority conferred by this article, such compensation to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.
- (6) If either a highway authority or a street authority which receives an application for consent fails to notify the undertaker of its decision within 28 days of receiving the application for consent—
- (a) under paragraph (4)(a) in the case of a highway authority; or
 - (b) under paragraph (4)(b) in the case of a street authority;
- that authority is deemed to have granted consent.
- (7) Section 13 (refusal to give possession to acquiring authority) of the 1965 Act applies to the entry onto, or possession of land under this article to the same extent as it applies to the compulsory acquisition of land under this Order by virtue of section 125 (application of compulsory acquisition provisions) of the 2008 Act.

Removal of human remains

- 20.—(1) Before the undertaker carries out any development or works which will or may disturb any human remains in the Order land it must remove those human remains from the Order land, or cause them to be removed, in accordance with the following provisions of this article.
- (2) Before any such remains are removed from the Order land the undertaker must give notice of the intended removal, describing the Order land and stating the general effect of the following provisions of this article, by—
- (a) publishing a notice once in each of two successive weeks in a newspaper circulating in the area of the authorised development; and
 - (b) displaying a notice in a conspicuous place on or near to the Order land.
- (3) As soon as reasonably practicable after the first publication of a notice under paragraph (2) the undertaker must send a copy of the notice to the relevant planning authority.
- (4) At any time within fifty-six days after the first publication of a notice under paragraph (2) any person who is a personal representative or relative of any deceased person whose remains are interred in the specific land may give notice in writing to the undertaker of that person's intention to undertake the removal of the remains.
- (5) Where a person has given notice under paragraph (4), and the remains in question can be identified, that person may cause such remains to be—
- (a) removed and re-interred in any burial ground or cemetery in which burials may legally take place; or
 - (b) removed to, and cremated in, any crematorium;
- and that person must, as soon as reasonably practicable after such re-interment or cremation, provide to the undertaker a certificate for the purpose of enabling compliance with paragraph (10).
- (6) If the undertaker is not satisfied that any person giving notice under paragraph (4) is the personal representative or relative as that person claims to be, or that the remains in question can

be identified, the question is to be determined on the application of either party in summary manner by the county court, and the court may make an order specifying who is to remove the remains and as to the payment of the costs of the application.

(7) The undertaker must pay the reasonable expenses of removing and re-interring or cremating the remains of any deceased person under this article.

(8) If—

- (a) within the period of fifty-six days referred to in paragraph (4) no notice under that paragraph has been given to the undertaker in respect of any remains in the Order land;
- (b) such notice is given and no application is made under paragraph (6) within fifty-six days after the giving of the notice but the person who has given the notice fails to remove the remains within a further period of fifty-six days;
- (c) within fifty-six days after any order is made by the county court under paragraph (6) any person, other than the undertaker, specified in the order fails to remove the remains; or
- (d) it is determined that the remains to which any such notice under paragraph (4) relates cannot be identified;

subject to paragraph (9), the undertaker must remove the remains and cause them to be re-interred in such burial ground, or cemetery in which burials may legally take place as the undertaker thinks suitable for the purpose and, so far as possible, remains from individual graves must be re-interred in individual containers which must be identifiable by a record prepared with reference to the original position of burial of the remains that they contain.

(9) If the undertaker is satisfied that any person giving notice under paragraph (4) is the personal representative or relative as that person claims to be and that the remains in question can be identified, but that person does not remove the remains, the undertaker must comply with any reasonable request that person may make in relation to the removal and re-interment or cremation of the remains.

(10) On the re-interment or cremation of any remains under this article—

- (a) a certificate of re-interment or cremation must be sent by the undertaker to the Registrar General by the undertaker giving the date of re-interment or cremation and identifying the place from which the remains were removed and the place in which they were re-interred or cremated; and
- (b) a copy of the certificate of re-interment or cremation and the record mentioned in paragraph (8) must be sent by the undertaker to the relevant planning authority mentioned in paragraph (3).

(11) No notice is required under paragraph (2) before the removal of any human remains where the undertaker is satisfied that—

- (a) the remains were interred more than 100 years ago; and
- (b) that no relative or personal representative of the deceased is likely to object to the remains being moved in accordance with this article.

(12) In this article, references to a relative of the deceased are to a person who—

- (a) is a husband, wife, civil partner, parent, grandparent, child or grandchild of the deceased;
- (b) is, or is a child of, a brother, sister, uncle or aunt of the deceased;
- (c) is the lawful executor of the estate of the deceased; or
- (d) is the lawful administrator of the estate of the deceased.

(13) The removal of the remains of any deceased person under this article must be carried out in accordance with any directions which may be given by the Secretary of State.

(14) Any jurisdiction or function conferred on the county court by this article may be exercised by the district judge of the court.

(15) Section 25 (bodies not to be removed from burial grounds, save under faculty, without licence of Secretary of State) of the Burial Act 1857^(a) is not to apply to a removal carried out in accordance with this article.

PART 5

POWERS OF ACQUISITION

Compulsory acquisition of land

21.—(1) The undertaker may acquire compulsorily so much of the Order land as is required for the authorised development, or to facilitate it, or as is incidental to it.

(2) This article is subject to article 23 (time limit for exercise of authority to acquire land compulsorily), article 24(2) (compulsory acquisition of rights etc.), article 28 (acquisition of subsoil only), article 30 (rights under or over streets), article 31 (temporary use of land for carrying out the authorised development), article 46 (Crown rights) and Schedule 14 (protective provisions).

Compulsory acquisition of land: minerals

22. Parts 2 and 3 of Schedule 2 (minerals) to the Acquisition of Land Act 1981 are incorporated in this Order, subject to the following modifications—

- (a) for “acquiring authority” substitute “undertaker”; and
- (b) for “undertaking” substitute “authorised development”.

Time limit for exercise of authority to acquire land compulsorily

23.—(1) The applicable period for the purposes of section 4 of the 1965 Act (time limit for giving notice to treat) and section 5A of the 1981 Act (time limit for general vesting declaration) is seven years beginning on the day on which this Order is made.

(2) No notice to treat is to be served under Part 1 (compulsory purchase under the Acquisition of Land Act of 1946) of the 1965 Act and no declaration is to be executed under section 4 (execution of declaration) of the 1981 Act as applied by article 26 (application of the 1981 Act) after the end of the applicable period, including any extension to the applicable period pursuant to those Acts.

(3) The authority conferred by article 31 (temporary use of land for carrying out the authorised development) must not be used after the end of the applicable period referred to in paragraph (1), save that if an application is made under section 118 of the 2008 Act (legal challenges relating to applications for orders granting development consent) the applicable period is to be extended by—

- (a) a period equivalent to the period beginning on the day the application is made and ending on the day it is withdrawn or finally determined; or
- (b) if shorter, one year.

(4) An application is not finally determined for the purposes of paragraph (3)(a) if an appeal in respect of the application—

- (a) could be brought (ignoring any possibility of an appeal out of time with permission); or
- (b) has been made and not withdrawn or finally determined.

(5) Nothing in paragraph (3) prevents the undertaker remaining in possession of land after the end of that period, if the land was entered and possession was taken before the end of that period.

^(a) 1857 c. 81.

Compulsory acquisition of rights etc.

24.—(1) Subject to paragraph (2), the undertaker may acquire compulsorily such rights over the Order land or impose such restrictive covenants affecting the Order land as may be required for any purpose for which that land may be acquired under article 21 (compulsory acquisition of land), by creating them as well as by acquiring rights already in existence.

(2) Subject to the provisions of this paragraph, article 25 (private rights) and article 33 (statutory undertakers), in the case of the Order land specified in column (1) of Schedule 5 (land in which only new rights etc., may be acquired) the undertaker's powers of compulsory acquisition are limited to the acquisition of existing rights over land and the creation and acquisition of the new rights and the imposition of restrictive covenants for the purpose specified in relation to that land in column (2) of that Schedule.

(3) Subject to section 8 (other provisions as to divided land) of the 1965 Act, and Schedule 2A (counter-notice requiring purchase of land not in notice to treat) as substituted by paragraph 5(8) of Schedule 6 (modification of compensation and compulsory purchase enactments for creation of new rights), where the undertaker creates a new interest or acquires an existing right over land or imposes a restrictive covenant under paragraph (1) or (2), the undertaker is not required to acquire a greater interest in that land.

(4) Schedule 6 (modification of compensation and compulsory purchase enactments for creation of new rights) has effect for the purpose of modifying the enactments relating to compensation and the provisions of the 1965 Act in their application in relation to the compulsory acquisition under this article of a right over land by creation of a new right or the imposition of a restrictive covenant.

(5) In any case where the acquisition of new rights or imposition of a restriction under paragraph (1) or (2) is required for the purpose of diverting, replacing or protecting apparatus of a statutory undertaker, the undertaker may, with the consent of the Secretary of State, transfer the power to acquire such rights and impose such restrictions to the statutory undertaker in question.

(6) The exercise by a statutory undertaker of any power in accordance with a transfer under paragraph (5) is subject to the same restrictions, liabilities and obligations as would apply under this Order if that power were exercised by the undertaker.

(7) Subject to the modifications set out in Schedule 6 the enactments for the time being in force with respect to compensation for the compulsory purchase of land are to apply in the case of a compulsory acquisition under this Order in respect of a right by the creation of a new right or imposition of a restriction as they apply to the compulsory purchase of land and interests in land.

(8) Subject to article 46 (Crown rights), so much of the special category land as is required for the purposes of exercising the powers acquired by the undertaker pursuant to this article is discharged from all rights, trusts and incidents to which it was previously subject, so far as their continuance would be inconsistent with the exercise of those rights.

Private rights

25.—(1) Subject to the provisions of this article, all private rights and restrictions over land subject to compulsory acquisition under this Order are extinguished—

- (a) as from the date of acquisition of the land by the undertaker, whether compulsorily, by agreement or through the grant of a lease of the land by agreement; or
- (b) on the date of entry on the land by the undertaker under section 11(1) of the 1965 Act (power of entry),

whichever is earliest.

(2) Subject to the provisions of this article, all private rights and restrictions over land subject to compulsory acquisition of rights or the imposition of restrictions under this Order are extinguished in so far as their continuance would be inconsistent with the exercise of the right or compliance with the restriction—

- (a) as from the date of the acquisition of the right or the imposition of the restriction by the undertaker (whether the right is acquired compulsorily, by agreement or through the grant of a lease of the land by agreement); or
- (b) on the date of entry on the land by the undertaker under section 11(1) of the 1965 Act (powers of entry) in pursuance of the right,

whichever is the earliest.

(3) Subject to the provisions of this article, all private rights or restrictions over land of which the undertaker takes temporary possession under this Order are suspended and unenforceable, in so far as their continuance would be inconsistent with the purpose for which temporary possession is taken, for as long as the undertaker remains in lawful possession of the land.

(4) Subject to the provisions of this article, all private rights over any part of the Order land that is owned by, vested in or acquired by the undertaker are extinguished on commencement of any activity authorised by this Order which interferes with or breaches those rights and where the undertaker gives notice of such extinguishment.

(5) Any person who suffers loss by the extinguishment or suspension of any private right or restriction under this article is entitled to compensation in accordance with the terms of section 152 of the 2008 Act, to be determined, in case of dispute, under Part 1 of the 1961 Act (determination of questions of disputed compensation).

(6) This article does not apply in relation to any right to which section 138 of the 2008 Act (extinguishment of right, and removal of apparatus, of statutory undertakers etc.) or article 33 (statutory undertakers) applies.

(7) Paragraphs (1) to (3) have effect subject to—

- (a) any notice given by the undertaker before—
 - (i) the completion of the acquisition of the land or the acquisition of rights or the imposition of restrictions over or affecting the land;
 - (ii) the undertaker's appropriation of the land;
 - (iii) the undertaker's entry onto the land; or
 - (iv) the undertaker's taking temporary possession of the land,
 that any or all of those paragraphs do not apply to any right or restriction specified in the notice; or
- (b) any agreement made at any time between the undertaker and the person in or to whom the right or restriction is question is vested, belongs to benefits.

(8) If an agreement referred to in paragraph (7)(b)—

- (a) is made with a person in or to whom the right or restriction is vested, belongs or benefits; and
- (b) is expressed to have effect also for the benefit of those deriving title from or under that person,

the agreement is effective in respect of the persons so deriving title, whether the title was derived before or after the making of the agreement.

(9) Reference in this article to private rights over land includes reference to any trusts or incidents to which the land is subject.

Application of the 1981 Act

26.—(1) The 1981 Act applies as if this Order were a compulsory purchase order.

(2) The 1981 Act, as applied by paragraph (1), has effect with the following modifications.

(3) In section 1 (application of Act), for subsection 2 substitute—

“(2) This section applies to any Minister, any local or other public authority or any other body or person authorised to acquire land by any means of a compulsory purchase order.”.

(4) In Section 5(2) (earliest date for execution of declaration) omit the words from “and this subsection” to the end.

(5) In Section 5B(1) (extension of time limit during challenge) for “section 23 of the Acquisition of Land Act 1981 (application to High Court in respect of compulsory purchase order)” substitute “section 118 of the 2008 Act (legal challenges relating to applications for orders granting development consent)”.

(6) In section 6 (notices after execution of declaration), in subsection (1)(b) for “section 15 of, or paragraph 6 of Schedule 1 to, the Acquisition of Land Act 1981” substitute “section 134 (notice of authorisation of compulsory acquisition) of the Planning Act 2008”.

(7) In section 7 (constructive notice to treat), in subsection (1)(a), omit the words “(as modified by section 4 of the Acquisition of Land Act 1981)”.

(8) In Schedule A1 (counter-notice requiring purchase of land not in general vesting declaration), for paragraph 1(2) substitute—

“(2) But see article 28(1) (acquisition of subsoil only) of the North Falls Offshore Wind Farm Order 202[], which excludes the acquisition of subsoil only from this Schedule.”.

(9) References to the 1965 Act in the 1981 Act must be construed as references to the 1965 Act as applied by section 125 (application of compulsory acquisition provisions) of the 2008 Act (as modified by article 29 (modification of Part 1 of the 1965 Act) to the compulsory acquisition of land under this Order.

Statutory authority to override easements and other rights

27.—(1) The carrying out or use of the authorised development and the doing of anything else authorised by the Order is authorised for the purpose specified in section 158(2) (nuisance: statutory authority) of the 2008 Act, notwithstanding that it involves—

- (a) an interference with an interest or right to which this article applies; or
- (b) a breach of a restriction as to use of land arising by virtue of contract.

(2) The undertaker must pay compensation to any person whose land is injuriously affected by—

- (a) an interference with an interest or right to which this article applies; or
- (b) a breach of a restriction as to the use of land arising by virtue of contract,

authorised by virtue of this Order and the operation of section 158 (nuisance: statutory authority) of the 2008 Act.

(3) The interests and rights to which this article applies are any easement, liberty, privilege, right or advantage annexed to land and adversely affecting other land, including any natural right to support and any restrictions as to the use of land arising by virtue of a contract.

(4) Subsection (2) of section 10 (further provisions as to compensation for injurious affection) of the 1965 Act applies to paragraph (2) by virtue of section 152(5) of the 2008 act (compensation in case where no right to claim in nuisance).

(5) Any rule or principle applied to the construction of section 10 of the 1965 Act must be applied to construction of paragraph (2) (with any necessary modifications).

Acquisition of subsoil only

28.—(1) The undertaker may acquire compulsorily so much of, or such rights in, the subsoil of the land referred to in paragraph (1) of article 21 (compulsory acquisition of land) or article 24 (compulsory acquisition of rights etc.) as may be required for any purpose for which that land may be acquired under that provision instead of acquiring the whole of the land.

(2) Where the undertaker acquires any part of, or rights in, the subsoil of land under paragraph (1), the undertaker is not required to acquire an interest in any other part of the land.

(3) The following do not apply in connection with the exercise of the power under paragraph (1) in relation to the subsoil only—

- (a) Schedule 2A (counter-notice requiring purchase of land not in notice to treat) of the 1965 Act as modified by Schedule 6 (modification of compensation and compulsory purchase enactments for creation of new rights);
 - (b) Schedule A1 (counter-notice requiring purchase of land not in general vesting declaration) to the 1981 Act; and
 - (c) Section 153(4A) (blighted land: proposed acquisition of part interest; material detriment test) of the Town and Country Planning Act 1990.
- (4) Paragraphs (2) and (3) do not apply where the undertaker acquires a cellar, vault, arch or other construction forming part of a house, building or factory.

Modification of Part 1 of the 1965 Act

29.—(1) Part 1 (compulsory purchase under Acquisition of Land Act of 1946) of the 1965 Act, as applied to this Order by section 125 (acquisition of compulsory acquisition provisions) of the 2008 Act is modified as follows.

(2) In Section 4A(1) (extension of time limit during challenge), for “section 23 of the Acquisition of Land Act 1981 (application to High Court in respect of compulsory purchase order)” substitute, “section 118 of the 2008 Act (legal challenges relating to applications for orders granting development consent)”.

(3) In Section 11A (powers of entry: further notices of entry)—

- (a) in subsection (1)(a), after “land” insert “under that provision”; and
- (b) in subsection (2), after “land” insert “under that provision”.

(4) In Schedule 2A (counter-notice requiring purchase of land not in notice to treat)—

(a) for paragraphs 1(2) and 14(2) substitute—

“(2) But see article 28(3) (acquisition of subsoil only) of the North Falls Offshore Wind Farm Order 202[], which excludes the acquisition of subsoil only from this Schedule.”; and

(b) at the end insert—

“PART 4

30. In this Schedule, references to entering on and taking possession of land do not include doing so under article 18 (protective works to buildings), article 19 (authority to survey and investigate the land onshore), article 31 (temporary use of land for carrying out the authorised development) or article 32 (temporary use of land for maintaining the authorised development) of the North Falls Offshore Wind Farm Order 202[].”.

Rights under or over streets

30.—(1) The undertaker may enter on and appropriate so much of the subsoil of or air-space over any street within the Order limits as may be required for the purposes of the authorised development and may use the subsoil or air-space for those purposes or any other purpose ancillary to the authorised development.

(2) Subject to paragraph (3), the undertaker may exercise any power conferred by paragraph (1) in relation to a street without being required to acquire any part of the street or any easement or right in the street.

(3) Paragraph (2) does not apply in relation to—

- (a) any subway or underground building; or
- (b) any cellar, vault, arch or other construction in, on or under a street which forms part of a building fronting onto the street.

(4) Subject to paragraph (5), any person who is an owner or occupier of land appropriated under paragraph (1) without the undertaker acquiring any part of that person’s interest in the land, and

who suffers loss as a result, is entitled to compensation to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(5) Compensation is not payable under paragraph (4) to any person who is an undertaker to whom section 85 (sharing cost of necessary measures) of the 1991 Act applies in respect of measures of which the allowable costs are to be borne in accordance with that section.

Temporary use of land for carrying out the authorised development

31.—(1) The undertaker may, in connection with the carrying out of the authorised development—

- (a) enter on or take temporary possession of—
 - (i) the land specified in columns (1) and (2) of Schedule 7 (land of which temporary possession may be taken) for the purpose specified in relation to that land in column (3) of that Schedule; and
 - (ii) any other Order land in respect of which no notice of entry has been served under section 11 (powers of entry) of the 1965 Act (other than in connection with the acquisition of rights only) and no declaration has been made under section 4 (execution of declaration) of the 1981 Act;
- (b) remove any buildings, agricultural plant and apparatus, drainage, fences, debris and vegetation from the land;
- (c) construct temporary works (including the provision of means of access and footpaths), haul roads, security fencing, bridges, services, signage, structures and buildings on that land;
- (d) use the land for the purposes of a working site with access to the working site in connection with the authorised development;
- (e) construct any works, or use the land, as specified in relation to that land in column (3) of Schedule 7 (land of which temporary possession may be taken), or any mitigation works;
- (f) construct such works on that land as are mentioned in Part 1 of Schedule 1 (authorised development); and
- (g) carry out mitigation works required pursuant to the requirements in Part 3 of Schedule 1 (requirements).

(2) Not less than 28 days before entering on and taking temporary possession of land under this article the undertaker must serve notice of the intended entry on the owners and occupiers of the land.

(3) The undertaker must not, without the agreement of the owners of the land, remain in possession of any land under this article—

- (a) in the case of land specified in paragraph (1)(a)(i) after the end of the period of one year beginning with the date of completion of the part of the authorised development specified in relation to that land in column (3) of Schedule 7; or
- (b) in the case of land specified in paragraph (1)(a)(ii) after the end of the period of one year beginning with the date of completion of the part of the authorised development for which temporary possession of the land was taken unless the undertaker has, before the end of that period, served a notice of entry under section 11 of the 1965 Act or made a declaration under section 4 of the 1981 Act in relation to that land.

(4) Unless the undertaker has served a notice of entry under section 11 of the 1965 Act or made a declaration under section 4 of the 1981 Act or otherwise acquired the land or rights over land subject to temporary possession or otherwise agreed with the owners of the land, the undertaker must before giving up possession of land of which temporary possession has been taken under this article, remove all works and restore the land to the reasonable satisfaction of the owners of the land; but the undertaker is not required to—

- (a) replace any building, structure, drain or electric line removed under this article;
- (b) remove any drainage works installed by the undertaker under this article;

- (c) remove any new road surface or other improvements carried out under this article to any street specified in Schedule 2 (streets and public rights of way subject to street works) or any new footpath surface or other enhancements carried out under this article to any footpath or any improvements carried out under this article to any bridge;
- (d) remove any fencing or boundary treatments installed by the undertaker under this article to replace or enhance existing fencing or boundary treatments; or
- (e) restore the land on which any works have been carried out under paragraph (1)(g) insofar as the works relate to mitigation works identified in the environmental statement or required pursuant to the requirements of Schedule 1.

(5) The undertaker must pay compensation to the owners and occupiers of land which temporary possession is taken under this article for any loss or damage arising from the exercise in relation to the land of the provisions of any power conferred by this article.

(6) Any dispute as to a person's entitlement to compensation under paragraph (5), or as to the amount of compensation, must be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(7) Nothing in this article affects any liability to pay compensation under section 152 of the 2008 Act (compensation in case where no right to claim in nuisance) or under any other enactment in respect of loss or damage arising from the carrying out of the authorised development, other than loss or damage for which compensation is payable under paragraph (5).

(8) The undertaker may not compulsorily acquire under this Order the land referred to in paragraph (1)(a)(i) except that the undertaker is not precluded from—

- (a) acquiring new rights or imposing restrictive covenants over any part of the land listed under article 24 (compulsory acquisition of rights etc.) to the extent that such land is listed in column (1) of Schedule 5 (land in which only new rights etc., may be acquired); or
- (b) acquiring any part of the subsoil (or rights in the subsoil) of that land under article 28 (acquisition of subsoil only).

(9) Where the undertaker takes possession of land under this article, the undertaker is not required to acquire the land or any interest in it.

(10) Section 13 of the 1965 Act (refusal to give possession to acquiring authority) applies to the temporary use of land pursuant to this article to the same extent it applies to the compulsory acquisition of land under this Order by virtue of section 125 of the 2008 Act (application of compulsory acquisition provisions).

(11) Nothing in this article prevents the taking of temporary possession more than once in relation to any land specified in Schedule 7.

(12) Subject to article 46 (Crown rights), so much of the special category land as is required for the purposes of exercising the powers pursuant to this article is temporarily discharged from all rights, trusts and incidents to which it was previously subject, so far as their continuance would be inconstant with the exercise of those powers, and only for such time as any special category land is being used under this article.

Temporary use of land for maintaining the authorised development

32.—(1) Subject to paragraph (2), at any time during the maintenance period relating to any part of the authorised development, the undertaker may—

- (a) enter on or take temporary possession of any of the Order land if such possession is reasonably required for the purpose of maintaining the authorised development;
- (b) enter on any of the Order land for the purpose of gaining such access as is reasonably required for the purpose of maintaining the authorised development; and
- (c) construct such temporary works (including the provision of means of access) and buildings on the land as may be reasonably necessary for that purpose.

(2) Paragraph (1) does not authorise the undertaker to take temporary possession of—

- (a) any house; or
- (b) any building (other than a house) if it is for the time being occupied.

(3) Not less than 28 days before entering on and taking temporary possession of land under this article the undertaker must serve notice of the intended entry on the owners and occupiers of the land.

(4) The undertaker may only remain in possession of land under this article for so long as may be reasonably necessary to carry out the maintenance of the part of the authorised development for which possession of the land was taken.

(5) Before giving up possession of land of which temporary possession has been taken under this article, the undertaker must remove all temporary works and restore the land to the reasonable satisfaction of the owners of the land.

(6) The undertaker must pay compensation to the owners and occupiers of land of which temporary possession is taken under this article for any loss or damage arising from the exercise in relation to land of the provisions of this article.

(7) Any dispute as to a person's entitlement to compensation under paragraph (6), or as to the amount of the compensation, must be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(8) Nothing in this article affects any liability to pay compensation under section 152 (compensation in case where no right to claim in nuisance) of the 2008 Act or under any other enactment in respect of loss or damage arising from the maintenance of the authorised development, other than loss or damage for which compensation is payable under paragraph (6).

(9) Where the undertaker takes possession of land under this article, the undertaker is not required to acquire the land or any interest in it.

(10) Section 13 of the 1965 Act (refusal to give possession to acquiring authority) applies to the temporary use of land pursuant to this article to the same extent it applies to the compulsory acquisition of land under this Order by virtue of section 125 of the 2008 Act (application of compulsory acquisition provisions).

(11) In this article "the maintenance period", means the period during which the authorised development is in operation after construction and commissioning is complete.

(12) So much of the special category land as is required for the purposes or exercising the powers pursuant to this article is temporarily discharged from all rights, trusts and incidents to which it was previously subject, so far as their continuance would be inconsistent with the exercise of those powers, and only for such time as any special category land is being used under this article.

Statutory undertakers

33. Subject to the provisions of Schedule 14 (protective provisions) the undertaker may—

- (a) acquire compulsorily, or acquire new rights or impose restrictive covenants over, the land belonging to statutory undertakers shown on the land plans within the Order land and described in the book of reference; and
- (b) extinguish or suspend the rights of, or restrictions for the benefit of, or remove, relocate or reposition the apparatus belonging to statutory undertakers over or within the Order land.

Recovery of costs of new connections

34.—(1) Where any apparatus of a public utility undertaker or of a public communications provider is removed under article 33 (statutory undertakers) any person who is the owner or occupier of premises to which a supply was given from that apparatus is entitled to recover from the undertaker compensation in respect of expenditure reasonably incurred by that person, in consequence of the removal, for the purpose of effecting a connection between the premises and any other apparatus from which supply is given.

(2) Paragraph (1) does not apply in the case of removal of a public sewer but where such a sewer is removed under article 33 (statutory undertakers), any person who is—

(a) the owner or occupier of the premises the drains of which communicated with that sewer;
or

(b) the owner of a private sewer which communicated with that sewer,

is entitled to recover from the undertaker compensation in respect of expenditure reasonably incurred by that person, in consequence of the removal, for the purpose of making the drain or sewer belonging to that person communicate with any other public sewer or with a private sewerage disposal plant.

(3) This article does not have effect in relation to apparatus to which Part 3 (street works in England and Wales) of the 1991 Act applies.

(4) In this paragraph—

“public communications provider” has the same meaning as in section 151(1) of the 2003 Act;
and

“public utility undertaker” means a gas, water, electricity or sewerage undertaker.

PART 6

OPERATIONS

Operation of a generating station

35.—(1) The undertaker is authorised to use and operate the authorised development for which development consent is granted by this Order.

(2) This article does not relieve the undertaker of any requirement to obtain any permit or licence under any other legislation that may be required from time to time to authorise the operation of the authorised development.

Deemed marine licences under the 2009 Act

36. The deemed marine licences set out in Schedule 8 (deemed marine licence under the 2009 Act – generation assets), Schedule 9 (deemed marine licence under the 2009 Act – transmission assets) and Schedule 10 (deemed marine licence under the 2009 Act – transmission assets – offshore converter station) respectively, are deemed to be granted to the undertaker under Part 4 (marine licences) of the 2009 Act for the licenced marine activities set out in Part 1, and subject to the conditions set out in Part 2, of each of those Schedules.

PART 7

MISCELLANEOUS AND GENERAL

Application of landlord and tenant law

37.—(1) This article applies to—

(a) any agreement for leasing to any person the whole or any part of the authorised development or the right to operate the same; and

(b) any agreement entered into by the undertaker with any person for the construction, maintenance, use or operation of the authorised development, or any part of it,

so far as any such agreement relates to the terms on which any land which is the subject of a lease granted by or under that agreement is to be provided for that person’s use.

(2) No enactment or rule of law regulating the rights and obligations of landlords and tenants prejudices the operation of any agreement to which this article applies.

(3) Accordingly, no such enactment or rule of law applies in relation to the rights and obligations of the parties to any lease granted by and under any such agreement so as to—

- (a) exclude or in any respect modify any of the rights and obligations of those parties under the terms of the lease, whether with respect to the termination of the tenancy or any other matter;
- (b) confer or impose on any such party any right or obligation arising out of or connected with anything done or omitted on or in relation to land which is the subject of the lease, in addition to any such right or obligation provided for by the terms of the lease; or
- (c) restrict the enforcement (whether by action for damages or otherwise) by any party to the least of any obligation of any other party under the lease.

Operational land for the purposes of the 1990 Act

38. Development consent granted by this Order is treated as specific planning permission for the purposes of section 264(3)(a) of the 1990 Act (cases in which land is to be treated as not being operational land).

Felling or lopping of trees and removal of hedgerows

39.—(1) Subject to paragraph (3) and article 40 (trees subject to tree preservation orders), the undertaker may fell or lop or cut back the roots of any tree or shrub within or encroaching upon land within the Order limits, if the undertaker reasonably believes it to be necessary to do so to prevent the tree or shrub—

- (a) from obstructing or interfering with the construction, maintenance or operation of the authorised development or any apparatus used in connection with the authorised development; or
- (b) from constituting a danger to persons within the authorised development.

(2) Without limitation to the scope of paragraph (1) the undertaker may, for the purpose of the authorised project—

- (a) remove the hedgerows specified in Schedule 11, Part 1 (removal of hedgerows) to the extent and for the purpose specified; and
- (b) remove the important hedgerows specified in Schedule 11, Part 2 (removal of important hedgerows) to the extent and for the purpose specified.

(3) In carrying out any activity authorised by paragraph (1) or (2), the undertaker must—

- (a) do no unnecessary damage to any tree or shrub; and
- (b) pay compensation to any person for any loss or damage arising from such activity.

(4) Any dispute as to a person's entitlement to compensation under paragraph (3), or as to the amount of compensation, must be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(5) In this article “hedgerow” and “important hedgerow” have the same meaning as in the Hedgerow Regulations 1997(a).

Trees subject to tree preservation orders

40.—(1) The undertaker may fell or lop or cut back the roots of any tree within or overhanging land within the Order limits subject to a tree preservation order, if it reasonably believes it to be necessary to do so in order to prevent the tree from obstructing or interfering with construction,

(a) S.I. 1997/1160.

maintenance or operation of the authorised development or any apparatus used in connection with the authorised development.

(2) In carrying out any activity authorised by paragraph (1)—

- (a) the undertaker must do no unnecessary damage to any tree and must pay compensation to any person for any loss or damage arising from such activity; and
- (b) the duty contained in section 206(1) (replacement of trees) of the 1990 Act does not apply.

(3) The authority given by paragraph (1) constitutes a deemed consent under the relevant tree preservation order.

(4) Any dispute as to a person's entitlement to compensation under paragraph (2), or as to the amount of compensation, will be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

Certification of plans and documents, etc.

41.—(1) The undertaker must, as soon as practicable after the making of this Order, submit to the Secretary of State copies of the documents listed in Schedule 12 (documents to be certified) for certification that they are true copies of the documents referred to in this Order.

(2) A plan or document so certified is admissible in any proceedings as evidence of the contents of the document of which it is a copy.

(3) Where a plan or document certified under paragraph (1)—

- (a) refers to a provision of this Order (including any specified requirement) when it was in draft form; and
- (b) identifies that provision by number, or combination of numbers and letters, which is different from the number, or combination of numbers and letters by which the corresponding provision of this Order is identified in this Order as made;

the reference in the plan or document concerned must be construed for the purpose of this Order as referring to the provision (if any) corresponding to that provision in this Order as made.

Arbitration

42.—(1) Subject to article 45 (saving provisions for Trinity House), any difference under any provision of this Order, unless otherwise provided for, must be referred to and settled in arbitration in accordance with the rules at Schedule 13 (arbitration rules) of this Order, by a single arbitrator to be agreed upon by the parties, within 14 days of receipt of the notice of arbitration, or if the parties fail to agree within the time period stipulated, to be appointed on application of either party (after giving written notice to the other) by the Secretary of State.

(2) For the avoidance of doubt, any matter for which the consent or approval of the Secretary of State or the Marine Management Organisation is required under any provision of this Order will not be subject to arbitration.

Requirements, appeals, etc.

43.—(1) Part 4 of Schedule 1 (procedure for discharge of requirements) has effect.

(2) Save to the extent that the requirements are already subject to Part 4 of Schedule 1 (procedure for discharge of requirements), sub-section (1) of section 78 (right to appeal against planning decisions and failure to take such decision) of the 1990 Act applies to the development consent granted by this Order and to the requirements except that it is modified so as to read for the purposes of this Order only as follows—

- (a) after “local planning authority” insert “or Secretary of State”;
- (b) after sub-section (b) insert the following—

“(ba) refuse or fails to determine an application for any consent, agreement or approval of that authority required by a requirement imposed on a grant of development consent or contained in a development consent order, or grant it subject to conditions; or”; and

(c) after sub-section (1), insert the following—

“(1A) Where the appeal under sub-section (1) relates to a decision by the Secretary of State, the appeal will be decided by a Secretary of State who would not be responsible for determining an application for development consent with the subject matter of the North Falls Offshore Wind Farm Order 202[] section 103(1) of the 2008 Act applied.”.

(3) Sections 78 (right to appeal against planning decisions and failure to take such decisions) and 79 (determination of appeals) of the 1990 Act have effect in relation to any appeal under the terms of this article except that the Secretary of State in question is the Secretary of State who would be responsible for determining an application for development consent with the subject matter of this Order if section 103(1) (Secretary of State is to decide applications) of the 2008 Act applied.

Abatement of works abandoned or decayed

44. Where any of the offshore works or all of them or any part of them, is abandoned or allowed to fall into decay the Secretary of State may, following consultation with the undertaker, issue a written notice requiring the undertaker at its own expense either to repair, make safe and restore one or any of those Works, or any relevant part of them, or to remove them or any relevant part and, without prejudice to any notice served under section 105(1) of the 2004 Act restore the site to a safe and proper condition, to such an extent and within such limits as may be specified in the notice.

Saving provisions for Trinity House

45. Nothing in this Order prejudices or derogates from any of the rights, duties or privileges of Trinity House.

Crown rights

46.—(1) Nothing in this Order affects prejudicially any estate, right, power, privilege, authority or exemption of the Crown and in particular, nothing in this Order authorises the undertaker or any lessee or licensee to take, use, enter upon or in any manner interfere with any land or rights of any description (including any portion of the shore or bed of the sea or any river, channel, creek, bay or estuary)—

- (a) belonging to His Majesty in right of the Crown and forming part of The Crown Estate without the consent in writing of the Crown Estate Commissioners;
- (b) belonging to His Majesty in right of the Crown and not forming part of The Crown Estate without the consent in writing of the government department having the management of that land; or
- (c) belonging to a government department or held in trust for His Majesty for the purposes of a government department without the consent in writing of that government department.

(2) Paragraph (1) does not apply to the exercise of any right under this Order for the compulsory acquisition of an interest in any Crown land (as defined in the 2008 Act) which is for the time being held otherwise than by or on behalf of the Crown.

(3) A consent under paragraph (1) may be given unconditionally or subject to terms and conditions; and is deemed to have been given in writing where it is sent electronically.

Protective provisions

47. Schedule 14 (protective provisions) has effect.

Funding

48.—(1) The undertaker must not exercise the powers conferred by the provisions referred to in paragraph (2) in relation to any land unless it has first put in place either—

- (a) a guarantee and the amount of that guarantee approved by the Secretary of State in respect of the liabilities of the undertaker to pay compensation pursuant to the provisions referred to in paragraph (2); or
- (b) an alternative form of security and the amount of that security for that purpose approved by the Secretary of State in respect of the liabilities of the undertaker to pay compensation pursuant to the provisions referred to in paragraph (2).

(2) The provisions are—

- (a) article 21 (compulsory acquisition of land);
- (b) article 24 (compulsory acquisition of rights etc.);
- (c) article 25 (private rights);
- (d) article 28 (acquisition of subsoil only);
- (e) article 30 (rights under or over streets);
- (f) article 31 (temporary use of land for carrying out the authorised development);
- (g) article 32 (temporary use of land for maintaining the authorised development); and
- (h) article 33 (statutory undertakers).

(3) A guarantee or alternative form of security given in respect of any liability of the undertaker to pay compensation under this Order is to be treated as enforceable against the guarantor or person providing the alternative form of security by any person to whom such compensation is payable and must be in such a form as to be capable of enforcement by such a person.

(4) Nothing in this article requires a guarantee or alternative form of security to be in place for more than 15 years after the date on which the relevant power is exercised.

No double recovery

49. Compensation is not payable in respect of the same matter both under this Order and under any other enactment, any contract or rule of law, or under two or more different provisions of this order.

Service of notices

50.—(1) A notice or other document required or authorised to be served for the purposes of this Order may be served—

- (a) by post;
- (b) by delivering it to the person on whom it is to be served or to whom it is to be given or supplied; or
- (c) with the consent of the recipient and subject to paragraphs (6) to (8), by electronic transmission.

(2) Where the person on whom a notice or other document to be served for the purposes of this Order is a body corporate, the notice or document is duly served if it is served on the secretary or clerk of that body.

(3) For the purposes of section 7 of the Interpretation Act 1978 (references to service by post) as it applies for the purposes of this article, the proper address of any person in relation to the service on that person of a notice or document under paragraph (1) is, if that person has given an address for service, that address and otherwise—

- (a) in the case of the secretary or clerk of that body corporate, the registered or principal office of that body; and
- (b) in any other case, the last known address of that person at the time of service.

(4) Where for the purposes of this Order a notice or other document is required or authorised to be served on a person as having an interest in, or as the occupier of, land and the name or address of that person cannot be ascertained after reasonable enquiry, the notice may be served by—

- (a) addressing it to that person by the description of “owner”, or as the case may be “occupier” of the land (describing it); and
- (b) either leaving it in the hands of the person who is or appears to be resident or employed on the land or leaving it conspicuously affixed to some building or object on or near the land.

(5) Where a notice or other document required to be served or sent for the purposes of this Order is served or sent by electronic transmission the requirement is to be taken to be fulfilled only where—

- (a) the recipient of the notice or other document to be transmitted has given consent to the use of electronic transmission in writing or by electronic transmission;
- (b) the notice or document is capable of being accessed by the recipient;
- (c) the notice or document is legible in all material respects; and
- (d) in a form sufficiently permanent to be used for subsequent reference.

(6) Where the recipient of a notice or other document served or sent by electronic transmission notifies the sender within seven days of receipt that the recipient requires a paper copy of all or any part of that notice or other document the sender must provide such a copy as soon as reasonably practicable.

(7) Any consent to the use of an electronic transmission by a person may be revoked by that person in accordance with paragraph (8).

(8) Where a person is no longer will to accept the use of electronic transmission for any of the purposes of this Order—

- (a) that person must give notice in writing or by electronic transmission revoking any consent given by that person for that purpose; and
- (b) such revocation is final and takes effect on a date specified by the person in the notice but that date must not be less than seven days after the date on which the notice is given.

(9) This article does not exclude the employment of any method of service not expressly provided for by it.

(10) In this article “legible in all material respects” means that the information contained in the notice of document is available to that person to no lesser extent than it would be if served, given or supplied by means of a notice or document in printed form.

Compensation provisions

51. Schedule 15 (compensation to protect the coherence of the national site network) has effect.

Signatory text

Address
Date

Name
Parliamentary Under Secretary of State
Department

SCHEDULES

SCHEDULE 1

Article 3

AUTHORISED DEVELOPMENT

PART 1

AUTHORISED DEVELOPMENT

A nationally significant infrastructure project as defined in sections 14 (nationally significant infrastructure projects: general) and 15 (generating stations) of the 2008 Act which is located in the Southern North Sea approximately 40 kilometres from the East Anglian coast at its nearest point, comprising—

Work No. 1—

- (a) an offshore wind turbine generating station with a gross electrical output capacity of over 100 megawatts comprising up to 57 wind turbine generators each fixed to the seabed by one of the following foundation types: monopile, mono suction bucket, multi-leg pin pile jacket or multi-leg suction bucket jacket;
- (b) a network of cables between the wind turbine generators and between the wind turbine generators and Work No. 2, including one or more cable crossings;

and associated development within the meaning of section 115(2) of the 2008 Act comprising—

Work No. 2—

- (a) up to two offshore substation platforms each fixed to the seabed by one of the following foundation types: monopile, multi-leg pin pile jacket or a multi-leg suction bucket jacket and a platform interconnector cable including one or more cable crossings; and
- (b) up to one offshore converter platform fixed to the seabed by one of the following foundation types: monopile, multi-leg pin pile jacket or a multi-leg suction bucket jacket.

*Work No. 3—*up to two cable circuits between Work No. 2 and Work No. 4A, including one or more cable crossings;

*Work No. 4A—*up to two cable circuits and associated ducting between Work No. 3 and Work No. 4B including up to three drilling exit pits for trenchless installation techniques, one or more cable crossings and a temporary work area for vessels to carry out anchoring and positioning.

Between MHWS and MLWS and in the County of Essex and District of Tendring

*Work No. 4B—*landfall connection works comprising up to two cable circuits and associated ducting between Work No. 4A and Work No. 4C, including trenchless installation technique works.

In the County of Essex and the District of Tendring

*Work No. 4C—*onshore connection works comprising up to two cable circuits and associated ducting between Work No. 4B and Work No. 4D.

*Work No. 4D—*onshore connection works comprising—

- (a) up to two cable circuits and associated ducting connecting Work No. 4C and Work No. 6;
- (b) up to three drilling entry pits for trenchless installation techniques;
- (c) up to two transition joint bays;

- (d) working areas and laydown areas and means of access.

Work No. 5—temporary compound including temporary working areas and laydown areas.

Work No. 6—onshore connection works comprising—

Work No. 6A—

- (a) up to two cable circuits and associated ducting between Work No. 4D and Work No. 12 including working areas and laydown areas and means of access; or
- (b) up to two cable circuits to be pulled through existing ducts between Work No. 4D and Work No. 12 including working areas and laydown areas and means of access; and

Work No. 6B—cable ducting for two additional cable circuits for later installation of additional electrical connections between Work No. 4D and Work No. 12 including working areas and laydown areas and means of access.

Work No. 7—temporary compounds including temporary working areas and laydown areas and means of access.

Work No. 8—temporary means of access including creation and improvement of accesses and visibility splays and vegetation clearance.

Work No. 9—works to permanently widen and improve the junction between Bentley Road and the A120 and to permanently widen and improve Bentley Road from A120 to Works No. 6, including temporary provision of area for non-motorised user access.

Work No. 10—permanent means of access including creation and improvement of accesses and visibility splays and vegetation clearance.

Work No. 11—an onshore substation including platform or foundations, electrical equipment including switch gear, power transformers, reactive compensation equipment, filters, cooling equipment, control and welfare buildings, lightning rods, internal roads, security fencing and other associated equipment, structures and buildings including noise-attenuation works and permanent security fencing and security gate.

Work No. 12—onshore substation compound including—

Work No. 12A—

- (a) up to two cable circuits and associated ducting between Work No. 6 and Work No. 14 including working areas and laydown areas and means of access;
- (b) up to two cable circuits to be pulled through existing ducts between Work No. 6 and Work No. 14 including working areas and laydown areas and means of access;
- (c) land re-profiling, groundworks and creation of platforms and foundations;
- (d) landscaping;
- (e) drainage works including connections to existing drainage and creation of new sustainable drainage including attenuation pond(s);
- (f) temporary and permanent means of access including creation and improvement of accesses and visibility splays and vegetation clearance;
- (g) temporary compounds including working areas and laydown areas;
- (h) temporary and permanent ecological and environmental mitigation works including habitat creation.

Work No. 12B—cable ducting for two additional cable circuits for later installation of additional electrical connections between Work No. 6 and Work No. 14.

Works No. 13—Groundworks, drainage works, outfall and planting including working areas and laydown areas and means of access.

Work No. 14—Electrical works to connect to a National Grid substation including—

- (a) worked need to connect the authorised development to the new National Grid substation including but not limited to cabling, cable sealing ends, circuit breakers, surge arrestors, dis-connectors, transformers, busbars and busbar clamp measuring equipment, relay marshalling rooms and electrical earthing works;
- (b) connection works comprising up to two buried 400kV cable circuits and associated ducting between Work No. 12 and the National Grid substation including electrical engineering works within and around the National Grid substation buildings and compound;
- (c) temporary and permanent means of access including creation and improvement of accesses and visibility splays and vegetation clearance;
- (d) temporary compounds including working areas and laydown areas.

In connection with Work Nos. 1, 2, 3 and 4A, and to the extent that they do not otherwise form part of any such work, further associated development comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement, including—

- (i) scour protection around the foundations of the offshore structures;
- (ii) cable protection measures such as rock placement and the placement of rock and/or concrete mattresses, with or without frond devices;
- (iii) dredging;
- (iv) the removal of material from the seabed required for the construction of Work Nos. 1, 2, 3 and 4A and the disposal of inert material of natural origin and/or dredged material within the Order limits produced during construction drilling, seabed preparation for the installation of the foundations of the offshore structures, during seabed preparation for cable laying, cable laying, and excavation of drilling pits for trenchless installation techniques;
- (v) creation and use of temporary vessel laydown areas, use of cable anchors and buoys;
- (vi) removal of static fishing equipment; and
- (vii) lighting,

and in connection with such Work Nos. 4B, 4C, 4D, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 and to the extent that they do not otherwise form part of any such work, further associated development comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement, including—

- (i) haul roads, ramps, watercourse and other temporary crossings, means of access and other vehicular and/or pedestrian means of access, including creation of new tracks and footpaths, and/or widening, upgrades, alterations and improvements of existing roads, tracks and footpaths;
- (ii) bunds, embankments, swales, landscaping, signage, fencing and boundary treatments and alteration of groynes;
- (iii) provision of temporary and permanent ecological and environmental mitigation, enhancement and compensation works;
- (iv) spoil storage and associated control measures;
- (v) jointing bays, link boxes, cable ducts, works for trenchless installation technique crossings, cable protection, joint protection, manholes, marker posts, underground cable markers, tiles and tape, and lighting and other works associated with laying cables and/or pulling cables through cable ducts;
- (vi) works for the provision of apparatus including cabling, water and electricity supply works, foul drainage provision, surface water management systems, temporary drainage during installations of cables and culverting;

- (vii) works to alter the position of apparatus, including mains, sewers, drains and cables;
- (viii) works to alter the course of, or otherwise interfere with, non-navigable rivers, streams or watercourses;
- (ix) landscaping works and habitat creation including installation of bird and bat boxes, creation of hibernacula and reinforcement of existing planting to provide habitat;
- (x) works for the benefit or protection of land affected by the authorised development;
- (xi) working sites in connection with the carrying out of the authorised development, lay down areas and compounds and storage compounds;
- (xii) works of restoration; and
- (xiii) fencing or other means of enclosure; and
- (xiv) such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development.

PART 2

ANCILLARY WORKS

Works within the Order limits which fall within the scope of the work assessed by the environmental statement comprising—

- (a) intrusive ground investigations including the making of bore holes and trial pits;
- (b) temporary landing places, moorings or other means of accommodating vessels in the construction, maintenance and/or decommissioning of the authorised development;
- (c) marking buoys, beacons, fenders and other navigational warning or ship impact protection works; and
- (d) temporary works for the benefit or protection of land, watercourses or structures affected by the authorised development.

PART 3

REQUIREMENTS

Time limits

1. The authorised development must commence no later than the expiration of seven years beginning with the date this Order comes into force.

Offshore design parameters

2.—(1) The wind turbine generators to be constructed or operated within Work No.1 of the authorised development must be located within the area delineated by the co-ordinates in the following table and shown on sheet 3a of the offshore order limits and boundary co-ordinates plan—

(1) <i>Point</i>	(2) <i>Latitude</i>	(3) <i>Longitude</i>
36	51° 46.18399'N	01° 51.52207'E
37	51° 46.45215'N	01° 51.46739'E
38	51° 47.79417'N	01° 56.0602'E
39	51° 45.96006'N	01° 54.98406'E
40	51° 44.20008'N	01° 56.16270'E
41	51° 43.43466'N	01° 58.08954'E

42	51° 44.92260'N	02° 02.79174'E
43	51° 44.20590'N	02° 02.65992'E
44	51° 44.16756'N	02° 02.36766'E
45	51° 43.89822'N	02° 01.62702'E
46	51° 43.70418'N	02° 01.18500'E
47	51° 43.46172'N	02° 00.54066'E
48	51° 42.90816'N	01° 59.73738'E
49	51° 42.25464'N	01° 58.18482'E
50	51° 41.80842'N	01° 58.22082'E
51	51° 38.66118'N	01° 54.67986'E
52	51° 37.76189'N	01° 52.32853'E
53	51° 39.03140'N	01° 52.10085'E
54	51° 40.08359'N	01° 52.71647'E
55	51° 40.32461'N	01° 52.55921'E
56	51° 40.41888'N	01° 52.66356'E
57	51° 40.36970'N	01° 52.53295'E
58	51° 40.36967'N	01° 52.52982'E
59	51° 40.80925'N	01° 52.24298'E
60	51° 41.18441'N	01° 51.71421'E
61	51° 41.78502'N	01° 51.60623'E
62	51° 45.61162'N	01° 51.61163'E

(2) The offshore works must be constructed in accordance with the parameters set out in the following table—

(1) <i>Parameter</i>	(2) <i>Value</i>
Maximum number of wind turbine generators	57
Maximum total rotor swept area (m ²)	3,032,694.06
Maximum height of wind turbine generators when measured from MHWS to the tip of the vertical blade (m)	377.39
Maximum rotor diameter of each wind turbine generator (m)	337
Minimum distance from MHWS to the lowest point of the rotating blade for each wind turbine generator (m)	27
Minimum distance between wind turbine generators (downwind) measured from the centre point of each wind turbine generator (m)	1180
Minimum distance between wind turbine generators (crosswind) measured from the centre point of each wind turbine generator (m)	944
Maximum pile diameter of single pile structures (m)	17
Maximum pile diameter of two or more pile structures for wind turbine generator (m)	6
Maximum pile diameter of two or more pile structures for offshore platform (m)	3.5
Maximum total seabed footprint for installed wind turbine generators (excluding scour protection) (m ²)	94,729
Maximum total seabed footprint for installed	2,709,162

wind turbine generators (including scour protection) (m ²)	
Maximum total scour protection volume for wind turbine generator foundations (m ³)	4,882,186
Maximum total length of inter-array cables (km)	170
Maximum inter-array cable protection area (m ²)	204,000
Maximum inter-array cable protection volume (m ³)	119,000
Maximum dimensions of offshore substation platforms:	
Height when measured from MHWS (m) (including cranes and helideck)	61.68
Length (m)	60
Topside area (m ²)	2,400
Maximum dimensions of offshore converter platform:	
Height when measured from MHWS (m) (including cranes and helideck)	111.62
Length (m)	130
Topside area (m ²)	10,400
Maximum total seabed footprint for two offshore substation platforms:	
(excluding scour protection) (m ²)	5890
(including scour protection) (m ²)	166,715
scour protection volume (m ³)	50,316
Maximum total length of export cables (km)	125.4
Maximum export cables cable protection area (m ²)	75,240
Maximum export cables cable protection volume (m ³)	43,890
Maximum total length of platform interconnector cable (km)	20
Maximum platform interconnector cable protection area (m ²)	24,000
Maximum platform interconnector cable protection volume (m ³)	14,000

(3) Any part of the authorised development located within the following areas shown on the Deep Water Route Cable Installation Area (Future Dredging Depths) Plan, must be designed, installed, operated and maintained at a level which would not preclude or impede dredging:

- (a) of the area shown shaded in orange and labelled Sunk A – Sunk DW Buffer, to a level of 22 metres below Chart Datum;
- (b) of the area shown shaded in pink and labelled Trinity – Trinity DW Buffer, to a level of 22 metres below Chart Datum;
- (c) of the area shown shaded in green and labelled Sunk B – Sunk DW Buffer, to a level of 19 metres below Chart Datum; and
- (d) of the area shown shaded in blue and labelled Sunk Pilotage Area – Sunk Pilot Diamond Buffer, to a level of 22 metres below Chart Datum.

Aviation safety

3.—(1) The undertaker must exhibit such lights, with such shape, colour and character and at such times as are required by Air Navigation Order 2016 and/or determined necessary for aviation safety in consultation with the Defence Infrastructure Organisation Safeguarding and as directed

by the Civil Aviation Authority. Lighting installed specifically to meet Ministry of Defence aviation safety requirements must remain operational for the life of the authorised development unless otherwise agreed with the Ministry of Defence.

(2) The undertaker must notify the Defence Infrastructure Organisation Safeguarding, at least 14 days prior to the commencement of the offshore works, of the following—

- (a) the date of the commencement of construction of the offshore works;
- (b) the date any wind turbine generators are brought into use;
- (c) the maximum height of any construction equipment to be used;
- (d) the maximum heights of any wind turbine generator, meteorological mast and offshore substation platforms and/or offshore converter platform to be constructed; and
- (e) the latitude and longitude of each wind turbine generator, meteorological mast and offshore substation platforms and/or offshore converter platform to be constructed; and
- (f) the Defence Infrastructure Organisation Safeguarding must be notified of any changes to the information supplied under this paragraph and of the completion of the construction of the offshore works.

(3) The lights installed in accordance with sub-paragraph (1) will be operated at the lowest permissible lighting intensity level.

Stages of authorised development onshore

4.—(1) The onshore works may not be commenced until notification has been submitted to the discharging authority detailing whether the onshore works will be constructed—

- (a) in a single stage; or
- (b) in two or more stages.

(2) The onshore works may not be commenced until written details of the stages of the onshore works have been submitted to the discharging authority.

(3) The construction of the onshore works must follow the written details provided under sub-paragraph (2) of this requirement.

Substation works

5.—(1) Construction of Work No. 11 (onshore substation) must not commence until written details of that Work have been submitted to and approved by the discharging authority, and the written details submitted must include—

- (a) the layout;
- (b) scale;
- (c) proposed finished ground levels;
- (d) external hard surfacing materials;
- (e) the dimensions, external colour and materials used for the buildings;
- (f) security fencing, height, colour and materials;
- (g) vehicular and pedestrian access, parking and circulation areas;
- (h) operational external lighting; and
- (i) proposed and existing functional services above and below ground, including drainage, surface water drainage, power and communications cables and pipelines, manholes and supports.

(2) The written details submitted under sub-paragraph (1) of this requirement must be in accordance with requirement 6 (detailed design parameters onshore) and substantially in accordance with the design vision including the design and consultation process set out in sections 1.4 and 1.5 thereof and any design guide.

(3) Work No. 11 must be carried out in accordance with the approved written details.

Detailed design parameters onshore

6.—(1) The onshore works must not exceed the parameters set out in the following table and sub-paragraph (2)—

<i>(1)</i> <i>Parameter</i>	<i>(2)</i> <i>Value</i>
Maximum number of landfall transition joint bays	2

(2) In relation to Work No. 11 (onshore substation)—

- (a) the highest part of any building, any external electrical equipment or enclosure, excluding lightning rods, must not exceed a height of 13m above Ordnance Datum;
- (b) the total area of the fenced compound (excluding its accesses) must not exceed 58,800m²;
- (c) the lightning rods within the fenced compound must not exceed a height of 18m above Ordnance Datum;

Provision of landscaping

7.—(1) Work No. 11 must not be commenced until a written landscaping scheme and associated work programme in accordance with the outline landscape and ecological management strategy for Work No. 11 has been submitted to and approved by the discharging authority in consultation with the relevant SNCB.

(2) The written landscaping scheme must include details of all proposed hard and soft landscaping works including—

- (a) location, number, species, size and planting density of any proposed planting including any trees; and
- (b) implementation timetables for all landscaping works within Work No. 11.

(3) The landscaping must be carried out in accordance with the approved written landscaping scheme.

Code of construction practice

8.—(1) No stage of the onshore works may commence until a code of construction practice (which must accord with the outline code of construction practice) for that stage has been submitted to and approved by the discharging authority in consultation with the relevant SNCB and the Environment Agency.

(2) The onshore works must be constructed in accordance with the approved code of construction practice.

Construction traffic management plan

9.—(1) No stage of the onshore works may commence until for that stage a construction traffic management plan (which must accord with the outline construction traffic management plan) for that stage has been submitted to and approved by the discharging authority in consultation with National Highways.

(2) The onshore works must be carried out in accordance with the approved construction traffic management plan.

Permanent highway accesses

10.—(1) No new permanent means of access to a highway to be used by vehicular traffic, or any permanent alteration to an existing means of access to a highway used by vehicular traffic may be formed until written details of the design, layout and siting of that new or altered access have been

submitted to and approved by the discharging authority in consultation with the relevant highway authority.

(2) The highway accesses must be constructed in accordance with the approved written details.

Onshore archaeology

11.—(1) Geo-archaeological and archaeological evaluation and mitigation must be carried out in accordance with the archaeological mitigation strategy.

(2) No stage of the onshore works may commence until, for that stage, an archaeological written scheme(s) of investigation in accordance with the onshore outline written scheme(s) of investigation as appropriate for the relevant stage has been submitted to and approved by the discharging authority in consultation with Historic England.

(3) The onshore works must be carried out in accordance with the written scheme(s) of investigation as applicable in each stage as approved under sub-paragraph (2).

(4) Intrusive onshore site preparation works must not take place until an archaeological or geoarchaeological written scheme(s) of investigation in accordance with the outline written scheme(s) of investigation as appropriate has been submitted to and approved by the discharging authority in consultation with Historic England. The archaeological or geoarchaeological written scheme(s) of investigation required under this sub-paragraph must be implemented as approved.

(5) The archaeological post investigation assessment must be completed in accordance with the programme set out in the archaeological mitigation strategy and any relevant written scheme of investigation, and provision made for analysis, publication, and dissemination of results and archive deposition.

Ecological management plan

12.—(1) No stage of the onshore works may commence until for that stage an ecological management plan in accordance with the outline landscape and ecological management strategy as appropriate for the relevant stage, has been submitted to and approved by the discharging authority in consultation with the relevant SNCB and the Environment Agency.

(2) The ecological management plan(s) submitted under sub-paragraph (1) must include an implementation timetable and must be implemented as approved.

(3) Pre-commencement works must only take place in accordance with the relevant details set out in the outline landscape and ecology management strategy as certified.

Soil management plan

13.—(1) No stage of the onshore works may commence until for that stage a soil management plan in accordance with the measures set out in the code of construction practice as appropriate for the relevant stage, has been submitted to and approved by the discharging authority in consultation with the relevant SNCB.

(2) The onshore works must be carried out in accordance with the approved soil management plan(s).

European protected species: onshore

14.—(1) No stage of the onshore works or other than surveying and investigation necessary to comply with this requirement may commence until, for that stage, pre-construction survey work has been carried out to establish whether a European protected species is present on any of the land affected, or likely to be affected, by any part of that stage of the onshore works.

(2) Where a European protected species is shown to be present, the relevant stage of the onshore works is likely to affect the species must not commence until a scheme of protection and mitigation measures for that stage has been submitted to the discharging authority or a European protected species licence is granted by the relevant SNCB.

(3) Each stage of the onshore works which requires a scheme of protection and mitigation measures in accordance with sub-paragraph (2) of this requirement must be carried out in accordance with the approved scheme.

(4) In this paragraph, “European protected species” has the same meaning as in regulations 42 (European protected species of animals) and 46 (European protected species of plants) of the Conservation of Habitats and Species Regulations 2017.

Groundwater monitoring

15.—(1) No stage of the onshore works for which a groundwater monitoring plan is required in accordance with the outline groundwater monitoring and mitigation plan, must be commenced until, for that stage, a groundwater monitoring plan produced substantially in accordance with the Groundwater Risk Assessment and Monitoring Plan – Private Water Supplies and Licenced Abstractions has been submitted to and approved by the discharging authority in consultation with the Environment Agency.

(2) Sub-paragraph (1) does not apply to any works or surveying and investigation necessary to inform the preparation of a groundwater monitoring plan.

(3) Any plan approved under sub-paragraph (1) must be implemented as approved.

Restoration of land used temporarily for construction

16. Unless provided for in requirement 20, any land landward of MLWS within the Order limits which is used temporarily for construction of the onshore works and not ultimately incorporated in permanent works or approved landscaping must be reinstated within twelve months of completion of the relevant stage of the onshore works.

Control of noise during operational stage

17.—(1) The noise rating level for the standard operation of Work No. 11 must not exceed—

- (a) 33dB $L_{A_{r,Tr}}$ at any time at a free field location immediately adjacent to the following noise sensitive locations—
 - (i) Normans Farm (grid reference 608446 228492);
 - (ii) Mulberry Lodge (grid reference 608753 228577);
 - (iii) Jubilee Villa (grid reference 609061 228932); and
- (b) 32dB $L_{A_{r,Tr}}$ at any time at a free field location immediately adjacent to Hollylodge Farm (grid reference 609483 229368); and
- (c) 31dB $L_{A_{r,Tr}}$ at any time at a free field location immediately adjacent to Grange Farm (grid reference 608681 230164).

(2) Prior to the commencement of operation of Work No. 11, the undertaker will consult and agree with Five Estuaries Offshore Wind Farm Ltd and National Grid Electricity Transmission Plc, a noise investigation protocol to be submitted to and approved by the discharging authority. The noise investigation protocol must identify how the undertaker, Five Estuaries Offshore Wind Farm Ltd and National Grid Electricity Transmission Plc, will jointly investigate noise.

(3) The determination of $L_{A_{r,Tr}}$ must be in accordance with BS 4142:2014+A1:2019. The reference method set out in Annex D to BS 4142:2014+A1:2019 (or any successor thereto) must be used in the assessment of whether tonal penalties apply. The noise investigation protocol must identify—

- (a) the required meteorological and other conditions under which the measurements will be taken, acknowledging that data obtained during emergency operation or testing of certain plant and equipment is not to be taken into account, and
- (b) suitable monitoring locations (and alternative locations if appropriate).

(4) For the purposes of this requirement “standard operation” means the ordinary operation of the substations excluding emergency operation and the testing of plant and equipment associated with emergency operation.

Skills and Employment Plan

18.—(1) No stage of the authorised development may commence until a skills and employment plan, substantially in accordance with the outline skills and employment plan has been submitted to and approved by the discharging authority, after consultation with Suffolk County Council.

(2) The skills and employment plan must be implemented as approved.

Onshore build options

19.—(1) Subject to sub-paragraph (2), the undertaker may commence onshore works or exercise powers of compulsory acquisition under Part 5 of this Order, in relation to only—

- (a) build option 1; or
- (b) build option 2.

(2) Other than Work No. 9, the onshore works must not commence, nor powers of compulsory acquisition under Part 5 of this Order be exercised, until notification has been submitted to the discharging authority as to whether the undertaker intends to commence build option 1 or build option 2.

Reuse of temporary works with the onshore works for Five Estuaries

20.—(1) In the event that any temporary works which have been constructed pursuant to any development consent order that may be made by the Secretary of State in relation to Five Estuaries are proposed to be reused by the undertaker in connection with the authorised development, such reuse must not be commenced until a written scheme which accords with sub-paragraph (2) has been submitted to and approved by the discharging authority.

(2) The written scheme to be submitted for approval under sub-paragraph (1) must include details of the temporary works to be reused and a timetable for their reuse. The written scheme must be implemented as approved.

(3) Where in the event that any temporary works which have been constructed pursuant to this Order are to be subsequently used for the purposes of construction of Five Estuaries, the undertaker will not be required to maintain, restore or reinstate any such temporary works.

Biodiversity net gain

21.—(1) Work No. 11 and Work No. 12 must not be commenced until a biodiversity net gain assessment (which must accord with the outline biodiversity net gain strategy) in relation to that stage has been submitted to and approved by the discharging authority in consultation with the relevant SNCB.

(2) The biodiversity net gain assessment must be implemented as approved.

Operational Drainage Strategy

22.—(1) No part of Work No. 11 or Work No. 12 may commence until an operational drainage strategy for operation of that part has been submitted to and approved by the discharging authority in consultation with the Environment Agency.

(2) The operational drainage strategy must be in accordance with the outline operational drainage strategy.

(3) The operational drainage strategy must be implemented as approved.

Horizontal directional drilling method statement

23.—(1) No part of Work Nos. 4B, 4C, 4D, 6 or 12 may commence until a horizontal directional drill method statement and contingency plan for that part has been submitted to and approved by the discharging authority in consultation with the relevant SNCB and the Environment Agency.

(2) The horizontal directional drill method statement and contingency plan must accord with the principles set out in the outline horizontal directional drill method statement and contingency plan.

Public rights of way

24.—(1) No stage of the onshore works may commence until a public rights of way management plan for any sections of public rights of way shown to be temporarily closed on the streets, access and rights of way plans for that stage has been submitted to and approved by the discharging authority.

(2) The public rights of way management plan must be substantially in accordance with the outline public rights of way management plan.

(3) The public rights of way management plan must be implemented as approved.

Offshore decommissioning

25.—(1) The offshore works must not be commenced until a written decommissioning programme in compliance with any notice served upon the undertaker by the Secretary of State pursuant to section 105(2) (requirement to prepare decommissioning programmes) of the 2004 Act has been submitted to the Secretary of State for approval.

(2) The undertaker must provide a copy of the written decommissioning programme submitted to the Secretary of State for approval under sub-paragraph (1) to the MMO.

Onshore decommissioning

26.—(1) A written scheme of decommissioning for the onshore works must be submitted to and approved by the discharging authority at least six months prior to any decommissioning works commencing.

(2) The written scheme of decommissioning for the onshore works must include a code of construction practice and the approved scheme must be implemented as approved in the carrying out of any decommissioning works or relevant part of it.

Requirement for written approval

27. Where under any of the above requirements the approval or agreement of the Secretary of State, the discharging authority or another person is required, that approval or agreement must be given in writing.

Amendments to approved details

28. With respect to any requirement which requires the authorised development to be carried out in accordance with the written details, plan, strategy, scheme or other document approved under this Schedule, the approved written details, plan, strategy, scheme or other document are taken to include any amendments that may subsequently be approved or agreed by the Secretary of State, the discharging authority or another person.

Obstacle free zone for navigational safety

29.—(1) Unless otherwise agreed with the MCA, no wind turbine generator or offshore platform shall be installed within the area defined by the coordinates as specified in the table in sub-paragraph (3).

(2) If agreement with the MCA is obtained pursuant to sub-paragraph (1) the undertaker must install any infrastructure in accordance with the details approved under sub-paragraph (1).

(3) The coordinates referred to in sub-paragraph (1) are specified in the table—

<i>(1)</i> <i>Point</i>	<i>(2)</i> <i>Latitude</i>	<i>(3)</i> <i>Longitude</i>
A	51° 45.7956' N	001° 51.5983' E
B	51° 46.4522' N	001° 51.4674' E
C	51° 47.7942' N	001° 56.0600' E
D	51° 47.5410' N	001° 55.9115' E
E	51° 46.7564' N	001° 53.2251' E
F	51° 42.5994' N	001° 51.7675' E
G	51° 40.9325' N	001° 52.0693' E
H	51° 41.1844' N	001° 51.7142' E
I	51° 41.7850' N	001° 51.6062' E
J	51° 39.0314' N	001° 52.1008' E
K	51° 39.4391' N	001° 52.3393' E
L	51° 37.8725' N	001° 52.6222' E
M	51° 37.7619' N	001° 52.3285' E

Galloper recommended route

30.—(1) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not commence any part of Work No. 1 or Work No. 2 until the MSC has ratified the proposal to remove the Galloper recommended route.

(2) Unless otherwise agreed by the Secretary of State in consultation with the MCA, the undertaker must not install any surface-piercing infrastructure forming part of Work No. 1 or Work No. 2 until the MSC resolution to remove the Galloper recommended route has come into force.

National Landscape Enhancement

31.—(1) Work No. 1 and Work No. 2 must not be commenced until a National Landscape Enhancement Scheme has been submitted to and approved by the discharging authority in consultation with Suffolk County Council and Suffolk & Essex Coast & Heaths National Landscape Partnership.

(2) The National Landscape Enhancement Scheme must accord with the principles set out in the National Landscape Enhancement Scheme principles document.

(3) The National Landscape Enhancement Scheme must be implemented as approved.

(4) In this Requirement “the National Landscape Enhancement Scheme principles document” means the principles set out in Table 2 of Applicant’s Response to ExA’s letter dated 6 June 2025 as a request for further information under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010.

PART 4

PROCEDURE FOR DISCHARGE OF REQUIREMENTS

Interpretation

32. In this Part “application” means an application for any consent, agreement or approval required by a requirement whether or not the application seeks to discharge a requirement in whole or in part.

Applications made under requirements

33.—(1) Where an application has been made to the discharging authority for any agreement or approval required pursuant to a requirement included in this Order, the discharging authority must give notice to the undertaker of their decision, including the reasons, on the application, within a period of 8 weeks beginning with—

- (a) the day immediately following that on which the application is received by the discharging authority; or
- (b) such longer period as may be agreed by the undertaker and the discharging authority.

(2) In determining any application made to the discharging authority for any consent, agreement or approval required by a requirement contained in Part 3 of Schedule 1 (requirements) to this Order, the discharging authority may—

- (a) give or refuse its consent, agreement or approval; or
- (b) give its consent, agreement or approval either subject to reasonable conditions, or unconditionally,

and when consent, agreement or approval is refused or granted subject to conditions the discharging authority must provide its reasons for that decision with notice of the decision.

(3) In the event that the discharging authority does not determine an application within the period set out in sub-paragraph (1), the discharging authority is to be taken to have granted all parts of the application (without any condition or qualification) at the end of that period.

Further information

34.—(1) Where an application has been made under sub-paragraph (2) the discharging authority has the right to request such reasonable further information from the undertaker as is necessary to enable it to consider the application.

(2) If the discharging authority considers further information is needed, and the requirement does not specify that consultation with a requirement consultee is required, it must, within 21 days of receipt of the application, notify the undertaker in writing specifying the further information required.

(3) If the requirement indicates that consultation must take place with a consultee the discharging authority must issue the consultation to the requirement consultee within five working days of receipt of the application. Where the consultee requires further information they must notify the discharging authority in writing specifying the further information required within 14 days of receipt of the consultation. The discharging authority must notify the undertaker in writing specifying any further information requested by the consultee within five working days of receipt of such a request.

(4) In the event that the discharging authority does not give such notification as specified in sub-paragraphs (2) or (3) it is deemed to have sufficient information to consider the application and is not thereafter entitled to request further information without the prior agreement of the undertaker.

Provision of information by Consultees

35.—(1) Any consultee who receives a consultation under paragraph 34(3) must respond to that request within 28 days from receipt unless sub-paragraph (2) of this paragraph applies.

(2) Where any consultee requests further information in accordance with the timescales set out in paragraph 34(3) then they must respond to the consultation within ten working days from the receipt of the further information requested.

Fees

36.—(1) Where an application is made to the discharging authority for agreement or approval in respect of a requirement the fee for the discharge of conditions as specified in the Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits)

(England) Regulations 2012(a) (or any regulations replacing the same) is to be paid by the undertaker to the discharging authority in accordance with these regulations unless a bespoke arrangement has been agreed between the Applicant and discharging authority and legally secured.

Appeal

37.—(1) The undertaker may appeal in the event that—

- (a) the discharging authority refuses an application for any consent, agreement or approval required by a requirement included in this Order or grants it subject to conditions; or
- (b) within the time period specified in sub-paragraph (2).

(2) The appeal process is to be as follows—

- (a) the undertaker must submit the appeal documentation to the Secretary of State and must on the same day provide copies of the appeal documentation to the discharging authority and any consultee required to be consulted pursuant to the requirement which is the subject of the appeal (together with the undertaker, these are the “appeal parties”);
- (b) as soon as is practicable after receiving the appeal documentation, the Secretary of State must appoint a person (the “appointed person”) to determine the appeal and must notify the appeal parties of the identity of the appointed person and the address to which all correspondence for their attention should be sent, the date of such notification being the “start date” for the purposes of this sub-paragraph (2);
- (c) the discharging authority and any consultee required to be consulted pursuant to the requirement which is the subject of the appeal must submit written representations to the appointed person in respect of the appeal within ten working days of the start date and must ensure that copies of their written representations are sent to each other and to the undertaker on the day on which they are submitted to the appointed person;
- (d) the appeal parties must make any counter-submissions to the appointed person within ten working days of receipt of written representations pursuant to sub-paragraph (c); and
- (e) the appointed person must make their decision and notify it to the appeal parties, with reasons, as soon as reasonably practicable and in any event within 30 working days of the deadline for the receipt of counter-submissions pursuant to sub-paragraph (d).

(3) The appointment of the person pursuant to sub-paragraph (2)(b) may be undertaken by a person appointed by the Secretary of State for this purpose instead of by the Secretary of State.

(4) In the event that the appointed person considers that further information is necessary to consider the appeal, the appointed person must notify the appeal parties in writing specifying the further information required and the date by which the information is to be submitted and the appointed person must make any notification and set the date for the receipt of such further information having regard to the timescales in sub-paragraph (2).

(5) Any further information required under sub-paragraph (4) must be provided by the appeal party from whom the further information was requested to the appointed person and other appeal parties, the discharging authority and any consultee required to be consulted pursuant to the requirement the subject of the appeal on the date specified by the appointed person (the “specified date”), and the appointed person must notify the appeal parties of the revised timetable for the appeal on or before that day. The revised timetable for the appeal must require submission of written representations to the appointed person within ten working days of the specified date but otherwise is to be in accordance with the process and time limits set out in sub-paragraphs (2)(c) to (2)(e).

(6) On an appeal under this sub-paragraph, the appointed person may—

- (a) allow or dismiss the appeal; or
- (b) reverse or vary any part of the decision of the discharging authority (whether the appeal relates to that part of it or not).

(a) S.I. 2012/2920.

(7) The appointed person may proceed to a decision on an appeal taking into account only such written representations as have been sent within the relevant time limits.

(8) The appointed person may proceed to a decision even though no written representations have been made within the relevant time limits, if it appears to the appointed person that there is sufficient material to enable a decision to be made on the merits of the case and may deal with the application as if it had been made to the appointed person in the first instance.

(9) The decision of the appointed person on an appeal is to be final and binding on the parties, and a court may entertain proceedings for questioning the decision only if the proceedings are brought by a claim for judicial review.

(10) If an approval is given by the appointed person pursuant to this paragraph, it is to be deemed to be an approval for the purpose of Part 3 of this Schedule as if it had been given by the discharging authority. The discharging authority may confirm any determination given by the appointed person in identical form in writing but a failure to give such confirmation (or a failure to give it in identical form) is not to be taken to affect or invalidate the effect of the appointed person's determination.

(11) Save where a direction is given pursuant to sub-paragraph (12) requiring the costs of the appointed person to be paid by the discharging authority, the reasonable costs of the appointed person must be met by the undertaker.

(12) On application by the discharging authority or the undertaker, the appointed person may give directions as to the costs of the appeal parties and as to the parties by whom the costs of the appeal are to be paid. In considering whether to make any such direction and the terms on which it is to be made, the appointed person must have regard to relevant guidance on the Planning Practice Guidance website or any official circular or guidance which may from time to time replace it.

SCHEDULE 2

Article 8

STREETS AND PUBLIC RIGHTS OF WAY SUBJECT TO STREET WORKS

(1) <i>Street or public right of way</i>	(2) <i>Extent as shown on the street plan or public rights of way plan</i>
Private Access Track	Approximately 746 metres of Private Access Track as shown between points marked 1a and 1b on the streets plan
Private Access Track	Approximately 119 metres of Private Access Track as shown between points marked 1c and 1d on the streets plan
Footpath Great Clacton FP29	Approximately 455 metres of Great Clacton FP29 between points marked 1a and 1b on sheet 1 of the public rights of way plan
Footpath Frinton and Walton FP41	Approximately 24 metres of Frinton and Walton FP41 between points marked 1b and 1c on sheet 1 of the public rights of way plan
Footpath Frinton and Walton FP3	Approximately 822 metres of Frinton and Walton FP3 between points marked 1d and 1e on sheet 1 of the public rights of way plan
Bridleway Frinton and Walton BR2	Approximately 41 metres of Frinton and Walton BR2 between points marked 1f and 1g on sheet 1 of the public rights of way plan
Private Access Track	Approximately 90 metres of Private Access Track as shown between points marked 2a and 2b on the streets plan
B1032 (Clacton Road)	Approximately 412 metres of B1032 (Clacton Road) as shown between points marked 2c and 2d on the streets plan
Little Clacton Road	Approximately 123 metres of Little Clacton Road as shown between points marked 3a and 3b on the streets plan
Footpath Frinton and Walton FP6	Approximately 2 metres of Frinton and Walton FP6 between points marked 3a and 3b on the public rights of way plan
Footpath Frinton and Walton FP38	Approximately 148 metres of Frinton and Walton FP38 between points marked 3c and 3d on sheet 3 of the public rights of way plan
Footpath Frinton and Walton FP11	Approximately 166 metres of Frinton and Walton FP11 between points marked 3e and 3f on sheet 3 of the public rights of way plan
B1033 (Thorpe Road)	Approximately 352 metres of B1033 (Thorpe Road) as shown between points marked 5a and 5b on the streets plan
Footpath Thorpe Le Soken FP13	Approximately 283 metres of Thorpe Le Soken FP13 between points marked 5a and 5b on the public rights of way plan
B1034 (Sneating Hall Lane)	Approximately 332 metres of B1034 (Sneating Hall Lane) as shown between points marked 5c and 5d on the streets plan

Damant's Farm Lane	Approximately 329 metres of Damant's Farm Lane as shown between points marked 5e and 5f on the streets plan
B1414 (Landermere Road)	Approximately 345 metres of B1414 (Landermere Road) as shown between points marked 6a and 6b on the streets plan
Footpath Thorpe Le Soken FP7	Approximately 27 metres of Thorpe Le Soken FP7 between points marked 6a and 6b on sheet 6 of the public rights of way plan
Golden Lane	Approximately 249 metres of Golden Lane as shown between points marked 7a and 7b on the streets plan
Private Access Track	Approximately 100 metres of Private Access Track as shown between points marked 7c and 7d on the streets plan
Footpath Thorpe Le Soken FP3	Approximately 125 metres of Thorpe Le Soken FP3 between points marked 7i and 7j on sheet 7 of the public rights of way plan
Footpath Thorpe Le Soken FP1	Approximately 92 metres of Thorpe Le Soken FP1 between points marked 7k and 7l on sheet 7 of the public rights of way plan
B1035 (Tendring Road)	Approximately 243 metres of B1035 (Tendring Road) as shown between points marked 8a and 8b on the streets plan
B1035 (Tendring Road)	Approximately 80 metres of B1035 (Tendring Road) as shown between points marked 8c and 8d on the streets plan
Swan Road	Approximately 11 metres of Swan Road as shown between points marked 8e and 8f on the Streets Plan
Swan Road	Approximately 60 metres of Swan Road as shown between points marked 8f and 8g on of the streets plan
Swan Road	Approximately 12 metres of Swan Road as shown between points marked 8f and 8h on of the streets plan
B1035 (Thorpe Road)	Approximately 222 metres of B1035 (Thorpe Road) as shown between points marked 8i and 8j on the streets plan
Footpath Thorpe Le Soken FP18	Approximately 212 metres of Thorpe Le Soken FP18 between points marked 8a and 8b on sheet 8 of the public rights of way plan
Footpath Beaumont Cum Moze FP18	Approximately 25 metres of Beaumont Cum Moze FP18 between points marked 8b and 8c on sheet 8 of the public rights of way plan
Lodge Lane	Approximately 222 metres of Lodge Lane as shown between points marked 9a and 9b on the streets plan
Footpath Tendring FP22	Approximately 137 metres of Tendring FP22 between points marked 9a and 9b on sheet 9 of the public rights of way plan
Footpath Tendring FP8	Approximately 94 metres of Tendring FP8 between points marked 9h and 9i on sheet 9 of the public rights of way plan
Footpath Tendring FP25	Approximately 91 metres of Tendring FP25 between points marked 10a and 10b on sheets 9

Wolves Hall Lane	and 10 of the public rights of way plan Approximately 238 metres of Wolves Hall Lane as shown between points marked 10a and 10b on the streets plan
Footpath Tendring FP1	Approximately 132 metres of Tendring FP1 between points marked 10c and 10d on sheet 10 of the public rights of way plan
Stones Green Road	Approximately 366 metres of Stones Green Road as shown between points marked 10c and 10d on the streets plan
Private Access Track	Approximately 105 metres of Private Access Track as shown between points marked 11a and 11b on the streets plan
A120	Approximately 96 metres of A120 as shown between points marked 11c and 11d on the streets plan
Private Access Track	Approximately 15 metres of Private Access Track as shown between points marked 11e and 11f on the streets plan
Footpath Wix FP31	Approximately 140 metres of Wix FP31 between points marked 11a and 11b on sheet 11 of the public rights of way plan
Footpath Wix FP32	Approximately 105 metres of Wix FP32 between points marked 11c and 11d on sheet 11 of the public rights of way plan
B1035 (Clacton Road)	Approximately 310 metres of B1035 (Clacton Road) as shown between points marked 12a and 12b on the Streets Plan
Private Access Track	Approximately 99 metres of Private Access Track as shown between points marked 12c and 12d on the Streets Plan
Private Access Track	Approximately 101 metres of Private Access Track as shown between points marked 12e and 12f on the streets plan
B1035 (Clacton Road)	Approximately 350 metres of B1035 (Clacton Road) as shown between points marked 12g and 12h on the streets plan
Bentley Road	Approximately 1484 metres of Bentley Road as shown between points marked 13a and 13b on the streets plan
A120	Approximately 237 metres of A120 as shown between points marked 13c and 13d on the streets plan
Payne's Lane	Approximately 172 metres of Payne's Lane as shown between points marked 13e and 13f on the streets plan
Spratts Lane	Approximately 185 metres of Spratts Lane as shown between points marked 14a and 14b on the streets plan
Barlon Road	Approximately 171 metres of Barlon Road as shown between points marked 14c and 14d on the streets plan
Private Access Track	Approximately 130 metres of Private Access Track as shown between points marked 15a and 15b on the streets plan
Footpath Little Bromley FP17	Approximately 96 metres of Little Bromley

Footpath Little Bromley FP16	FP17 between points marked 14a and 14b on sheet 14 of the public rights of way plan Approximately 130 metres of Little Bromley FP16 between points marked 15a and 15b on sheet 15 of the public rights of way plan
Ardleigh Road	Approximately 523 metres of Ardleigh Road as shown between points marked 15c and 15d on the streets plan
Grange Road	Approximately 154 metres of Grange Road as shown between points marked 16a and 16b on the streets plan
Grange Road	Approximately 458 metres of Grange Road as shown between points marked 16c and 16d on the streets plan

SCHEDULE 3

TRAFFIC REGULATION

Articles 11, 12 and 14

PART 1

STREETS TO BE TEMPORARILY CLOSED OR RESTRICTED

(1)	(2)
<i>Street to be temporarily closed or restricted</i>	<i>Extent as shown on the streets plan</i>
Private Access Track	Approximately 746 metres of Private Access Track as shown between points marked 1a and 1b on the streets plan
Private Access Track	Approximately 119 metres of Private Access Track as shown between points marked 1c and 1d on the streets plan
Private Access Track	Approximately 90 metres of Private Access Track as shown between points marked 2a and 2b on the streets plan
B1032 (Clacton Road)	Approximately 412 metres of B1032 (Clacton Road) as shown between points marked 2c and 2d on the streets plan
Little Clacton Road	Approximately 123 metres of Little Clacton Road as shown between points marked 3a and 3b on the streets plan
B1033 (Thorpe Road)	Approximately 352 metres of B1033 (Thorpe Road) as shown between points marked 5a and 5b on the streets plan
B1034 (Sneating Hall Lane)	Approximately 332 metres of B1034 (Sneating Hall Lane) as shown between points marked 6a and 6b on the streets plan
Damant's Farm Lane	Approximately 329 metres of Damant's Farm Lane as shown between points marked 6c and 6d on the streets plan
B1414 (Landermere Road)	Approximately 345 metres of B1414 (Landermere Road) as shown between points marked 7a and 7b on the streets plan
Golden Lane	Approximately 249 metres of Golden Lane as shown between points marked 8a and 8b on the streets plan
Private Access Track	Approximately 100 metres of Private Access Track as shown between points marked 8c and 8d on the Streets Plan
B1035 (Tendring Road)	Approximately 243 metres of B1035 (Tendring Road) as shown between points marked 9a and 9b on the streets plan
B1035 (Tendring Road)	Approximately 80 metres of B1035 (Tendring Road) as shown between points marked 9c and 9d on the streets plan
Swan Road	Approximately 11 metres of Swan Road as shown between points marked 9e and 9f on the streets plan

Swan Road	Approximately 60 metres of Swan Road as shown between points marked 9f and 9g on of the streets plan
Swan Road	Approximately 12 metres of Swan Road as shown between points marked 9f and 9h on of the streets plan
B1035 (Thorpe Road)	Approximately 222 metres of B1035 (Thorpe Road) as shown between points marked 9i and 9j on the streets plan
Lodge Lane	Approximately 222 metres of Lodge Lane as shown between points marked 10a and 10b on the streets plan
Wolves Hall Lane	Approximately 238 metres of Wolves Hall Lane as shown between points marked 11a and 11b on the streets plan
Stones Green Road	Approximately 366 metres of Stones Green Road as shown between points marked 12a and 12b on the streets plan
Private Access Track	Approximately 105 metres of Private Access Track as shown between points marked 12c and 12d on the streets plan
A120	Approximately 96 metres of A120 as shown between points marked 12e and 12f on the streets plan
Private Access Track	Approximately 15 metres of Private Access Track as shown between points marked 12g and 12h on the streets plan
B1035 (Clacton Road)	Approximately 310 metres of B1035 (Clacton Road) as shown between points marked 13a and 3b on the streets plan
Private Access Track	Approximately 99 metres of Private Access Track as shown between points marked 13c and 13d on the streets plan
Private Access Track	Approximately 101 metres of Private Access Track as shown between points marked 13e and 13f on the streets plan
B1035 (Clacton Road)	Approximately 350 metres of B1035 (Clacton Road) as shown between points marked 14a and 14b on the streets plan
Bentley Road	Approximately 1484 metres of Bentley Road as shown between points marked 15a and 16a on the streets plan
Payne's Lane	Approximately 172 metres of Payne's Lane as shown between points marked 15b and 15c on the streets plan
A120	Approximately 237 metres of A120 as shown between points marked 16b and 16c on the streets plan
Spratts Lane	Approximately 185 metres of Spratts Lane as shown between points marked 17a and 17b on the streets plan
Barlon Road	Approximately 171 metres of Barlon Road as shown between points marked 17c and 17d on the streets plan
Private Access Track	Approximately 130 metres of Private Access Track as shown between points marked 17e and

Ardleigh Road	17f on the streets plan Approximately 523 metres of Ardleigh Road as shown between points marked 18a and 18b on the streets plan
Grange Road	Approximately 154 metres of Grange Road as shown between points marked 18c and 18d on the streets plan
Grange Road	Approximately 458 metres of Grange Road as shown between points marked 18e and 18f on the streets plan

PART 2

PUBLIC RIGHTS OF WAY TO BE TEMPORARILY CLOSED OR RESTRICTED

<i>(1)</i> <i>Public right of way to be temporarily closed or restricted</i>	<i>(2)</i> <i>Extent as shown on the public rights of way plan</i>
Footpath Great Clacton FP29	Approximately 455 metres of Great Clacton FP29 between points marked 1a and 1b on the public rights of way plan
Footpath Frinton and Walton FP41	Approximately 24 metres of Frinton and Walton FP41 between points marked 1b and 1c on the public rights of way plan
Footpath Frinton and Walton FP3	Approximately 822 metres of Frinton and Walton FP3 between points marked 1d and 1e on the public rights of way plan
Bridleway Frinton and Walton BR2	Approximately 41 metres of Frinton and Walton BR2 between points marked 1f and 1g on the public rights of way plan
Footpath Frinton and Walton FP6	Approximately 2 metres of Frinton and Walton FP6 between points marked 3a and 3b on sheet 3 of the public rights of way plan
Footpath Frinton and Walton FP38	Approximately 148 metres of Frinton and Walton FP38 between points marked 3c and 3d on sheet 3 of the public rights of way plan
Footpath Frinton and Walton FP11	Approximately 166 metres of Frinton and Walton FP11 between points marked 3e and 3f on sheet 3 of the public rights of way plan
Footpath Thorpe Le Soken FP13	Approximately 283 metres of Thorpe Le Soken FP13 between points marked 5a and 5b on sheet 5 of the public rights of way plan
Footpath Thorpe Le Soken FP7	Approximately 27 metres of Thorpe Le Soken FP7 between points marked 6a and 6b on sheet 6 of the public rights of way plan
Footpath Thorpe Le Soken FP4	Approximately 40 metres of Thorpe Le Soken FP4 between points marked 7a and 7b on sheet 7 of the public rights of way plan
Footpath Thorpe Le Soken FP4	Approximately 30 metres of Thorpe Le Soken FP4 between points marked 7c and 7d on sheet 7 of the public rights of way plan
Footpath Thorpe Le Soken FP4	Approximately 192 metres of Thorpe Le Soken FP4 between points marked 7e and 7f on sheet 7 of the public rights of way plan
Footpath Thorpe Le Soken FP3	Approximately 15 metres of Thorpe Le Soken

Footpath Thorpe Le Soken FP3	FP3 between points marked 7g and 7h on sheet 7 of the public rights of way plan Approximately 125 metres of Thorpe Le Soken FP3 between points marked 7i and 7j on sheet 7 of the public rights of way plan
Footpath Thorpe Le Soken FP1	Approximately 92 metres of Thorpe Le Soken FP1 between points marked 7k and 7l on sheet 7 of the public rights of way plan
Footpath Thorpe Le Soken FP18	Approximately 212 metres of Thorpe Le Soken FP18 between points marked 8a and 8b on sheet 8 of the public rights of way plan
Footpath Beaumont Cum Moze FP18	Approximately 25 metres of Beaumont Cum Moze FP18 between points marked 8b and 8c on sheet 8 of the public rights of way plan
Footpath Tendring FP22	Approximately 131 metres of Tendring FP22 between points marked 9a and 9b on sheet 9 of the public rights of way plan
Footpath Tendring FP22	Approximately 6 metres of Tendring FP22 between points marked 9c and 9d on sheet 9 of the public rights of way plan
Footpath Tendring FP17	Approximately 13 metres of Tendring FP17 between points marked 9d and 9e on sheet 9 of the public rights of way plan
Footpath Tendring FP8	Approximately 117 metres of Tendring FP8 between points marked 9f and 9g on sheet 9 of the public rights of way plan
Footpath Tendring FP8	Approximately 94 metres of Tendring FP8 between points marked 9h and 9i on sheet 9 of the public rights of way plan
Footpath Tendring FP25	Approximately 91 metres of Tendring FP25 between points marked 10a and 10b on sheet 10 of the public rights of way plan
Footpath Tendring FP1	Approximately 132 metres of Tendring FP1 between points marked 10c and 10d on sheet 10 of the public rights of way plan
Footpath Wix FP31	Approximately 140 metres of Wix FP31 between points marked 11a and 11b on sheet 11 of the public rights of way plan
Footpath Wix FP32	Approximately 105 metres of Wix FP32 between points marked 11c and 11d on sheet 11 of the public rights of way plan
Footpath Wix FP15	Approximately 15 metres of Wix FP15 between points marked 11e and 11f on sheet 11 of the public rights of way plan
Footpath Wix FP37	Approximately 91 metres of Wix FP37 between points marked 12a and 12b on sheet 12 of the public rights of way plan
Footpath Little Bromley FP17	Approximately 96 metres of Little Bromley FP17 between points marked 14a and 14b on sheet 14 of the public rights of way plan
Footpath Little Bromley FP16	Approximately 130 metres of Little Bromley FP16 between points marked 15a and 15b on sheet 15 of the public rights of way plan
Footpath Little Bromley FP15	Approximately 28 metres of Little Bromley FP15 between points marked 15c and 15d on sheet 15 of the public rights of way plan

PART 3

SPEED LIMITS

<i>(1)</i> <i>Area</i>	<i>(2)</i> <i>Road name, number and length</i>	<i>(3)</i> <i>Speed limit</i>
District of Tendring	Approximately 1,408 metres of B1033 (Thorpe Road/Frinton Road) as shown between points marked 5a and 5b on the temporary traffic regulation order plan	40 miles per hour
District of Tendring	Approximately 955 metres of Golden Lane as shown between points marked 7a and 7b on the temporary traffic regulation order plan	40 miles per hour
District of Tendring	Approximately 1,138 metres of B1035 (Thorpe Road/Tendring Road) as shown between points marked 7c and 8a on the temporary traffic regulation order plan	40 miles per hour
District of Tendring	Approximately 160 metres of Whitehall Lane as shown between points marked 8b, 8c and 8d on the temporary traffic regulation order plan	40 miles per hour
District of Tendring	Approximately 91 metres of Swan Road as shown between points marked 8e, 8f and 8g on the temporary traffic regulation order plan	40 miles per hour
District of Tendring	Approximately 528 metres of the B1035 (Clacton Road) as shown between points marked 12a and 12b on the temporary traffic regulation order plan	40 miles per hour
District of Tendring	Approximately 1,586 metres of Bentley Road as shown between points marked 13a and 13b on the temporary traffic regulation order plan	40 miles per hour
District of Tendring	Approximately 1,201 metres of Ardleigh Road / Little Bromley Road as shown between points marked 16a and 16b on the temporary traffic regulation order plan	30 miles per hour

SCHEDULE 4

ACCESS TO WORKS

Article 13

<i>(1)</i> <i>Street</i>	<i>(2)</i> <i>Location of access</i>	<i>(3)</i> <i>Purpose for which access is required</i>
Church Lane	The point marked OA-1 on sheet 2 of the access to works plan	Vehicular access for operational and maintenance access
B1032 (Clacton Road)	The point marked AC-1 on sheet 2 of the access to works plan	Vehicular access for construction access
B1032 (Clacton Road)	The point marked OA-2 on sheet 2 of the access to works plan	Vehicular access for operational and maintenance access
B1032 (Clacton Road)	The point marked AC-2 on sheet 2 of the access to works plan	Vehicular access for construction access
B1032 (Clacton Road)	The point marked OA-3 on sheet 2 of the access to works plan	Vehicular access for operational and maintenance access
Little Clacton Road	The point marked OA-4 on sheet 3 of the access to works plan	Vehicular access for operational and maintenance access
Little Clacton Road	The point marked CR-1 on sheet 3 of the access to works plan	Vehicular access for construction crossing
Little Clacton Road	The point marked OA-5 on sheet 3 of the access to works plan	Vehicular access for operational and maintenance access
Pork Lane	The point marked OA-6 on sheet 4 of the access to works plan	Vehicular access for operational and maintenance access
Pork Lane	The point marked OA-7 on sheet 4 of the access to works plan	Vehicular access for operational and maintenance access
Thorpe Park Lane	The point marked OA-8 on sheet 4 of the access to works plan	Vehicular access for operational and maintenance access
B1033 (Thorpe Road)	The point marked AC-3A on sheet 5 of the access to works plan	Vehicular access for construction access
B1033 (Thorpe Road)	The point marked OA-9 on sheet 5 of the access to works plan	Vehicular access for operational and maintenance access
B1033 (Thorpe Road)	The point marked AC-3B on sheet 5 of the access to works plan	Vehicular access for construction access
B1033 (Thorpe Road)	The point marked OA-10 on sheet 5 of the access to works plan	Vehicular access for operational and maintenance access
B1034 (Sneating Hall Lane)	The point marked OA-11 on	Vehicular access for

	sheet 5 of the access to works plan	operational and maintenance access
B1034 (Sneating Hall Lane)	The point marked CR-2 on sheet 5 of the access to works plan	Vehicular access for construction crossing
B1034 (Sneating Hall Lane)	The point marked OA-12 on sheet 5 of the access to works plan	Vehicular access for operational and maintenance access
Dament's Farm Lane	The point marked OA-13 on sheet 5 of the access to works plan	Vehicular access for operational and maintenance access
Dament's Farm Lane	The point marked CR-3 on sheet 5 of the access to works plan	Vehicular access for construction crossing
Walton Road	The point marked OA-14 on sheet 6 of the access to works plan	Vehicular access for operational and maintenance access
the B1414 (Landermere Road)	The point marked OA-15 on sheet 6 of the access to works plan	Vehicular access for operational and maintenance access
the B1414 (Landermere Road)	The point marked CR-4 on sheet 6 of the access to works plan	Vehicular access for construction crossing
the B1414 (Landermere Road)	The point marked OA-16 on sheet 6 of the access to works plan	Vehicular access for operational and maintenance access
Golden Lane	The point marked OA-17 on sheet 7 of the access to works plan	Vehicular access for operational and maintenance access
Golden Lane	The point marked CR-5 on sheet 7 of the access to works plan	Vehicular access for construction crossing
Golden Lane	The point marked OA-18 on sheet 7 of the access to works plan	Vehicular access for operational and maintenance access
B1035 (Tendring Road)	The point marked AC-4 on sheet 8 of the access to works plan	Vehicular access for construction access
B1035 (Tendring Road)	The point marked OA-19 on sheet 8 of the access to works plan	Vehicular access for operational and maintenance access
B1035 (Thorpe Road)	The point marked AC-5 on sheet 8 of the access to works plan	Vehicular access for construction access
Swan Lane	The point marked OA-20 on sheet 8 of the access to works plan	Vehicular access for operational and maintenance access
Swan Lane	The point marked OA-21 on sheet 8 of the access to works plan	Vehicular access for operational and maintenance access
Lodge Lane	The point marked CR-6 on sheet 9 of the access to works plan	Vehicular access for construction crossing
Lodge Lane	The point marked OA-22 on sheet 9 of the access to works plan	Vehicular access for operational and maintenance access

Wolves Hall Lane	The point marked OA-23 on sheet 9 of the access to works plan	Vehicular access for operational and maintenance access
Wolves Hall Lane	The point marked OA-24 on sheet 10 of the access to works plan	Vehicular access for operational and maintenance access
Wolves Hall Lane	The point marked OA-25 on sheet 10 of the access to works plan	Vehicular access for operational and maintenance access
Wolves Hall Lane	The point marked CR-7 on sheet 10 of the access to works plan	Vehicular access for construction crossing
Wolves Hall Lane	The point marked OA-26 on sheet 10 of the access to works plan	Vehicular access for operational and maintenance access
Stones Green Road	The point marked CR-8A on sheet 11 of the access to works plan	Vehicular access for construction crossing
Stones Green Road	The point marked CR-8B on sheet 11 of the access to works plan	Vehicular access for construction crossing
Stones Green Road	The point marked OA-27 on sheet 11 of the access to works plan	Vehicular access for operational and maintenance access
Colchester Road	The point marked OA-28 on sheet 11 of the access to works plan	Vehicular access for operational and maintenance access
B1035 (Clacton Road)	The point marked AC-6 on sheet 12 of the access to works plan	Vehicular access for construction access
B1035 (Clacton Road)	The point marked AC-7 on sheet 12 of the access to works plan	Vehicular access for construction access
B1035 (Clacton Road)	The point marked OA-29 on sheet 12 of the access to works plan	Vehicular access for operational and maintenance access
B1035 (Clacton Road)	The point marked AC-8A on sheet 12 of the access to works plan	Vehicular access for construction access
B1035 (Clacton Road)	The point marked AC-8B on sheet 12 of the access to works plan	Vehicular access for construction access
B1035 (Clacton Road)	The point marked OA-30 on sheet 12 of the access to works plan	Vehicular access for operational and maintenance access
Bentley Road	The point marked AC-9 on sheet 13 of the access to works plan	Vehicular access for construction access
Bentley Road	The point marked AC-10 on sheet 13 of the access to works plan	Vehicular access for construction access
Bentley Road	The point marked AC-11 on sheet 13 of the access to works plan	Vehicular access for construction access
Bentley Road	The point marked OA-31 on sheet 13 of the access to works plan	Vehicular access for operational and maintenance

	plan	access
Paynes Lane	The point marked OA-32 on sheet 14 of the access to works plan	Vehicular access for operational and maintenance access
Paynes Lane	The point marked CR-9 on sheet 14 of the access to works plan	Vehicular access for construction crossing
Paynes Lane	The point marked OA-33 on sheet 14 of the access to works plan	Vehicular access for operational and maintenance access
Paynes Lane	The point marked CR-9A on sheet 14 of the access to works plan	Vehicular access for construction crossing
Spratts Lane	The point marked CR-10 on sheet 14 of the access to works plan	Vehicular access for construction crossing
Paynes Lane	The point marked OA-34 on sheet 14 of the access to works plan	Vehicular access for operational and maintenance access
Spratts Lane	The point marked CR-10A on sheet 14 of the access to works plan	Vehicular access for construction crossing
Barlon Road	The point marked OA-35 on sheet 15 of the access to works plan	Vehicular access for operational and maintenance access
Barlon Road	The point marked CR-11 on sheet 15 of the access to works plan	Vehicular access for construction crossing
Barlon Road	The point marked OA-36 on sheet 15 of the access to works plan	Vehicular access for operational and maintenance access
Barlon Road	The point marked CR-11A on sheet 15 of the access to works plan	Vehicular access for construction crossing
Ardleigh Road	The point marked OA-38 on sheet 16 of the access to works plan	Vehicular access for operational and maintenance access
Ardleigh Road	The point marked AC-12 on sheet 16 of the access to works plan	Vehicular access for construction access
Ardleigh Road	The point marked OA-39 on sheet 16 of the access to works plan	Vehicular access for operational and maintenance access
Ardleigh Road	The point marked OA-37 on sheet 16 of the access to works plan	Vehicular access for operational and maintenance access
Ardleigh Road	The point marked AC-13 on sheet 16 of the access to works plan	Vehicular access for construction access

SCHEDULE 5

Article 24

LAND IN WHICH ONLY NEW RIGHTS ETC., MAY BE ACQUIRED

(1) <i>Number of plot shown on land plans</i>	(2) <i>Purpose for which rights may be acquired</i>
Intertidal zone 01-001, 01-002	

Rights

Rights for the purposes of the construction, installation, retention, operation, maintenance and decommissioning of the authorised development to—

- (a) lay down, install, retain, adjust, alter, construct, operate, erect, use, maintain, repair, renew, upgrade, inspect, remove and replace the electricity cables (including the removal of materials including spoil) in, under, over and/or on the land, together with such telemetry and fibre-optic lines, ducting, jointing bays and other apparatus, protection measures, cable marker posts, chambers and manholes, manhole covers and other equipment which is ancillary to the purposes of transmitting electricity along such electricity cables (all collectively referred to as the “cables”), and in doing so, to use or resort to trenchless installation techniques including (but not limited to) directional drilling beneath sea defences and existing infrastructure;
- (b) to benefit from continuous vertical and lateral support for the authorised development;
- (c) pass and re-pass with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of laying down, installing, adjusting, altering, constructing, using, maintaining, repairing, renewing, inspecting, removing and replacing the electrical infrastructure and cables;
- (d) construct and install and thereafter use the land for all necessary purposes for the commissioning, construction, repair, testing and maintenance of the cables in, on or under the land;
- (e) place and use plant, machinery, structures and temporary structures within the land for the purposes of the installation, construction, maintenance, repairing, renewing, upgrading, inspecting, removal and replacing of the ducting, electrical infrastructure and cables, and to erect temporary signage and provide measures for the benefit of public and personnel safety.

Restrictive covenants

A restrictive covenant over the land for the benefit of the

remainder of the Order land to—

- (a) prevent anything to be done in or upon the land or any part thereof for the purpose of the erection of any buildings or construction erection or works of any kind (including the foundations or footings thereto);
- (b) prevent anything to be done by way of hard surfacing of the land with concrete of any kind or with any other material or surface whatsoever without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed if the proposed surfacing would not cause damage to relevant part of the authorised development nor make it materially more difficult or expensive to maintain the authorised development);
- (c) prevent anything to be done by way of excavation of any kind in the land nor any activities which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development, alter, increase or decrease ground cover or soil levels in any manner whatsoever without the consent in writing of the undertaker save as are reasonably required for agricultural activities (being ploughing to no deeper than 0.6m for the purposes of arable farming) or are required to be carried out by National Grid in order to exercise their statutory functions or rights in relation to their apparatus (if any) within the land;
- (d) to prevent anything being done which may interfere with free flow and passage of electricity or telecommunications through the cables or support for the authorised development;
- (e) prevent carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development.

Landfall and Onshore Connection Works

01-003, 01-004, 01-005, 01-006,
01-007, 01-008, 01-009, 01-010

Rights

Rights for the purposes of the construction, installation, retention, operation, maintenance and decommissioning of the authorised development to—

- (a) lay down, install, retain, adjust, alter, construct, operate, erect, use, maintain, repair, renew, upgrade, inspect, remove and replace the electricity cables (including the removal of materials including spoil) in, under, over and/or on the land, together with such telemetry and fibre-optic lines, ducting, jointing bays and other apparatus, protection measures, cable marker posts, chambers and manholes, manhole covers and other equipment which is ancillary to the purposes of transmitting electricity along such electricity cables (all collectively referred to as the “cables”), and in doing so, to use or resort to

trenchless installation techniques including (but not limited to) directional drilling beneath sea defences, watercourses and highways;

- (b) enter, be on, and break open and break up the surface of the land and remain with or without plant, vehicles, machinery, apparatus and equipment which is ancillary to the purposes of installing, operating and maintaining the cables, transmitting electricity along the cables or use of electrical infrastructure and the cables;
- (c) to benefit from continuous vertical and lateral support for the authorised development;
- (d) pass and re-pass with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of laying down, installing, adjusting, altering, constructing, using, maintaining, repairing, renewing, upgrading, inspecting, removing and replacing the electrical infrastructure and cables;
- (e) construct and install and thereafter use the land for all necessary purposes for the commissioning, construction, repair, testing and maintenance of the cables in, on or under the land;
- (f) place and use plant, machinery, structures and temporary structures within the land for the purposes of the installation, construction, maintenance, repairing, renewing, upgrading, inspecting, removal and replacing of the electrical infrastructure and cables, and to erect temporary signage and provide measures for the benefit of public and personnel safety;
- (g) erect temporary bridges and supporting or protective structures for the purposes of access to adjoining land and highway;
- (h) erect fencing, gates, walls, barriers or other means of enclosure, and create secure working areas and compounds including trenchless installation technique compounds and working areas;
- (i) construct, lay down, use and remove temporary access roads including any necessary hard standing and other surface materials including (but not limited to) matting, aggregate, trackway, stone, tarmacadam, terram, temporary bridging, culverting or diversion of water courses and drains during any period during which construction, maintenance, repair or renewal or decommissioning is being carried out;
- (j) to use, maintain, renew, improve and alter existing accesses, roads, streets, tracks or ways over the land, providing that such use is not exclusive and exercise of this right must not prevent or unreasonably inhibit use by other parties;
- (k) effect access and egress to and from the highway;
- (l) make such investigations in or on the land as required;

- (m) alter, fell, lop or cut, coppice wood, uproot trees or hedges or shrubs or other vegetation which now or hereafter may be standing on the land or other land which would if not felled, lopped, cut or removed would obstruct or interfere with the operation of the cables and ancillary equipment including ducting;
- (n) to take and use, remove and discharge water from the land, and to lay down, install, retain, use, maintain, inspect, adjust, alter, remove, refurbish, reconstruct, upgrade, replace, protect and improve sewers, drains, pipes, ducts, mains, conduits, flues and to drain into and manage waterflows in any drains, watercourses and culverts, install, retain, use, inspect, maintain, adjust, alter, renew, repair, test or cleanse drainage schemes on the land or reinstate the any existing drainage scheme on the land;
- (o) lay down, install, alter, re-lay, maintain, protect, adjust, use or remove pipes, cables or conduits or apparatus including but not limited to electricity poles, electricity pylons, electricity masts, overhead electricity lines, telecommunications cables and any ancillary equipment and apparatus public and private drains, watercourses, sewers, ponds or culverts, service media (including the pipes, cables or conduits or apparatus of statutory undertakers and providing connection to the authorised development);
- (p) erect and remove temporary fencing, gates, walls, barriers or other means of enclosure, remove fences and structures within the land during any period during which construction, maintenance, repair or renewal is being carried out (subject to erection of any temporary stock-proof fencing as is reasonably required and the re-instatement or suitable replacement of the fences or structures following the end of each period of exercise of the rights);
- (q) store and stockpile materials (including excavated material);
- (r) create boreholes and trial excavation pits for the purposes of intrusively surveying the land and monitoring the use of any trenchless installation technique, to keep in place and monitor the same through construction, maintenance repair, replacement or decommissioning and to reinstate the land;
- (s) to excavate materials below ground level, including soils, and to store and re-use or dispose of the same, and in so excavating to undertake any works, including works of protection or removal of archaeological remains as may be required by any written scheme of investigation approved under this Order;
- (t) lay out and maintain temporary paths and bridleways for public use as temporary diversions for public rights of way which are interfered with during any

period in which construction, maintenance, repair or renewal decommissioning is being carried out;

- (u) to install, execute, implement, retain, repair, improve, renew, relocate, maintain and carry out mitigation, maintenance, remediation works for environmental or ecological mitigation or enhancement works, including temporary works for noise alleviation measures and the installation of temporary barriers for the protection of fauna;
- (v) carry out such works (together with associated fencing) required by a planning permission and/or consent now or to be granted over the land and/or in accordance with any necessary licences relating to protected species and/or wildlife; and
- (w) (in an emergency only when the cables are temporarily unusable) to lay down, install, use, maintain and inspect underground cables, telephone signalling and fibre-optic cables and ancillary equipment, associated works and other conducting media together with conduits or pipes for containing the same in and under the land.

Restrictive covenants

A restrictive covenant over the land for the benefit of the remainder of the Order land to—

- (a) prevent anything to be done in or upon the land or any part thereof for the purpose of the erection of any buildings or construction erection or works of any kind (including the foundations or footings thereto);
- (b) prevent anything to be done by way of hard surfacing of the land with concrete of any kind or with any other material or surface whatsoever without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed if the proposed surfacing would not cause damage to relevant part of the authorised development nor make it materially more difficult or expensive to maintain the authorised development);
- (c) to prevent anything to be done by way of excavation of any kind in the land nor any activities which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development, alter, increase or decrease ground cover or soil levels in any manner whatsoever without the consent in writing of the undertaker save as are reasonably required for agricultural activities (being ploughing to no deeper than 0.6m for the purposes of arable farming) or are required to be carried out by National Grid in order to exercise their statutory functions or rights in relation to their apparatus (if any) within the land;
- (d) to prevent the planting or growing within the land of any trees, shrubs or underwood without the consent

in writing of the undertaker (such consent not to be unreasonably withheld or delayed provided that the proposed trees, shrubs or underwood would not cause damage to the relevant part of the authorised development nor make it materially more difficult or expensive to access the relevant part of the authorised development);

- (e) to prevent anything being done which may interfere with free flow and passage of electricity or telecommunications through the cables or support for the authorised development;
- (f) to prevent carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development; and
- (g) to prevent any activity which would in the reasonable opinion of the undertaker result in the disturbance of ecological mitigation areas or areas of habitat creation or reinstatement including any ploughing or grazing without the prior written consent of the undertaker.

Cable Route Onshore

01-010, 01-012, 01-013, 01-016, 02-001, 02-002, 02-006, 02-009, 02-015, 02-016, 03-004, 03-005, 03-008, 03-009, 03-023, 03-024, 04-006, 04-007, 04-009, 04-010, 04-011, 04-016, 04-022, 05-005, 05-008, 05-009, 05-010, 05-016, 05-017, 05-018, 05-024, 05-026, 06-002, 06-014, 06-017, 06-018, 06-019, 06-020, 07-001, 07-003, 07-007, 07-009, 07-010, 07-011, 07-012, 08-005, 08-006, 08-007, 08-009, 08-011, 08-012, 08-013, 08-014, 08-020, 08-021, 08-022, 09-005, 09-007, 09-008, 09-012, 10-003, 10-006, 10-007, 10-009, 10-019, 10-020, 11-004, 11-005, 12-005, 12-006, 12-010, 12-011, 12-012, 12-020, 12-021, 13-001, 13-002, 13-027, 13-028, 13-046, 13-052, 13-053, 13-054, 13-055, 13-056, 13-057, 13-061, 14-003, 14-004, 14-007, 14-008, 14-009, 14-015, 14-016, 14-017, 14-021, 14-022, 15-001, 15-003, 15-004, 15-005, 15-010, 15-011

Rights

Rights for the purposes of the construction, installation, operation, maintenance and decommissioning of the authorised development to—

- (a) lay down, install, retain, adjust, alter, construct, operate, erect, use, maintain, repair, renew, upgrade, inspect, remove and replace the electricity cables (including the removal of materials including spoil) in, under, over and/or on the land together with such telemetry and fibre-optic lines, ducting, jointing bays and other apparatus, protection measures, cable marker posts, chambers and manholes, manhole covers and other equipment which is ancillary to the purposes of transmitting electricity along such electricity cables (all collectively referred to as the “cables”), and in doing so, to use or resort to trenchless installation techniques including (but not limited to) directional drilling beneath watercourses, highways and railways;
- (b) lay down, install, retain, adjust, alter, construct, operate, erect, use, maintain, repair, renew, upgrade, inspect, remove and replace the additional ducts for electricity cables (including the removal of materials including spoil) in, under, over and/or on the land, allow the installation and use of electrical cables in the additional ducts, together with such telemetry and fibre-optic lines, ducting, jointing bays and other apparatus, protection measures, cable marker posts, chambers and manholes, manhole covers and other equipment which is ancillary to the purposes of transmitting electricity along such electricity cables

(all collectively referred to as the “cables”), and in doing so, to use or resort to trenchless installation techniques including (but not limited to) directional drilling beneath watercourses, highways and railways;

- (c) enter, be on, and break open and break up the surface of the land and remain with or without plant, vehicles, machinery, apparatus and equipment which is ancillary to the purposes of installing, operating and maintaining the cables or additional ducts, transmitting electricity along the cables, or use of electrical infrastructure and the cables;
- (d) to benefit from continuous vertical and lateral support for the authorised development;
- (e) pass and re-pass with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of laying down, installing, adjusting, altering, constructing, using, maintaining, repairing, renewing, upgrading, inspecting, removing and replacing the electrical infrastructure and cables and additional ducts;
- (f) construct and install and thereafter use the land for all necessary purposes for the commissioning, construction, repair, testing and maintenance of the cables and additional ducts in, on or under the land;
- (g) place and use plant, machinery, structures and temporary structures within the land for the purposes of the installation, construction, maintenance, repairing, renewing, upgrading, inspecting, removal and replacing of the electrical infrastructure and cables and additional ducts, and to erect temporary signage and provide measures for the benefit of public and personnel safety;
- (h) erect temporary bridges and supporting or protective structures for the purposes of access to adjoining land and highway;
- (i) erect fencing, gates, walls, barriers or other means of enclosure, and create secure working areas and compounds including trenchless installation technique compounds and working areas;
- (j) construct, lay down, use and remove temporary access roads including any necessary hard standing and other surface materials including (but not limited to) matting, aggregate, trackway, stone, tarmacadam, terram, temporary bridging, culverting or diversion of water courses and drains during any period during which construction, maintenance, repair or renewal or decommissioning is being carried out;
- (k) to use, maintain, renew improve and alter existing accesses, roads, streets, tracks or ways over the land, providing that such use is not exclusive and exercise of this right must not prevent or unreasonably inhibit use by other parties;
- (l) effect access and egress to and from the highway;

- (m) make such investigations in or on the land as required;
- (n) alter, fell, lop or cut, coppice or replant wood, uproot trees or hedges or shrubs or other vegetation which now or hereafter may be standing on the land or other land which would if not felled, lopped, cut or removed would obstruct or interfere with the operation of the cables and ancillary equipment including ducting;
- (o) to take and use, remove and discharge water from the land, and to lay down, install, retain, use, maintain, inspect, adjust, alter, remove, refurbish, reconstruct, upgrade, replace, protect and improve sewers, drains, pipes, ducts, mains, conduits, flues and to drain into and manage waterflows in any drains, watercourses and culverts, install, retain, use, inspect, maintain, adjust, alter, renew, repair, test or cleanse drainage schemes on the land or reinstate the any existing drainage scheme on the land;
- (p) lay down, install, alter, re-lay, maintain, protect, adjust, use or remove pipes, cables or conduits or apparatus including but not limited to electricity poles, electricity pylons, electricity masts, overhead electricity lines, telecommunications cables and any ancillary equipment and apparatus, public and private drains, watercourses, sewers, ponds or culverts, service media (including the pipes, cables or conduits or apparatus of statutory undertakers and providing connection to the authorised development);
- (q) erect and remove temporary fencing, gates, walls, barriers or other means of enclosure, remove fences and structures within the land during any period during which construction, maintenance, repair or renewal is being carried out (subject to erection of any temporary stock-proof fencing as is reasonably required and the re-instatement or suitable replacement of the fences or structures following the end of each period of exercise of the rights);
- (r) store and stockpile materials (including excavated material);
- (s) create boreholes and trial excavation pits for the purposes of intrusively surveying the land and monitoring the use of any trenchless installation technique, to keep in place and monitor the same through construction, maintenance repair, replacement or decommissioning and to reinstate the land;
- (t) to excavate materials below ground level, including soils, and to store and re-use or dispose of the same, and in so excavating to undertake any works, including works of protection or removal of archaeological remains as may be required by any written scheme of investigation approved under this Order;

- (u) lay out and maintain temporary paths and bridleways for public use as temporary diversions for public rights of way which are interfered with during any period in which construction, maintenance, repair or renewal decommissioning is being carried out;
- (v) to install, execute, implement, retain, repair, improve, renew, relocate, maintain and carry out mitigation, maintenance, remediation works for environmental or ecological mitigation or enhancement works, including temporary works for noise alleviation measures and the installation of temporary barriers for the protection of fauna;
- (w) carry out such works (together with associated fencing) required by a planning permission and/or consent now or to be granted over the land and/or in accordance with any necessary licences relating to protected species and/or wildlife; and
- (x) (in an emergency only when the cables are temporarily unusable) to lay down, install, use, maintain and inspect underground cables, telephone signalling and fibre-optic cables and ancillary equipment, associated works and other conducting media together with conduits or pipes for containing the same in and under the land.

Restrictive covenants

A restrictive covenant over the land for the benefit of the remainder of the Order land to—

- (a) prevent anything to be done in or upon the land or any part thereof for the purpose of the erection of any buildings or construction erection or works of any kind (including the foundations or footings thereto);
- (b) prevent anything to be done by way of hard surfacing of the land with concrete of any kind or with any other material or surface whatsoever without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed if the proposed surfacing would not cause damage to relevant part of the authorised development nor make it materially more difficult or expensive to maintain the authorised development);
- (c) to prevent anything to be done by way of excavation of any kind in the land nor any activities which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development, alter, increase or decrease ground cover or soil levels in any manner whatsoever without the consent in writing of the undertaker save as are reasonably required for agricultural activities (being ploughing to no deeper than 0.6m for the purposes of arable farming) or are required to be carried out by National Grid in order to exercise their statutory functions or rights in relation to their apparatus (if any) within the

land;

- (d) to prevent the planting or growing within the land of any trees, shrubs or underwood without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed provided that the proposed trees, shrubs or underwood would not cause damage to the relevant part of the authorised development nor make it materially more difficult or expensive to access the relevant part of the authorised development);
- (e) to prevent anything being done which may interfere with free flow and passage of electricity or telecommunications through the cables or support for the authorised development;
- (f) to prevent carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development; and
- (g) to prevent any activity which would in the reasonable opinion of the undertaker result in the disturbance of ecological mitigation areas or areas of habitat creation or reinstatement including any ploughing or grazing without the prior written consent of the undertaker.

Operational and Maintenance Access

01-011, 01-015, 02-004, 02-012,
02-017, 02-018, 02-019, 02-020,
03-001, 03-016, 03-017, 03-020,
03-021, 03-022, 04-002, 04-003,
04-004, 04-005, 04-012, 04-013,
04-014, 04-015, 04-017, 04-018,
05-022, 05-027, 06-001, 06-003,
06-007, 06-012, 07-004, 08-002,
08-010, 08-015, 08-023, 08-024,
09-003, 09-006, 09-009, 09-010,
09-011, 10-008, 10-013, 11-001,
12-014, 13-032, 13-033

Rights

Rights for the purposes of the construction, installation, operation, maintenance and decommissioning of the authorised development to—

- (a) pass and re-pass with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of the authorised development, the inspection, use, testing, maintenance, renewal, repair, upgrading, replacement and removal of the cables and connection into any adjacent cables and associated works, to take plant and equipment on to adjoining land and make such investigations in or on the land which is ancillary for the purposes of exercise of the rights;
- (b) to construct, use, maintain and improve a permanent means of access including visibility splays, and retain, maintain, straighten, widen, repair, alter, upgrade and use existing access routes for the purposes of accessing the land, adjoining land and highway;
- (c) retain, maintain, straighten, widen, repair, alter, upgrade and use existing access routes for the purposes of accessing adjoining land and highway;
- (d) construct, lay down, use and remove temporary access roads including any necessary hard standing and other surface materials including (but not limited to) matting, aggregate, trackway, stone, tarmacadam,

terram, temporary bridging, culverting or diversion of water courses and drains during any period during which construction, maintenance, repair, renewal or decommissioning is being carried out;

- (e) erect temporary bridges and supporting or protective structures for the purposes of access to adjoining land;
- (f) place and use plant, machinery, structures and temporary structures within the land, and to erect temporary signage and provide measures for the benefit of public and personnel safety;
- (g) alter, fell, lop, cut, coppice wood, uproot trees or hedges or shrubs or other vegetation which now or hereafter may be present on the land for the purpose of enabling the right to pass and re-pass to adjoining land;
- (h) repair, improve, renew, remove, relocate and plant trees, woodland, shrubs, hedgerows, seeding, other vegetation and other ecological measures together with the right to maintain, inspect and replant such trees, shrubs and landscaping;
- (i) erect and remove temporary fencing, gates, walls, barriers or other means of enclosure; and
- (j) lay out and maintain temporary paths and bridleways for public use as temporary diversions for public rights of way which are interfered with during any period in which construction, maintenance, repair or renewal decommissioning is being carried out.

Restrictive covenants

A restrictive covenant over the land for the benefit of the remainder of the Order land to—

- (a) prevent anything to be done in or upon the Land or any part thereof for the purpose of the erection of any buildings or construction erection or works of any kind (including the foundations footings or other supporting structures thereto); and
- (b) prevent the planting or growing within the Land of any trees, shrubs or underwood without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed provided that the proposed trees, shrubs or underwood would not cause damage to the relevant part of the authorised development nor make it materially more difficult or expensive to access the relevant part of the authorised development).

Substation Drainage

15-002, 15-012, 15-013, 15-015

Rights

Rights for the purposes of the construction, installation, operation, maintenance and decommissioning of the authorised development to—

- (a) remove and discharge water from the land and to lay down, install, retain, use, maintain, inspect, adjust, alter, remove, refurbish, reconstruct, upgrade, replace, protect and improve sewers, drains, pipes, ducts, mains, conduits, flues and to drain into and manage waterflows in any drains, watercourses and culverts, to lay down, install, adjust, alter, construct, create, use, maintain, repair, renew, upgrade, inspect, remove and replace a drainage scheme on the land (the “drainage works”);
- (b) inspect, use mechanical excavation (including directional drilling and/or digging), reinstate, remove, move or alter such part or parts of any drainage system on the land for the purposes of the drainage works (including connecting the drainage works to any land drain as at the date of the drainage works);
- (c) enter, be on, and break up the surface of the land and remain with or without plant, vehicles, machinery, apparatus and equipment which is ancillary to the purposes of the drainage works;
- (d) store and stockpile materials (including excavated material);
- (e) make such investigations in or on the land as required for the purposes of the drainage works, include to create boreholes and trial excavation pits for the purposes of intrusively surveying the land;
- (f) to excavate materials below ground level, including soils, and to store and re-use or dispose of the same, and in so excavating, to undertake any works, including works of protection or removal of archaeological remains as may be required by any written scheme of investigation approved under this Order;
- (g) pass and re-pass with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of the drainage works;
- (h) place and use plant, machinery, structures and temporary structures within the land, and to erect temporary signage and provide measures for the benefit of public and personnel safety for the purposes of the drainage works;
- (i) erect fencing, gates, walls, barriers or other means of enclosure, and create secure works areas or compounds and working areas for the purposes of the drainage works;
- (j) construct, lay down, use and remove temporary access roads including any necessary hard standing and other surface materials including (but not limited to) matting, aggregate, trackway, stone, tarmacadam, terram, temporary bridging, culverting or diversion of water courses and drains during any period during which construction, maintenance, repair or renewal of any drainage work is being carried out;

- (k) effect access and egress to and from the highway;
- (l) alter, fell, lop or cut, coppice wood, uproot trees or hedges or shrubs which now or hereafter may be standing on the land or other land which would if not felled, lopped, cut or removed obstruct or interfere with the drainage works;
- (m) install, alter, re-lay, maintain, protect, adjust or remove pipes, cables or conduits or apparatus including but not limited to electricity poles, electricity pylons, electricity masts, overhead electricity lines, telecommunications cables and any ancillary equipment and apparatus public and private drains, watercourses, sewers, ponds or culverts, service media (including the pipes, cables or conduits or apparatus of statutory undertakers);
- (n) to install, execute, implement, retain, repair, improve, renew, relocate, maintain and carry out mitigation, maintenance, remediation works for environmental or ecological mitigation or enhancement works, including temporary works for noise alleviation measures and the installation of temporary barriers for the protection of fauna; and
- (o) to carry out such works (together with associated fencing) required by a planning permission and/or consent now or to be granted over the land in accordance with any necessary licences relating to protected species and/or wildlife.

Restrictive covenants

A restrictive covenant over the land for the benefit of the remainder of the Order land to—

- (a) prevent anything to be done in or upon the land or any part thereof for the purpose of the erection of any buildings or construction erection or works of any kind (including the foundations or footings thereto); and
- (b) prevent anything to be done by way of hard surfacing of the land with concrete of any kind or with any other material or surface whatsoever without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed if the proposed surfacing would not cause damage drainage works).

National Grid Substation Works

15-015, 16-002, 16-003, 16-004,
16-005, 16-006, 16-007, 16-008

Rights

Rights for the purposes of the construction, installation, operation, maintenance and decommissioning of the authorised development to—

- (a) lay down, install, retain, adjust, alter, construct, operate, erect, use, maintain, repair, renew, upgrade, inspect, remove and replace the electricity cables (including the removal of materials including spoil)

in, under, over and/or on the land, together with such telemetry and fibre-optic lines, ducting, jointing bays and other apparatus, protection measures, cable marker posts, chambers and manholes, manhole covers and other equipment which is ancillary to the purposes of transmitting electricity along such electricity cables (all collectively referred to as the “cables”);

- (b) enter, be on, and break open and break up the surface of the land and remain with or without plant, vehicles, machinery, apparatus and equipment which is ancillary to the purposes of transmitting electricity along the cables;
- (c) to benefit from continuous vertical and lateral support for the authorised development;
- (d) pass and re-pass with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of laying down, installing, adjusting, altering, constructing, using, maintaining, repairing, renewing, upgrading, inspecting the authorised development and for removing and replacing the cables;
- (e) to use, maintain, renew improve and alter existing accesses, roads, streets, tracks or ways over the land, providing that such use is not exclusive and exercise of this right must not prevent or unreasonably inhibit use by other parties;
- (f) construct, lay down, use and remove temporary access roads including any necessary hard standing and other surface materials including (but not limited to) matting, aggregate, trackway, stone, tarmacadam, terram, temporary bridging, culverting or diversion of water courses and drains during any period during which construction, maintenance, repair, renewal or decommissioning is being carried out;
- (g) place and use plant, machinery, structures and temporary structures within the land, and to erect temporary signage and provide measures for the benefit of public and personnel safety;
- (h) fell, lop, cut, coppice wood, uproot trees or hedges or shrubs or other vegetation which now or hereafter may be present on the land for the purpose of enabling the right to pass and re-pass to adjoining land;
- (i) to take and use, remove and discharge water from the land and to lay down, install, retain, use, maintain, inspect, adjust, alter, remove, refurbish, reconstruct, upgrade, replace, protect and improve sewers, drains, pipes, ducts, mains, conduits, flues and to drain into and manage waterflows in any drains, watercourses and culverts, to lay down, install, retain, adjust, alter, construct, create, use, maintain, repair, renew, upgrade, inspect, remove and replace a drainage scheme on the land;

- (j) lay down, install, alter, re-lay, maintain, protect, adjust, use or remove pipes, cables or conduits or apparatus including but not limited to electricity poles, electricity pylons, electricity masts, overhead electricity lines, telecommunications cables and any ancillary equipment and apparatus public and private drains, watercourses, sewers, ponds or culverts, service media (including the pipes, cables or conduits or apparatus of statutory undertakers); and
- (k) effect access and egress to and from the highway.

Restrictive covenants

A restrictive covenant over the land for the benefit of the remainder of the Order land to—

- (a) prevent anything to be done in or upon the land or any part thereof for the purpose of the erection of any buildings or construction erection or works of any kind (including the foundations or footings thereto) without the prior written consent of the undertaker;
 - (b) to prevent the planting or growing within the land of any trees, shrubs or underwood without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed provided that the proposed trees, shrubs or underwood would not cause damage to the relevant part of the authorised development nor make it materially more difficult or expensive to access the relevant part of the authorised development);
 - (c) to prevent anything being done which may interfere with free flow and passage of electricity or telecommunications through the cables or support for the authorised development;
 - (d) to prevent carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt or interfere with the exercise of the rights or damage the authorised development.
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MODIFICATION OF COMPENSATION AND COMPULSORY PURCHASE ENACTMENTS FOR CREATION OF NEW RIGHTS

Compensation enactments

1. The enactments for the time being in force with respect to compensation for the compulsory purchase of land apply, with the necessary modifications as respects compensation, in the case of a compulsory acquisition under this Order of a right by the creation of a new right or imposition of a restrictive covenant as they apply as respects compensation for the compulsory purchase of land and interests in land.

2.—(1) Without limitation on the scope of paragraph 1, the 1961 Act has effect subject to the following modification—

(2) For section 5A(5A) (relevant valuation date) of the 1961 Act substitute—

“(5A) If—

- (a) the acquiring authority enters on land for the purposes of exercising a right in pursuance of a notice of entry under section 11(1) of the Compulsory Purchase Act 1965 (as modified by paragraph 5(5) of Schedule 6 to the North Falls Offshore Wind Farm Order 202[]).
- (b) the acquiring authority is subsequently required by a determination under paragraph 12 of Schedule 2A to the Compulsory Purchase Act 1965 (as substituted by paragraph 5(8) of Schedule 6 to the North Falls Offshore Wind Farm Order 202[]) to acquire an interest in the land; and
- (c) the acquiring authority enters on and takes possession of that land, the authority is deemed for the purposes of sub-section (3)(a) to have entered on that land when it entered on that land for the purpose of exercising that right.”.

3.—(1) Without limitation on the scope of paragraph 1, the Land Compensation Act 1973(a) has effect subject to the modifications set out in sub-paragraph (2).

(2) In section 44(1) (compensation for injurious affection), as it applies to compensation for injurious affection under section 7 (measure of compensation in case of severance) of the 1965 Act as substituted by paragraph 5(3) of this Schedule—

- (a) for “land is acquired or taken from” substitute “a right or restrictive covenant over land is purchased from or imposed on”; and
- (b) for “acquired or taken from him” substitute “over which the right is exercisable or the restrictive covenant enforceable.

Application of Part 1 of the 1965 Act

4.—(1) Part 1 (compulsory purchase under Acquisition of Land Act 1946) of the 1965 Act, as applied by section 125 (application of compulsory acquisition provisions) of the 2008 Act (and modified by article 29 (modification of Part 1 of the 1965 Act) to the acquisition of land under article 21 (compulsory acquisition of land), applies to the compulsory acquisition of a right by the creation of a new right, or to the imposition of a restrictive covenant under article 24 (compulsory acquisition of rights etc.)—

- (a) with the modifications specified in paragraph 5; and
- (b) with such other modifications as may be necessary.

(a) 1973 c. 26.

5.—(1) The modifications referred to in paragraph 4 are set out in the following provisions of this Schedule.

(2) References in the 1965 Act to land are, in the appropriate contexts, to be read (according to the requirements of the particular context) as referring to, or as including references to—

- (a) the right acquired or to be acquired, or the restriction imposed or to be imposed; or
- (b) the land over which the right is or is to be exercisable, or the restriction is or is to be enforceable.

(3) For section 7 (measure of compensation in case of severance) of the 1965 Act substitute—

“7. In assessing the compensation to be paid by the acquiring authority under this Act, regard must be had not only to the extent (if any) to which the value of the land over which the right is to be acquired or the restrictive covenant is to be imposed is depreciated by the acquisition of the right or the imposition of the covenant but also to the damage (if any) to be sustained by the owner of the land by reason of its severance from other land of the owner, or injuriously affecting that other land by the exercise of the powers conferred by this or the special Act.”.

(4) The following provisions of the 1965 Act (which state the effect of a deed poll executed in various circumstances where there is no conveyance by persons with interests in the land), that is to say—

- (a) section 9(4) (failure by owners to convey);
- (b) paragraph 10(3) of Schedule 1 (persons without power to sell their interests) (conveyance of the land or interest);
- (c) paragraph 2(3) of Schedule 2 (absent and untraced owners); and
- (d) paragraphs 2(3) and 7(2) of Schedule 4 (common land);

are modified so as to secure that, as against persons with interests in the land which are expressed to be overridden by the deed, the right which is to be compulsorily acquired or the restrictive covenant which is to be imposed is vested absolutely in the acquiring authority.

(5) Section 11 (powers of entry) of the 1965 Act is modified so as to secure that, where the acquiring authority has served notice to treat in respect of any right or restriction, as well as the notice of entry required by sub-section (1) of that section (as it applies to a compulsory acquisition), it has power, exercisable in equivalent circumstances and subject to equivalent conditions, to enter for the purpose of exercising that right or enforcing that restrictive covenant (which is deemed for this purpose to have been created on the date of service of the notice); and sections 11A(a) (powers of entry: further notices of entry), 11B(b) (counter-notice requiring possession to be taken on specified date), 12 (unauthorised entry) and 13 (refusal to give possession to acquiring authority) of the 1965 Act are modified correspondingly.

(6) Section 20 (tenants at will, etc.) of the 1965 Act applies with the modifications necessary to secure that persons with such interests in land as are mentioned in that section are compensated in a manner corresponding to that in which they would be compensated on a compulsory acquisition under this Order of that land, but taking into account only the extent (if any) of such interference with such an interest as is actually caused, or likely to be caused, by the exercise of the right or the enforcement of the restrictive covenant in question.

(7) Section 22 (interests omitted from purchase) of the 1965 Act is modified so as to enable the acquiring authority in circumstances corresponding to those referred to in that section, to continue to be entitled to exercise the right acquired, subject to compliance with that section as respects compensation.

(8) For Schedule 2A of the 1965 Act substitute—

(a) Section 11A was inserted by section 186(3) of the Housing and Planning Act 2016 (c.22).
(b) Section 11B was inserted by section 187(2) of the above Act.

COUNTER-NOTICE REQUIRING PURCHASE OF LAND NOT IN NOTICE TO TREAT

Introduction

1.—(1) This Schedule applies where an acquiring authority serves a notice to treat in respect of a right over, or a restrictive covenant affecting, the whole or part of a house, building or factory and have not executed a general vesting declaration under section 4 (execution of declaration) of the 1981 Act as applied by article 26 (application of the 1981 Act) of the North Falls Offshore Wind Farm Order 202[] in respect of the land to which the notice to treat relates.

(2) But see article 28 (acquisition of subsoil only) of the North Falls Offshore Wind Farm Order 202[] which excludes the acquisition of subsoil only from this Schedule.

2. In this Schedule, “house” includes any park or garden belonging to a house.

Counter-notice requiring purchase of land

3. A person who is able to sell the house, building or factory (“the owner”) may serve a counter-notice requiring the acquiring authority to purchase the owner’s interest in the house, building or factory.

4. A counter-notice under paragraph 3 must be served within the period of 28 days beginning with the day on which the notice to treat was served.

Response to counter-notice

5. On receiving a counter-notice, the acquiring authority must decide whether to—

- (a) withdraw the notice to treat;
- (b) accept the counter-notice; or
- (c) refer the counter-notice to the Upper Tribunal.

6. The authority must serve notice of their decision on the owner within the period of 3 months beginning with the day on which the counter-notice is served (“the decision period”).

7. If the authority decide to refer the counter-notice to the Upper Tribunal they must do so within the decision period.

8. If the authority do not serve notice of a decision within the decision period it is to be treated as if it had served notice of a decision to withdraw the notice to treat at the end of that period.

9. If the authority serve notice of a decision to accept the counter-notice, the compulsory purchase order and the notice to treat are to have effect as if they included the owner’s interest in the house, building or factory.

Determination by the Upper Tribunal

10. On a referral under paragraph 7, the Upper Tribunal must determine whether the acquisition of the right or the imposition of the restrictive covenant would—

- (a) in the case of a house, building or factory, cause material detriment to the house, building or factory; or
- (b) in the case of a park or garden, seriously affect the amenity or convenience of the house to which the park or garden belongs.

11. In making the determination, the Upper Tribunal must take into account—

- (a) the effect of the acquisition of the right or the imposition of the covenant;
- (b) the use to be made of the right or covenant proposed to be acquired or imposed; and
- (c) if the right or covenant is proposed to be acquired or imposed for works or other purposes extending to other land, the effect of the whole of the works and the use of the other land.

12. If the Upper Tribunal determines that the acquisition of the right or the imposition of the covenant would have either of the consequences described in paragraph 10, it must determine how much of the house, building or factory the acquiring authority ought to be required to take.

13. If the Upper Tribunal determines that the acquiring authority ought to be required to take some or all of the house, building or factory, the compulsory purchase order and the notice to treat are to have effect as if they included the owner's interest in that land.

14.—(1) If the Upper Tribunal determines that the acquiring authority ought to be required to take some or all of the house, building or factory, the acquiring authority may at any time within the period of six weeks beginning with the day on which the Upper Tribunal makes its determination withdraw the notice to treat in relation to that land.

(2) If the acquiring authority withdraws the notice to treat under this paragraph it must pay the person on whom the notice was served compensation for any loss or expense caused by the giving and withdrawing of the notice.

15. Any dispute as to the compensation is to be determined by the Upper Tribunal.”.

SCHEDULE 7

Article 31

LAND OF WHICH TEMPORARY POSSESSION MAY BE TAKEN

<i>(1)</i> <i>Number of plot shown on land plans</i>	<i>(2)</i> <i>Purpose for which temporary possession may be taken</i>	<i>(3)</i> <i>Relevant part of the authorised development</i>
01-014	Temporary use as a construction working area and for access to facilitate construction of the authorised development at landfill	Work No. 5
02-003, 02-005, 02-007, 02-008, 02-011, 02-013, 02-014, 05-001, 07-014, 08-001, 08-003, 08-004, 08-016, 08-017, 11-002, 12-007, 12-017, 12-018, 12-019, 13-024, 13-025, 13-026, 13-030, 13-035, 13-037, 13-039, 13-040, 13-041, 13-042, 13-043, 13-044, 13-045	Temporary use as a construction working area and for access to facilitate construction of the authorised development	Work No. 7
02-003, 02-005, 02-007, 02-008, 02-010, 02-011, 02-013, 02-014, 03-002, 03-003, 03-006, 03-007, 03-010, 03-011, 03-012, 03-013, 03-014, 03-015, 03-018, 03-019, 03-025, 04-001, 04-008, 04-019, 04-020, 04-021, 05-001, 05-002, 05-003, 05-004, 05-006, 05-007, 05-011, 05-012, 05-013, 05-014, 05-015, 05-019, 05-020, 05-021, 05-023, 05-025, 06-004, 06-005, 06-006, 06-008, 06-009, 06-010, 06-011, 06-013, 06-015, 06-016, 07-002, 07-005, 07-006, 07-008, 07-013, 07-014, 08-001, 08-003, 08-004, 08-008, 08-018, 08-019, 08-025, 09-001, 09-002, 09-004, 10-001, 10-002, 10-004, 10-005, 10-010, 10-011, 10-012, 10-014, 10-015, 10-016, 10-017, 10-018, 11-002, 11-003, 12-001, 12-002, 12-003, 12-004, 12-007, 12-008, 12-009, 12-013, 12-015, 12-016, 12-017, 12-018, 13-024, 13-025, 13-026, 13-039, 13-040, 13-041, 13-042, 13-043, 13-044, 13-045, 13-047, 13-048, 13-049, 13-050, 13-051, 13-058, 13-059, 13-060,	Temporary use as access to facilitate construction of the authorised development	Work No. 8

14-001, 14-002, 14-005, 14-006, 14-010, 14-011, 14-012, 14-013, 14-014, 14-018, 14-019, 14-020, 15-006, 15-007, 15-008, 15-009

13-004, 13-005, 13-006, 13-007, 13-008, 13-009, 13-010, 13-011, 13-012, 13-019, 13-022, 13-025, 13-026, 13-039, 13-040, 13-043, 13-044

Temporary use as access and road widening to facilitate construction of the authorised development

Work No. 9

SCHEDULE 8

Article 36

DEEMED MARINE LICENCE UNDER THE 2009 ACT – GENERATION ASSETS

PART 1

LICENSED MARINE ACTIVITIES

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004(a);

“the 2008 Act” means the Planning Act 2008(b);

“the 2009 Act” means the Marine and Coastal Access Act 2009(c);

“the 2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017(d);

“aids to navigation management plan” means the aids to navigation management plan to be submitted to the MMO under condition 21 of this licence;

“authorised deposits” means the substances and articles specified in paragraph 4 of this licence;

“authorised development” means Work No. 1 described in paragraph 3 of this licence or any stage of that work;

“buoy” means any floating device used for navigational purposes or measurement purposes, including LIDAR buoys, wave buoys and guard buoys;

“cable circuits” means a number of electrical conductors necessary to transmit electricity between two points, comprising one or more conductors which may be bundled as one cable or take the form of separate cables, and in either case the circuit may include one or more auxiliary cables for the purpose of control, monitoring, protection or general communication;

“cable crossings” means a crossing of existing cables, pipelines or other existing infrastructure by cable circuits authorised by this Order together with cable protection;

“cable protection” means physical measures for the protection of cables including but not limited to concrete mattresses, split pipe system, and/or rock placement (including material used for cable crossings);

“cable protection replenishment” means the restoration to a former level or condition of cable protection lost by natural seabed processes or human activity;

“Chart Datum” means the level below which the tide will not normally fall at a given location, usually the lowest astronomical tide;

“chemical” means a chemical element and will include both substances and preparations;

“commence” means the first carrying out of any licensed marine activities authorised by this marine licence, save for any operations consisting of pre-construction surveys and monitoring approved under this marine licence and the activities set out in paragraph 2(d), and “commenced” and “commencement” must be construed accordingly;

“commissioning” means the process of assuring that all systems and components of the authorised development are tested to verify that they function and are operable in accordance with the specifications and operational requirements of the undertaker;

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- (a) 2004 c. 20.
(b) 2008 c. 29.
(c) 2009 c. 23.
(d) S.I. 2017/13.

“condition” means a condition in Part 2 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation – Safeguarding, St George’s House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire, WS14 9PY and any successor body to its functions;

“Defra” means the Department for Environment, Food and Rural Affairs;

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“dropped object procedure form” means the MMO notification proforma with reference MLDIR1 for reporting the loss or dumping of synthetic materials and other refuse at sea or any other format advised in writing by the MMO;

“enforcement officer” means a person authorised to carry out enforcement duties under Chapter 3 Part 4 (marine licensing) of the 2009 Act;

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.);

“habitats of principal importance” means a habitat designated as being of principal importance in accordance with section 41 (biodiversity lists and action (England)) of the Natural Environment and Rural Communities Act 2006(a);

“IHO S44ed5 Order 1a” means order 1a from the fifth edition of the International Hydrographic Organisation’s Standards for Hydrographic Surveys as updated or amended from time to time;

“jacket foundation” means a lattice type structure constructed of steel, and additional equipment such as J-tubes, corrosion protection systems and access platforms attached to the seabed at 3 or more points with pin piles or suction buckets;

“JNCC” means the Joint Nature Conservation Committee;

“Kingfisher bulletin” means the bulletin published by the Humber Seafood Institute or such other alternative publication approved in writing by the MMO for the purposes of this licence;

“Kingfisher Information Service” means the information service from non-departmental government body Seafish;

“licensed activities” means the activities specified in Part 1 of this licence;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including replenishment of cable protection) to the extent assessed in the environmental statement, and “maintenance” must be construed accordingly;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH who is the body created under the 2009 Act and who is responsible for the monitoring and enforcement of this licence;

“marine noise registry” means the database developed and maintained by JNCC on behalf of Defra to record the spatial and temporal distribution of impulsive noise generating activities in UK seas;

“MCA” means the Maritime and Coastguard Agency;

“MGN654” means “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes, as may be updated or amended from time to time;

“MHWS” or “mean high water springs” means the average throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide is at its greatest (Spring tides);

(a) 2006 c. 16.

“monopile foundation” means a steel pile, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“offshore converter platform” means a structure, authorised by the deemed marine licence in Schedule 10 to the Order, above MHWS and attached to the seabed by means of a foundation, with equipment to convert three-phase HVAC power generated by the wind turbine generators into HVDC power;

“the offshore order limits and boundary co-ordinates plan” means the plan certified as the offshore order limits and boundary co-ordinates plan by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.);

“offshore platform” means the offshore substation platform(s) and/or the offshore converter platform;

“Offshore Renewables Protocol for Reporting Archaeological Discoveries” means the Offshore Renewables Protocol for Reporting Archaeological Discoveries, the Crown Estate (2014), Protocol for Archaeological Discoveries: Offshore Renewables Projects, Salisbury, Wessex Archaeology as amended, updated or superseded from time to time;

“offshore substation platform” means a structure, authorised by the deemed marine licence in Schedule 9 to the Order, above MHWS and attached to the seabed by means of a foundation, with one or more decks, whether open or fully clad, accommodating electrical power transformers, switchgear, instrumentation, protection and control systems, and other associated equipment and facilities to enable the transmission of electronic communications and for electricity to be collected at, and exported from, the platform;

“operation” means the undertaking of the licensed activities which are not part of the construction, commissioning or decommissioning of the authorised development;

“Order” means the North Falls Offshore Wind Farm Order 202[];

“the Order limits” means the limits shown on the works plans (offshore) within which the authorised development may be carried out, the grid coordinates for the area seaward of MHWS are set out in paragraph 5 of Part 1 of this licence;

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore in-principle monitoring plan” means the document certified as the outline offshore in-principle monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore operations and maintenance plan” means the document certified as the outline offshore operations and maintenance plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore written scheme of investigation” means the document certified as the outline offshore written scheme of investigation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline project environmental management plan” means the document certified as the outline project environmental management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline sediment disposal management plan” means the document certified as the outline sediment disposal management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline site integrity plan for the southern north sea special area of conservation” means the document certified as the outline site integrity plan for the southern north sea special area of conservation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline vessel traffic monitoring plan” means the document certified as the outline vessel traffic monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc);

“pathway to the marine environment” means open systems or closed systems that require top up;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“preparation” means a mixture or solution composed of two or more substances;

“scour protection” means measures to prevent loss of seabed sediment around any structure placed in or on the seabed by use of protective aprons, mattresses, or rock and gravel placement;

“SNCB” means the statutory nature conservation body, being the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017(a) or its equivalent in the 2017 Regulations;

“statutory historic body” means Historic England or its successor in function;

“substance” means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition;

“transition piece” means the metal structure attached to the top of the foundation where the base of the wind turbine generator is connected and may include additional equipment such as J-tubes, corrosion protection systems, boat access systems, access platforms, craneage, electrical transmission equipment and associated equipment;

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“UK Hydrographic Office” means the UK Hydrographic Office of Admiralty Way, Taunton, Somerset, TA1 2DN;

“UK Standard Marking Schedule for Offshore Installations” means the Standard Marking Schedule for Offshore Installations published by the Department of Energy & Climate Change with reference DECC 04/11.

“undertaker” means, subject to article 5 (benefit of the Order), North Falls Offshore Wind Farm Limited (company number 12435947);

“vessel” means every description of vessel, however propelled or moved, and includes a non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

“wind turbine generator” means a structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s) (or equivalent structures), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, and helicopter landing facilities and other associated equipment, fixed to a foundation or transition piece;

“Work No. 1” has the meaning given in paragraph 3 of this licence and includes the further associated development listed;

“Work No. 2” has the same meaning as in Part 1 of Schedule 1 to the Order;

“working day” means a day which is not a weekend, bank holiday or public holiday in England; and

(a) S.I. 2017/1012.

“works plans (offshore)” means the plan or plans certified as the works plans (offshore) by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.).

(2) A reference to any statute, order, regulation or similar instrument is construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(3) Unless otherwise indicated—

- (a) all times are taken to be Greenwich Mean Time;
- (b) all co-ordinates are taken to be latitude and longitude degrees and minutes to two decimal places.

(4) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence are—

(a) Civil Aviation Authority

Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

(b) Historic England

East of England Regional Office
Brooklands
24 Brooklands Avenue
Cambridge
CB2 8BU

(c) Marine Management Organisation

Marine Licensing Team
Lancaster House Hampshire Court
Newcastle Business Park
Newcastle upon Tyne
NE4 7YH
Tel: 0300 123 1032;

(d) Marine Management Organisation (Local Office)

Pakefield Road
Lowestoft
NR33 0HT
Tel: 0208 026 0654

(e) Maritime and Coastguard Agency

UK Technical Services Navigation
Spring Place
105 Commercial Road
Southampton
SO15 1EG
Email: navigationsafety@mcga.gov.uk;

(f) Ministry of Defence (as represented by Defence Infrastructure Organisation – Safeguarding)

- St George's House
153
DIO Head Office
DMS Whittington
Lichfield
Staffordshire
WS14 9PY;
- (g) Natural England
Guildbourne House
Chatsworth Road
Worthing
BN11 1LD
Tel: 0300 060 4911;
- (h) Trinity House
Tower Hill
London
EC3N 4DH
Tel: 020 7481 6900;
- (i) The United Kingdom Hydrographic Office
Admiralty Way
Taunton
Somerset
TA1 2DN
Tel: 01823 337 900.

(5) Unless otherwise advised in writing by the MMO, the address for electronic communication with the MMO for the purposes of this licence is marine.consents@marinemanagement.org.uk, or where contact to the Local Office if the MMO is required, harwich@marinemanagement.org.uk.

(6) Unless otherwise advised in writing by the MMO, the Marine Case Management System ("MCMS") must be used for all licence returns or applications to vary this licence. The MCMS address is: <https://marinelicensing.marinemanagement.org.uk/>.

Details of licensed marine activities

2. Subject to the licence conditions in Part 2, this licence authorises the undertaker (and any agent or contractor acting on its behalf) to carry out the following licensable marine activities under section 66(1) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea within the Order limits seaward of MHWS of the substances and articles specified in paragraph 4 below and within Work No. 1 of up to 22,408,883 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin produced during construction drilling or seabed preparation for foundation works and seabed preparation for cable installation and cable installation (whether by ploughing, jetting, trenching or a combination of installation techniques);
- (b) the construction of works in or over the sea and/or on or under the seabed;
- (c) dredging for the purposes of seabed preparation for foundation works, preparation for construction vessels and/or electrical circuit works;
- (d) the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation;

- (e) boulder clearance works by displacement ploughing or subsea grab technique or any other comparable method;
- (f) removal of static fishing equipment;
- (g) wet storage; and
- (h) site preparation works.

3. Such activities described in paragraph 2 are authorised in relation to the construction, maintenance and operation of—

Work No. 1—

- (a) an offshore wind turbine generating station with a gross electrical output capacity of over 100 megawatts comprising up to 57 wind turbine generators each fixed to the seabed by one of the following foundation types: monopile, mono suction bucket, multi-leg pin pile jacket or multi-leg suction bucket jacket;
- (b) a network of cables between the wind turbine generators and between the wind turbine generators and Work No. 2 (as defined in Schedule 1 to the Order), including one or more cable crossings;

In connection with Work No. 1 and to the extent that they do not otherwise form part of that work, further associated development within the meaning of section 115(2) (development for which development consent may be granted) of the 2008 Act comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement and the provisions of this licence including—

- (a) scour protection around the foundations of the offshore structures;
- (b) cable protection measures such as the placement of rock and/or concrete mattresses;
- (c) the removal of material from the seabed required for the construction of Work No. 1; and
- (d) temporary landing places, moorings or other means of accommodating or anchoring vessels in the construction and/or maintenance of the authorised development and buoys.

4. The substances or articles authorised for deposit at sea are—

- (a) iron and steel, copper and aluminium;
- (b) stone and rock;
- (c) concrete and grout;
- (d) sand and gravel;
- (e) plastic, synthetic and rubber;
- (f) material extracted from the seabed within the offshore Order limits during construction drilling or seabed preparation for foundation works, vessels, cable installation preparation works and cable installation works;
- (g) anchors and weights used for the calibration of vessels, consisting of a hessian sack, metal shackles or chains; and
- (h) marine coatings, other chemicals and timber.

5. The grid coordinates for that part of the authorised development comprising Work No. 1 are specified below and more particularly on the offshore order limits and boundary co-ordinates plan—

(1) <i>Point ID</i>	(2) <i>Latitude (WGS84 (DDM))</i>	(3) <i>Longitude (WGS84 (DDM))</i>
36	51° 46.18399'N	01° 51.52207'E
37	51° 46.45215'N	01° 51.46739'E
38	51° 47.79417'N	01° 56.0602'E
39	51° 45.96006'N	01° 54.98406'E

40	51° 44.20008'N	01° 56.16270'E
41	51° 43.43466'N	01° 58.08954'E
42	51° 44.92260'N	02° 02.79174'E
43	51° 44.20590'N	02° 02.65992'E
44	51° 44.16756'N	02° 02.36766'E
45	51° 43.89822'N	02° 01.62702'E
46	51° 43.70418'N	02° 01.18500'E
47	51° 43.46172'N	02° 00.54066'E
48	51° 42.90816'N	01° 59.73738'E
49	51° 42.25464'N	01° 58.18482'E
50	51° 41.80842'N	01° 58.22082'E
51	51° 38.66118'N	01° 54.67986'E
52	51° 37.76189'N	01° 52.32853'E
53	51° 39.03140'N	01° 52.10085'E
54	51° 40.08359'N	01° 52.71647'E
55	51° 40.32461'N	01° 52.55921'E
56	51° 40.41888'N	01° 52.66356'E
57	51° 40.36970'N	01° 52.53295'E
58	51° 40.36967'N	01° 52.52982'E
59	51° 40.80925'N	01° 52.24298'E
60	51° 41.18441'N	01° 51.71421'E
61	51° 41.78502'N	01° 51.60623'E
62	51° 45.61162'N	01° 51.61163'E

General provisions

6. This marine licence remains in force until the authorised development has been decommissioned in accordance with a programme approved by the Secretary of State under section 106 (approval of decommissioning programmes) of the 2004 Act, including any modification to the programme under section 108 (reviews and revisions of decommissioning programmes) of the 2004 Act, and the completion of such programme has been confirmed by the Secretary of State in writing.

7. The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this marine licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 5 (benefit of the Order).

8. With respect to any condition which requires the licensed activities be carried out in accordance with the plans, protocols or statements approved under this licence, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved in writing by the MMO.

9. Any amendments to or variations from the approved details, plan or scheme must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of the MMO that it is unlikely to give rise to any materially new or materially greater environmental effects from those assessed in the environmental statement.

PART 2

CONDITIONS

Design parameters

10.—(1) The total number of wind turbine generators comprised in the authorised development must not exceed 57.

(2) Subject to sub-paragraph (3), each wind turbine generator forming part of the authorised development must not—

- (a) exceed a height of 377.39 metres when measured from MHWS to the tip of the vertical blade;
- (b) exceed a rotor diameter of 337 metres;
- (c) be less than 27 metres from MHWS to the lowest point of the rotating blade; and
- (d) be less than 1180 metres from the nearest wind turbine generator in a downwind direction and 944 metres from the nearest wind turbine generator in a crosswind direction.

(3) The minimum distance in sub-paragraph (2)(d) between each wind turbine generator is to be measured from the centre point of the wind turbine generator.

(4) Wind turbine generator foundation structures forming part of the authorised development must be one of the following foundation options—

- (a) monopile foundations;
- (b) mono suction bucket foundations;
- (c) multi-leg pin-piled jacket foundations; or
- (d) multi-leg suction bucket jacket foundations.

(5) No wind turbine generator—

- (a) jacket foundation employing pin piles forming part of the authorised development may—
 - (i) have a pin pile diameter of greater than six metres; and
 - (ii) employ more than eight pin piles per jacket foundation; and
- (b) monopile foundation forming part of the authorised development may not have a diameter greater than 17 metres.

(6) The total seabed footprint area for wind turbine generator foundations must not exceed—

- (a) 94,729 square metres excluding scour protection; and
- (b) 2,709,162 square metres including scour protection.

(7) The total volume of scour protection material for wind turbine generator foundations must not exceed 4,882,186 cubic metres.

(8) The total volume of drill arisings must not exceed 34,728 cubic metres.

11. The total length of the cable circuits in Work No. 1(b) and the area and volume of their cable protection (including cable crossings) must not exceed the following—

(1) <i>Parameter</i>	(2) <i>Value</i>
Maximum total length	170 km
Maximum protection area	204,000 m ²
Maximum protection volume	119,000 m ³

Maintenance of the authorised development

12.—(1) The undertaker may at any time maintain the authorised development, except to the extent that this licence or an agreement made under this licence provide otherwise.

(2) Maintenance works include but are not limited to—

- (a) repair, maintenance, refurbishment and replacement of major wind turbine components;
- (b) painting and applying other coatings to wind turbine generators and foundations;
- (c) bird waste and marine growth removal;
- (d) cable remedial burial;
- (e) cable repairs and replacement;
- (f) cable protection replenishment;
- (g) access ladder and boat landing replacement;
- (h) wind turbine generator and platform anode replacement; and
- (i) J-tube repair/replacement.

(3) In undertaking activities under sub-paragraph (2)(f), the undertaker must not reduce water depth by more than 5% Chart Datum unless agreed with the MMO and the MCA in writing.

(4) An operations and maintenance plan in accordance with the outline offshore operations and maintenance plan shall be submitted to the MMO for approval in consultation with the relevant SNCB at least six months prior to the commencement of operations. All operation and maintenance activities must be carried out in accordance with the approved plan.

Vessels under the undertaker's control

13.—(1) The undertaker must issue to operators of vessels under its control operating within the Order limits a code of conduct to prevent collision risk or injury to marine mammals which must be in accordance with the outline project environmental management plan.

(2) The undertaker must ensure appropriate co-ordination of vessels within its control operating within the Order limits so as to reduce collision risk to other vessels including advisory safe passing distances for vessels.

Extension of time periods

14. Any time period given in this licence given to either the undertaker or the MMO may be extended with the agreement of the other party in writing such agreement not to be unreasonably withheld or delayed.

Notifications and inspections

15.—(1) The undertaker must ensure that a copy of this marine licence (issued as part of the grant of the Order) and any subsequent amendments or revisions to it is provided to—

- (a) all agents and contractors notified to the MMO in accordance with condition 24; and
- (b) the masters and offshore operations managers responsible for the vessels notified to the MMO in accordance with condition 24.

(2) Only those persons and vessels notified to the MMO in accordance with condition 24 are permitted to carry out the licensed activities.

(3) The documents referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at the following locations—

- (a) the undertaker's registered address;
- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and
- (c) on board each vessel and at the office of any offshore operations managers with responsibility for vessels from which authorised deposits or removals are to be made.

(4) The undertaker must ensure that a copy of this marine licence and any subsequent revisions or amendments has been read and understood by the masters of any vessel being used to carry on

any licensed activity set out in condition 24(3), and that a copy of this marine licence is held on board any such vessel.

(5) The undertaker must provide access, and if necessary appropriate transportation, to the offshore construction site or any other associated works or vessels to facilitate any inspection that the MMO considers necessary to inspect the works during construction and operation of the authorised development.

(6) The undertaker must inform the MMO Local Office in writing at least 14 days prior to the commencement of the licensed activities or any part of them and within 14 days of the completion of each licensed activity.

(7) The undertaker must inform the Kingfisher Information Service, by email to kingfisher@seafish.co.uk, of details regarding the vessel routes, timings and locations relating to the construction of the authorised development or relevant stage—

- (a) at least fourteen days prior to the commencement of offshore activities, for inclusion in the Kingfisher bulletin and offshore hazard awareness data; and
- (b) as soon as reasonably practicable, and in any event no later than 24 hours after completion of construction of all offshore activities, confirmation of notification must be provided to the MMO in writing within five days.

(8) The undertaker must ensure that a local notification to mariners is issued at least 14 days prior to the commencement of the authorised development or any relevant stage advising of the start date of Work No. 1 and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, MCA and UK Hydrographic Office within five days of issue.

(9) The undertaker must ensure that local notifications to mariners are updated and reissued at weekly intervals during construction activities and at least five days before any planned operations and maintenance works and the notices must be supplemented with VHF radio broadcasts agreed with the MCA in accordance with the project environmental management plan approved under condition 21(1)(d) and the monitoring plan approved under condition 21(1)(f). Copies of all local notifications must be provided to the MMO and UK Hydrographic Office within five days of issue, save for in the case of a notice relating to operations and maintenance, which must be provided within 24 hours of issue.

(10) The undertaker must notify the UK Hydrographic Office of the commencement (within 14 days), progress and completion of construction (within 14 days) of the licensed activities in order that all necessary amendments to nautical and aeronautical charts are made and the undertaker must send a copy of such notifications to the MMO and MCA within five days of the notification.

(11) In case of damage to, or destruction or decay of, the authorised development seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker must as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify the MMO, the MMO Local Office, the MCA, Trinity House, the Kingfisher Information Service and the UK Hydrographic Office.

(12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners and inform the Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO, the MCA, Trinity House and the UK Hydrographic Office within five days of notifying mariners.

(13) The undertaker must notify the MMO in writing a minimum of 14 days in advance of the commencement of each discrete incident of cable repair, replacement, or protection replenishment activity. Such a notification must include proposed timings and a description of proposed methodologies.

(14) The undertaker must ensure that the MMO, the MMO Local Office, local mariners, local fishermen's organisations and the Source Data Receipt Team at the UK Hydrographic Office, Taunton, Somerset, TA1 2DN (sdr@ukho.gov.uk) are notified within 14 days of completion of each instance of cable repair, replacement or protection replenishment activity.

(15) Should the undertaker become aware that any of the information on which the granting of this licence was based was materially false or misleading, the undertaker must notify the MMO local office of this fact in writing as soon as is reasonably practicable. The undertaker must explain in writing what information was materially false or misleading and must provide to the MMO the correct information.

Aids to navigation

16.—(1) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised development seaward of MHWS exhibit such lights, marks, sounds, signals and other aids to navigation, and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must during the period from the start of construction of the authorised development to completion of decommissioning of the authorised development seaward of MHWS keep Trinity House and the MMO informed in writing of progress of the authorised development seaward of MHWS including the following—

- (a) notice of commencement of construction of the authorised development within 24 hours of commencement having occurred;
- (b) notice within 24 hours of any aids to navigation being established by the undertaker; and
- (c) notice within five days of completion of construction of the authorised development.

(3) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan agreed pursuant to condition 21(1)(i) using the reporting system provided by Trinity House.

(4) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised development seaward of MHWS notify Trinity House and the MMO in writing of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.

(5) In the event that the provisions of condition 15(11) are invoked, the undertaker must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

(6) Any jack up barges or vessels utilised during the licensed activities, when jacked up, must exhibit signals in accordance with the UK Standard Marking Schedule for Offshore Installations.

Colouring of structures

17.—(1) Except as otherwise required by Trinity House, the undertaker must colour all structures yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House.

(2) Subject to sub-paragraph (1) above, unless the MMO otherwise directs, the undertaker must ensure that the wind turbine generators are painted light grey (colour code RAL 7035).

Aviation safety

18.—(1) The undertaker must exhibit such lights, with such shape, colour and character as are required in writing by The Air Navigation Order 2016^(a) and determined necessary for aviation safety in consultation with the Defence Infrastructure Organisation Safeguarding and as directed by the Civil Aviation Authority. Lighting installed specifically to meet Ministry of Defence aviation safety requirements must remain operational for the life of the authorised development unless otherwise agreed in writing with the Ministry of Defence.

(a) S.I. 2016/765.

(2) The undertaker must notify the Defence Infrastructure Organisation Safeguarding, the Civil Aviation Authority and the MMO, at least 14 days prior to the commencement of the licensed activities, in writing of the following information—

- (a) the date of the commencement of the licensed activities;
- (b) the date any wind turbine generators are to be installed;
- (c) the maximum height of any construction equipment or vessels to be used;
- (d) the maximum heights of any wind turbine generator and offshore platform to be constructed (including any antennae);
- (e) the latitude and longitude of each wind turbine generator and offshore platform to be constructed,

and the Defence Infrastructure Organisation Safeguarding and the Civil Aviation Authority must be notified of any changes to the information supplied under this paragraph of this condition and of the completion of the construction of the authorised development. Copies of notifications must be provided to the MMO.

Chemicals, drilling and debris

19.—(1) The undertaker must ensure that any coatings and/or treatments are suitable for use in the marine environment and are used in accordance with relevant guidelines approved by Health and Safety Executive.

(2) The storage, handling, transport and use of fuels, lubricants, chemicals and other substances must be undertaken so as to prevent releases into the marine environment, including bunding of 110% of the total volume of all reservoirs and containers.

(3) The undertaker must inform the MMO of the location and quantities of material disposed of each month under the Order, by submission of a disposal return by 15 February each year for the months August to January inclusive, and by 15 August each year for the months February to July inclusive.

(4) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation or seabed preparation for foundations, vessels or cables, or cable installation, and drilling mud is disposed of within the Order limits seaward of MHWS.

(5) The undertaker must ensure that any rock material used in the construction of the authorised development is from a recognised source, free from contaminants and containing minimal fines.

(6) In the event that any rock material used in the construction of the authorised development is misplaced or lost below MHWS, the undertaker must report the loss to the MMO Local Office in writing within 48 hours of becoming aware of it and if the MMO, in consultation with the MCA and Trinity House, reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker must endeavour to locate the material and recover it at its own expense.

(7) The undertaker must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment. Concrete and cement mixing and washing areas should be contained to prevent run off entering the marine environment through the freeing ports.

(8) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported in writing to the MMO, Marine Pollution Response Team in accordance with the marine pollution contingency plan agreed under condition 21(1)(d)(i).

(9) Regarding incidents of dropped objects—

- (a) Debris or dropped objects within the Order limits which are considered a danger or hazard to navigation must be reported as soon as reasonably practicable but no later than six hours from the undertaker becoming aware of an incident, to the relevant HM Coastguard Maritime Rescue Co-ordination Centre by telephone (Dover Maritime Rescue Coordination Centre: 0344 382 0593), and the UK Hydrographic Office email: navwarnings@btconnect.com.

- (b) All dropped objects, including those in (a), within the Order limits must be reported to the MMO using the dropped object procedure form (including any updated form as provided by the MMO) as soon as reasonably practicable and in any event within 24 hours of the undertaker becoming aware of an incident, unless otherwise agree in writing with the MMO.
- (c) On receipt of notification or the dropped object procedure form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the marine environment at the undertaker's expense if reasonable to do so.

Force majeure

20.—(1) If, due to stress of weather or any other cause, the master of a vessel determines that it is necessary to deposit the authorised deposits within or outside of the Order limits because the safety of human life and/or of the vessel is threatened (an “unauthorised deposit”), full details of the circumstances of the deposit must be notified to the MMO in the manner provided in condition 19(9) within 48 hours of the deposit.

(2) Any unauthorised deposit must be removed at the expense of the undertaker unless written approval is obtained from the MMO.

Pre-construction plans and documentation

21.—(1) The licensed activities for each stage of construction of the authorised development must not commence until the following (insofar as relevant to that activity or stage of activity) has been submitted to and approved in writing by the MMO, in consultation with, where relevant, Trinity House, the MCA, UK Hydrographic Office and relevant SNCB—

- (a) a design plan, at a scale of between 1:25,000 and 1:50,000, or in such other format as may be appropriate, including detailed representation on the most suitably scaled chart, to ensure conformity with the description of Work No. 1 and compliance with conditions 10, 11 and 12, which shows for the relevant stage—
 - (i) the proposed location, including grid co-ordinates of the centre point of the proposed location for each wind turbine generator, subject to any micro-siting required due to anthropological constraints, environmental constraints or difficult ground conditions discovered post approval under this condition and choice of foundation types for all wind turbine generators;
 - (ii) the number, specifications and dimensions of the wind turbine generators to be installed;
 - (iii) the length and arrangement of cables comprising Work No. 1(b);
 - (iv) the type and dimensions of all foundations; and
 - (v) any exclusion zones or micro-siting requirements identified in any mitigation plan pursuant to sub-paragraph (2)(d) or relating to any habitats of principal importance identified as part of surveys undertaken in accordance with condition 25;
- (b) a construction programme for the relevant stage, unless otherwise agreed in writing with the MMO, to include details of—
 - (i) the proposed construction start date;
 - (ii) proposed timings for mobilisation of plant delivery of materials and installation works; and
 - (iii) an indicative written construction programme for all wind turbine generators and cable circuits comprised in Work No. 1 and the works in paragraph 2 (insofar as not shown in sub-paragraph (ii) above);
- (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details for the relevant stage of—

- (i) foundation installation methodology, including drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation and cable installation works and cable installation works, and having regard to any mitigation scheme pursuant to paragraph (g);
 - (ii) contractors; and
 - (iii) associated ancillary works;
- (d) a project environmental management plan covering the period of construction for the relevant stage to include details of—
 - (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with and report any spills and collision incidents of the authorised development in relation to all activities carried out;
 - (ii) a chemical risk register for all chemicals that have a pathway to the marine environment and may be used for the licensed activities (with the exception of any chemicals used in the course of normal navigation), submitted to the MMO for approval at least ten weeks prior to the use of such chemicals, to include details of—
 - (aa) the function of the chemicals;
 - (bb) the quantities being used and the frequency of use; and
 - (cc) the physical, chemical and ecotoxicological properties of the chemical (save for any chemicals present on the OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment (PLONOR));
 - (iii) a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised; and
 - (iv) waste management and disposal arrangements.
- (e) a scour protection plan for the relevant stage providing details of the need, type, sources, quantity and installation methods for scour protection, which must be updated and resubmitted in writing for approval if changes to it are proposed following cable laying operations;
- (f) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring (which shall include all benthic, ornithological and marine mammal monitoring) and related reporting in accordance with conditions 25, 26 and 27;
- (g) in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol for that stage, in accordance with the draft marine mammal mitigation protocol, the intention of which is to prevent injury to marine mammals, including details of soft start procedures with specified duration periods following current best practice as advised by the relevant SNCB;
- (h) a cable specification and installation plan for the relevant stage, to include—
 - (i) technical specification of offshore cables (including fibre optic cable) below MHWS within that stage, including a desk-based assessment of attenuation of electromagnetic field strengths, shielding and cable burial depth in accordance with good industry practice;
 - (ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to Chart Datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection;
 - (iii) proposals for the volume and areas of cable protection to be used for each cable crossing, and proposals for timing and methodology for reporting on actual volumes and areas post construction; and

- (iv) proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised development which includes a risk-based approach to the management of unburied or shallow buried cables;
 - (i) an aids to navigation management plan to be agreed in writing by the MMO following consultation with Trinity House, the MCA and the CAA to include details of how the undertaker will comply with the provisions of condition 16 relating to that stage for the lifetime of the authorised development;
 - (j) an offshore monitoring plan for the relevant stage which accords with the principles set out in the outline offshore in-principle monitoring plan;
 - (k) a fisheries liaison and co-existence plan for the relevant stage which accords with the principles set out in the outline fisheries liaison and co-existence plan;
 - (l) a vessel traffic monitoring plan for the relevant stage which accords with the principles set out in the outline vessel traffic monitoring plan;
 - (m) in the event that driven or part-driven pile foundations are proposed to be used a site integrity plan for the southern north sea special area of conservation which accords with the principles set out in the outline site integrity plan for the southern north sea special area of conservation; and
 - (n) a sediment disposal management plan for the relevant stage which accords with the principles set out in the outline sediment disposal management plan.
- (2) Subject to sub-paragraph (3), the licensed activities or any relevant stage of those activities must not commence unless, no later than six months prior to the commencement, a marine written scheme of archaeological investigation for the stage in construction has been submitted to and approved by the MMO in writing, in accordance with the outline offshore written scheme of investigation, and in accordance with industry good practice, in consultation with the statutory historic body to include—
- (a) details of responsibilities of the undertaker, archaeological consultant and contractor;
 - (b) a method statement for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
 - (c) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within six months of any survey being completed;
 - (d) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones prior to construction;
 - (e) monitoring of archaeological exclusion zones during and post construction, including provision of a report on such monitoring;
 - (f) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS ('online access to the index of archaeological investigations') form with a digital copy of the report within six months of completion of construction of the authorised development, and to notify the MMO that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;
 - (g) a reporting and recording protocol, designed in reference to the Offshore Renewables Protocol for Reporting Archaeological Discoveries as set out by the Crown Estate and reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised development; and
 - (h) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.
- (3) Pre-construction archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a method statement produced under the written scheme of investigation specific to the relevant pre-construction

activities (which must accord with the details set out in the outline offshore written scheme of investigation) which has been submitted to and approved by the MMO in consultation with the statutory historic body.

(4) In the event that driven or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive monopile foundations must not exceed 6,000kJ and the hammer energy used to drive or part-drive pin pile foundations must not exceed 3,000kJ.

(5) No main installation vessels may undertake pile driving at more than two pile locations at any one time for the licenced activities. There will only be a maximum installation of three monopiles foundations or six pin piles within a 24-hour period.

(6) The undertaker must, before submitting any pre-construction plans and documentation required under this condition, provide a copy of the plans and documentation to any person to whom part of the benefit of the Order applying seaward of MHWS has been transferred or leased pursuant to article 5 (benefit of the order) of the Order.

(7) A person receiving the plans and documents under sub-paragraph (6) must provide any comments on the plans and documentation to the undertaker within 14 days of receipt.

(8) The undertaker must participate in liaison meetings as requested from time to time by the MMO in writing in advance and must consider such matters as are determined by the MMO relating to the efficient operation of a deemed marine licence issued under this Order (including as varied or transferred).

22.—(1) Except where otherwise stated or agreed in writing with the MMO, each programme, statement, plan, protocol or scheme required to be approved under condition 21 (save for that required under condition 21(1)(f)) must be submitted for approval at least six months prior to the intended commencement of the relevant stage of the licensed activities.

(2) The pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting required under conditions 21(1)(f), must be submitted in accordance with the following, unless otherwise agreed in writing with the MMO—

- (a) at least six months prior to the first survey of the relevant stage, detail of any pre-construction surveys and an outline of all proposed monitoring;
- (b) at least six months prior to construction, detail on construction monitoring; and
- (c) at least six months prior to commissioning, detail of postconstruction (and operational) monitoring.

(3) The MMO must determine an application for approval made under condition 21 within a period of six months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker such agreement not to be unreasonably withheld or delayed.

(4) The licensed activities must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 21, unless otherwise agreed in writing by the MMO.

(5) The plans, protocols, statements, schemes and details submitted under condition 21 must ensure that any residual effects fall within the scope of those predicted in the environmental statement.

Offshore safety management

23. No stage of the authorised development may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and adequately addressed all MCA recommendations as appropriate to the authorised development contained within MGN654.

Reporting of engaged agents, contractors and vessels

24.—(1) The undertaker must provide the following information to the MMO—

- (a) the name, company number, address and function of any agent, contractor or subcontractor appointed to engage in the licensed activities not less than ten working days prior to such agent or contractor commencing any licensed activity; and
 - (b) each week during the construction of the authorised development a list of the vessels currently and to be used in relation to the licensed activities, including the master's name, vessel type, vessel IMO number and vessel owner or operating company.
- (2) Any changes to the supplied details must be notified to the MMO in writing, as far as practicable, prior to the agent, contractor or vessel engaging in the licensed activities.
- (3) The undertaker must notify the MMO in writing not less than 24 hours prior to the commencement of major component exchanges, ladder replacements or cable related works of—
- (a) any agents, contractors or subcontractors that will carry out such works; and
 - (b) any vessel proposed to be used for such works, including the master's name, vessel type, vessel IMO number and vessel owner or operating company.

Pre-construction monitoring and surveys

25.—(1) The undertaker must in discharging condition 21(1)(f) for construction submit a monitoring plan in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB, which must contain details of proposed surveys, including methodologies and timings, and a proposed format and content for a pre-construction baseline report and—

- (a) the survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the post-construction position or will enable the validation or otherwise of key predictions in the environmental statement; and
 - (b) the baseline report proposals must ensure that the outcome of the agreed surveys together with existing data and reports are drawn together to present a valid statement of the preconstruction position, with any limitations, and must make clear what postconstruction comparison is intended and the justification for this being required.
- (2) Subject to receipt from the undertaker of specific proposals pursuant to this condition, the pre-construction survey proposals must comprise, in outline—
- (a) a full sea floor coverage swath–bathymetry survey of the Order limits and a buffer outside, that meets the requirements of IHO S44ed5 Order 1a, to—
 - (i) determine the location, extent and composition of any biogenic or geogenic reef features, as set out within the outline offshore in-principle monitoring plan;
 - (ii) inform future navigation risk assessments as part of the cable specification and installation plan; and
 - (iii) inform the identification of any archaeological exclusion zone and post consent monitoring of any such archaeological exclusion zone;
 - (b) a bathymetric survey that meets the requirements of IHO S44ed5 Order 1a of the area within the Order limits within which it is proposed to carry out construction works.
- (3) The pre-construction survey(s) carried out pursuant to sub-paragraphs (2)(a)(i) and (2)(b) must fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developer' (as relevant).
- (4) The undertaker must carry out the surveys specified within the approved monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant SNCB.
- (5) Following completion of a survey carried out pursuant to this condition and prior to construction of the relevant stage, the undertaker must provide a report and full density data of the survey outcomes to the MMO, the relevant SNCB, the MCA and UK Hydrographic Office as relevant.

Construction monitoring

26.—(1) The undertaker must, in discharging condition 21(1)(f) in respect of construction monitoring, submit a construction monitoring plan or plans for that stage in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB, which must include details of any proposed construction monitoring, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify the objectives for each survey and explain how the survey will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) If the plan or plans submitted to the MMO under this condition contain survey proposals, the construction monitoring plan must include, in outline—

- (a) vessel traffic monitoring by automatic identification system for the duration of the construction period, with provision for a report to be submitted to the MMO, Trinity House, and the MCA annually during the construction period for the authorised development; and
- (b) where piled foundations are to be employed, unless otherwise agreed by the MMO in writing, details of proposed monitoring of the noise generated by the installation of the first four piled foundations of each piled foundation type to be constructed collectively under this licence and the deemed marine licences granted under Schedules 9 and 10 of the Order.

(3) If, in the reasonable opinion of the MMO in consultation with the SNCB the monitoring carried out pursuant to condition 26(2)(b) above shows impacts significantly in excess to those assessed in the environmental statement and there has been a failure of the mitigations set out in the marine mammal mitigation protocol, all piling activity must cease until either contingency measures approved within the marine management mitigation protocol have been implemented or an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

(4) The undertaker must carry out the surveys specified within the approved construction monitoring plan or plans in accordance with that plan or plans, and provide the approved reports in the format and to timings approved pursuant to sub-paragraph 27(1), unless otherwise agreed in writing by the MMO in consultation with the relevant SNCB.

Post-construction monitoring

27.—(1) The undertaker must, in discharging condition 21(1)(f) in respect of post-construction monitoring, submit a post-construction monitoring plan or plans for that stage in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB including details of proposed post-construction surveys, including methodologies (including appropriate buffers, where relevant) and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify the objectives for each survey and explain how the survey will assist in either informing a useful and valid comparison with the preconstruction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) If the plan or plans submitted to the MMO under this condition contain survey proposals, the post-construction survey plan or plans must include, in outline—

- (a) details of a survey to determine any change in the location, extent and composition of any biogenic or geogenic reef feature identified in the pre-construction survey in the parts of the offshore Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;

- (b) a bathymetric survey to monitor the effectiveness of archaeological exclusion zones. The data will be analysed by an accredited archaeologist as defined in the marine written scheme of archaeological investigation required under condition 21(2);
- (c) any ornithological monitoring required by the ornithological monitoring plans submitted in accordance with condition 21(1)(j); and
- (d) vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of the authorised development, unless otherwise agreed in writing by the MMO, with provision for a report to be submitted annually to the MMO, Trinity House, and the MCA.

(3) The undertaker must carry out the surveys specified within the approved post-construction monitoring plan or plans in accordance with that plan or plans and provide the agreed reports in the agreed format, unless otherwise agreed in writing with the MMO in consultation with the relevant SNCB.

(4) Within 12 weeks of completion of any cable repair or replacement works, the undertaker must undertake a post installation survey along the section of cable that has undergone repair or replacement to demonstrate the successful burial of the cable and submit a report to the MMO in writing on its findings.

Timing of monitoring report

28. Any monitoring report compiled in accordance with the monitoring plans provided under conditions 25, 26 and 27 must be provided to the relevant body no later than four months following receipt by the undertaker of the results of monitoring to which it relates, unless otherwise agreed with the relevant body in writing.

Reporting of impact pile driving

29.—(1) In the event that driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the marine noise registry—

- (a) no less than six months prior to the commencement of each stage of construction of the licensed activities, information on the expected location, start and end dates of impact pile driving to satisfy the marine noise registry's Forward Look requirements;
- (b) within two weeks after commencement of each stage of construction of the licensed activities, information on the location, start and end dates of impact pile driving to satisfy the Marine Noise Registry's Forward Look requirements;
- (c) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the marine noise registry's Close Out requirements by 7 April for winter season October – March inclusive and 7 October for summer season April – September inclusive; or within 12 weeks of completion of impact pile driving, whichever is earlier.

(2) The undertaker must notify the MMO in writing of the successful submission of Forward Look or Close Out data pursuant to sub-paragraph (1) above within 7 days of the submission.

(3) In this condition, “Forward Look” and “Close Out” mean the requirements as set out in the UK Marine Noise Registry Information Document Version 1 (July 2015) as amended, updated or superseded from time to time.

Maintenance reporting

30.—(1) An annual maintenance report must be submitted to the MMO in writing within one month following the first anniversary of the date of commencement of operations, and every year thereafter until the permanent cessation of operations.

(2) The report must provide a record of the licensed activities as set out in condition 12 during the preceding year, the timing of activities and methodologies used.

(3) Every fifth year, the undertaker must submit to the MMO in writing, within one month of that date, a consolidated maintenance report, which will—

- (a) include a review of licensed activities undertaken during the preceding five years with reference to the reports submitted in accordance with sub-paragraph (1) of this condition;
- (b) reconfirm the applicability of the methodologies and frequencies of the licensable activities permitted by this licence for the remaining duration of this licence.

Stages of construction

31.—(1) The licenced activities must not be commenced until a written scheme setting out the stages of construction of the authorised development seaward of MHWS has been submitted to and approved by the MMO in writing.

(2) The scheme must be implemented as approved.

(3) The written scheme referred to in sub-paragraph (1) must be submitted to the MMO in writing four months prior to the planned commencement of the licenced activities.

Completion of construction

32.—(1) The undertaker must submit a close out report in writing to the MMO and the relevant SNCB within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details—

- (a) the final number of installed wind turbine generators; and
- (b) the installed wind turbine generator parameters relevant for ornithological collision risk modelling.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

33. The undertaker must submit a close out report to the MCA, Trinity House and the UK Hydrographic Office within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following—

- (a) the final number of installed wind turbine generators;
- (b) a plan of the layout of installed wind turbine generators; and
- (c) latitude and longitude coordinates of the centre point of the location of each wind turbine generator, provided as Geographical Information System data referenced to WGS84 datum.

Deployment of cable protection

34. Any cable protection authorised under this licence must be deployed within 10 years from the date the Order comes into force unless otherwise agreed by the MMO in writing.

SCHEDULE 9

Article 36

DEEMED MARINE LICENCE UNDER THE 2009 ACT – TRANSMISSION ASSETS

PART 1

LICENSED MARINE ACTIVITIES

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004(a);

“the 2008 Act” means the Planning Act 2008(b);

“the 2009 Act” means the Marine and Coastal Access Act 2009(c);

“the 2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017(d);

“aids to navigation management plan” means the aids to navigation management plan to be submitted to the MMO under condition 22(1)(i) of this licence;

“Areas of Interest” means any part of those areas shown shaded orange, pink, green or blue on the Deep Water Route Cable Installation Area (Future Dredging Depths) Plan;

“authorised deposits” means the substances and articles specified in paragraph 4 of this licence;

“authorised development” means Work Nos. 2, 3, 4A and 4B as described in paragraph 3 of this licence or any stage of that work;

“buoy” means any floating device used for navigational purposes or measurement purposes, including LIDAR buoys, wave buoys and guard buoys;

“cable circuits” means a number of electrical conductors necessary to transmit electricity between two points, comprising one or more conductors which may be bundled as one cable or take the form of separate cables, and in either case the circuit may include one or more auxiliary cables for the purpose of control, monitoring, protection or general communication;

“cable crossings” means a crossing of existing cables, pipelines or other existing infrastructure by cable circuits authorised by this Order together with cable protection;

“cable protection” means physical measures for the protection of cables including but not limited to concrete mattresses, split pipe system, and/or rock placement (including material used for cable crossings);

“cable protection replenishment” means the restoration to a former level or condition of cable protection lost by natural seabed processes or human activity;

“Chart Datum” means the level below which the tide will not normally fall at a given location, usually the lowest astronomical tide;

“chemical” means a chemical element and will include both substances and preparations;

“commence” means the first carrying out of any licensed marine activities authorised by this marine licence, save for any operations consisting of pre-construction surveys and monitoring approved under this marine licence and the activities set out in paragraph 2(e), and

“commenced” and “commencement” must be construed accordingly;

-
- (a) 2004 c. 20.
(b) 2008 c. 29.
(c) 2009 c. 23.
(d) S.I. 2017/13.

“commissioning” means the process of assuring that all systems and components of the authorised development are tested to verify that they function and are operable in accordance with the specifications and operational requirements of the undertaker;

“condition” means a condition in Part 2 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation – Safeguarding, St George’s House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire, WS14 9PY and any successor body to its functions;

“Defra” means the Department for Environment, Food and Rural Affairs;

“Deep Water Route Cable Installation Area (Future Dredging Depths) Plan” means the document certified as such by the Secretary of State under article 41 (certification of plans, etc.) for the purposes of this Order;

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“dropped object procedure form” means the MMO notification proforma with reference MLDIR1 for reporting the loss or dumping of synthetic materials and other refuse at sea or any other format advised in writing by the MMO;

“enforcement officer” means a person authorised to carry out enforcement duties under Chapter 3 Part 4 (marine licensing) of the 2009 Act;

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.);

“habitats of principal importance” means a habitat designated as being of principal importance in accordance with section 41 (biodiversity lists and action (England)) of the Natural Environment and Rural Communities Act 2006(a);

“HHA” means the Harwich Haven Authority;

“IHO S44ed5 Order 1a” means order 1a from the fifth edition of the International Hydrographic Organisation’s Standards for Hydrographic Surveys as updated or amended from time to time;

“jacket foundation” means a lattice type structure constructed of steel and additional equipment such as, J-tubes, corrosion protection systems and access platforms attached to the seabed at 3 or more points with pin piles or suction buckets;

“JNCC” means the Joint Nature Conservation Committee;

“Kingfisher bulletin” means the bulletin published by the Humber Seafood Institute or such other alternative publication approved in writing by the MMO for the purposes of this licence;

“Kingfisher Information Service” means the information service from non-departmental government body Seafish;

“licensed activities” means the activities specified in Part 1 of this licence;

“LGPL” means London Gateway Port Limited (company number 04341592) as harbour authority for the London Gateway Port, pursuant to the London Gateway Port Harbour Empowerment Order 2008(b);

“local harbour authorities” means the PLA, HHA, and LGPL;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including replenishment of cable protection) to the extent assessed in the environmental statement, and “maintenance” must be construed accordingly;

(a) 2006 c. 16.
(b) S.I. 2008/1261.

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH who is the body created under the 2009 Act and who is responsible for the monitoring and enforcement of this licence;

“marine noise registry” means the database developed and maintained by JNCC on behalf of Defra to record the spatial and temporal distribution of impulsive noise generating activities in UK seas;

“MCA” means the Maritime and Coastguard Agency;

“MGN654” means “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes, as may be updated or amended from time to time;

“MHWS” or “mean high water springs” means the average throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide is at its greatest (Spring tides);

“monopile foundation” means a steel pile, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“offshore converter platform” means a structure, authorised by the deemed marine licence in Schedule 10 to the Order, above MHWS and attached to the seabed by means of a foundation, with equipment to convert three-phase HVAC power generated by the wind turbine generations into HVDC power;

“the offshore order limits and boundary co-ordinates plan” means the plan certified as the offshore order limits and boundary co-ordinates plan by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.);

“offshore platform” means the offshore substation platform(s) authorised by this licence and/or the offshore converter platform;

“Offshore Renewables Protocol for Reporting Archaeological Discoveries” means the Offshore Renewables Protocol for Reporting Archaeological Discoveries, the Crown Estate (2014), Protocol for Archaeological Discoveries: Offshore Renewables Projects, Salisbury, Wessex Archaeology as amended, updated or superseded from time to time;

“offshore substation platform” means a structure above MHWS and attached to the seabed by means of a foundation, with one or more decks, whether open or fully clad, accommodating electrical power transformers, switchgear, instrumentation, protection and control systems, and other associated equipment and facilities to enable the transmission of electronic communications and for electricity to be collected at, and exported from, the platform;

“operation” means the undertaking of the licensed activities which are not part of the construction, commissioning or decommissioning of the authorised development;

“Order” means the North Falls Offshore Wind Farm Order 202[];

“the Order limits” means the limits shown on the works plans (offshore) within which the authorised development may be carried out, the grid coordinates for the area seaward of MHWS are set out in paragraph 5 of Part 1 of this licence;

“outline cable specification and installation plan” means the document certified as the outline cable specification and installation plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline navigation and installation plan” means the document certified as the outline navigation and installation plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore in-principle monitoring plan” means the document certified as the outline offshore in-principle monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore operations and maintenance plan” means the document certified as the outline offshore operations and maintenance plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore written scheme of investigation” means the document certified as the outline offshore written scheme of investigation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline project environmental management plan” means the document certified as the outline project environmental management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline sediment disposal management plan” means the document certified as the outline sediment disposal management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline site integrity plan for the southern north sea special area of conservation” means the document certified as the outline site integrity plan for the southern north sea special area of conservation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline vessel traffic monitoring plan” means the document certified as the outline vessel traffic monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“pathway to the marine environment” means open systems or closed systems that require top up;

“pin piled jacket” means a jacket attached to the seabed using pin piles;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“platform interconnector cable” means one or more electricity cables connecting offshore platforms to each other;

“PLA” means the Port of London Authority;

“preparation” means a mixture or solution composed of two or more substances;

“scour protection” means measures to prevent loss of seabed sediment around any structure placed in or on the seabed by use of protective aprons, mattresses, or rock and gravel placement;

“SNCB” means the statutory nature conservation body being the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017^(a) or its equivalent in the 2017 Regulations;

“statutory historic body” means Historic England or its successor in function;

“substance” means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition;

“suction caisson (or bucket)” means a steel cylindrical structure attached to the legs of a jacket foundation which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential;

“suction caisson jacket” means a jacket attached to the seabed using suction caissons (typically one per leg)

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“UK Hydrographic Office” means the UK Hydrographic Office of Admiralty Way, Taunton, Somerset, TA1 2DN;

(a) S.I. 2017/1012.

“UK Standard Marking Schedule for Offshore Installations” means the Standard Marking Schedule for Offshore Installations published by the Department of Energy & Climate Change with reference DECC 04/11.

“undertaker” means, subject to article 5 (benefit of the Order), North Falls Offshore Wind Farm Limited (company number 12435947);

“vessel” means every description of vessel, however propelled or moved, and includes a non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

“working day” means a day which is not a weekend, bank holiday or public holiday in England; and

“works plans (offshore)” means the plan or plans certified as the works plans (offshore) by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.).

(2) A reference to any statute, order, regulation or similar instrument is construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(3) A reference in this licence to a work identified by the number of the work is to be construed as a reference to the work of that number given in paragraph 3 of this licence.

(4) Unless otherwise indicated—

(a) all times are taken to be Greenwich Mean Time;

(b) all co-ordinates are taken to be latitude and longitude degrees and minutes to two decimal places.

(5) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence are—

(a) Civil Aviation Authority

Aviation House

Beehive Ring Road

Crawley

West Sussex

RH6 0YR

(b) Historic England

East of England Regional Office

Brooklands

24 Brooklands Avenue

Cambridge

CB2 8BU

(c) Marine Management Organisation

Marine Licensing Team

Lancaster House Hampshire Court

Newcastle Business Park

Newcastle upon Tyne

NE4 7YH

Tel: 0300 123 1032;

(d) Marine Management Organisation (Local Office)

Pakefield Road

- Lowestoft
NR33 0HT
Tel: 0208 026 0654
- (e) Maritime and Coastguard Agency
UK Technical Services Navigation
Spring Place
105 Commercial Road
Southampton
SO15 1EG
Email: navigationsafety@mcga.gov.uk
- (f) Ministry of Defence (as represented by Defence Infrastructure Organisation – Safeguarding)
St George’s House
153
DIO Head Office
DMS Whittington
Lichfield
Staffordshire
WS14 9PY;
- (g) Natural England
Guildbourne House
Chatsworth Road
Worthing
BN11 1LD
Tel: 0300 060 4911;
- (h) Trinity House
Tower Hill
London
EC3N 4DH
Tel: 020 7481 6900;
- (i) The United Kingdom Hydrographic Office
Admiralty Way
Taunton
Somerset
TA1 2DN
Tel: 01823 337 900.
- (j) Port of London Authority
London River House
Royal Pier Road
Gravesend
7
Kent
DA12 2BG

Tel: 01474 562200

- (k) London Gateway Port Limited

[details to be provided]

- (l) Harwich Haven Authority

[details to be provided]

(6) Unless otherwise advised in writing by the MMO, the address for electronic communication with the MMO for the purposes of this licence is marine.consent@marinemangement.org.uk, or where contact to the Local Office if the MMO is required, harwich@marinemangement.org.uk.

(7) Unless otherwise advised in writing by the MMO, the Marine Case Management System ("MCMS") must be used for all licence returns or applications to vary this licence. The MCMS address is: <https://marinelicensing.marinemangement.org.uk/>.

Details of licensed marine activities

2. Subject to the licence conditions in Part 2, this licence authorises the undertaker (and any agent or contractor acting on its behalf) to carry out the following licensable marine activities under section 66(1) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea within the Order limits seaward of MHWS of the substances and articles specified in paragraph 4 below and in Work Nos. 2 to 4A of up to 5,139,984 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin produced during construction drilling or seabed preparation for foundation works and seabed preparation for cable installation, cable installation (whether by ploughing, jetting, trenching or a combination of installation techniques), and excavation of drilling pits for trenchless installation techniques;
- (b) the construction of works in or over the sea, and or on or under the seabed;
- (c) dredging for the purposes of seabed preparation for foundation works, preparation for construction vessels and/or electrical circuit works;
- (d) boulder clearance works by displacement ploughing or subsea grab technique or any other equivalent method;
- (e) the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation;
- (f) removal of static fishing equipment;
- (g) wet storage; and
- (h) site preparation works.

3. Such activities described in paragraph 2 are authorised in relation to the construction, maintenance and operation of—

Work No. 2— up to two offshore substation platforms each fixed to the seabed by one of the following foundation types: monopile, multi-leg pin pile jacket or multi-leg suction bucket jacket and a platform interconnector cable including one or more cable crossings.

Work No. 3— up to two cable circuits between Work No. 2 and Work No. 4A, including one or more cable crossings;

Work No. 4A—up to two cable circuits and associated ducting between Work No. 3 and Work No. 4B including up to three drilling exit pits for trenchless installation techniques, one or more cable crossings and a temporary work area for vessels to carry out anchoring and positioning.

Work No. 4B—landfall connection works comprising up to two cable circuits and associated ducting between Work No. 4A and Work No. 4C, including trenchless installation technique works.

In connection with such Works Nos. 2, 3 4A, and 4B and to the extent that they do not otherwise form part of any such work, further associated development within the meaning of section 115(2)

(development for which development consent may be granted) of the 2008 Act comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement and the provisions of this licence, including—

- (a) scour protection around the foundations of the offshore substation platforms;
- (b) cable protection measures such as the placement of rock and/or concrete mattresses;
- (c) the removal of material from the seabed required for the construction of Work Nos. 2, 3 and 4A;
- (d) temporary landing places, moorings or other means of accommodating or anchoring vessels in the construction and/or maintenance of the authorised development and buoys.

4. The substances or articles authorised for deposit at sea are—

- (a) iron and steel, copper and aluminium;
- (b) stone and rock;
- (c) concrete and grout;
- (d) sand and gravel;
- (e) plastic, synthetic and rubber;
- (f) material extracted from the seabed within the offshore Order limits during construction drilling or seabed preparation for foundation works, vessels, cable installation preparation works and cable installation works and excavation of drilling pits for trenchless installation techniques;
- (g) anchors and weights used for the calibration of vessels, consisting of a hessian sack, metal shackles or chains; and
- (h) marine coatings, other chemicals and timber.

5. The grid coordinates within which that part of the authorised development comprising Work Nos. 2, 3 and 4A must be located are specified below and more particularly on the offshore order limits and boundary co-ordinates plan—

(1) <i>Point ID</i>	(2) <i>Latitude (WGS84 (DDM))</i>	(3) <i>Longitude (WGS84 (DDM))</i>
1	51° 49.15653'N	01° 14.19781'E
2	51° 48.89411'N	01° 16.00324'E
3	51° 48.93931'N	01° 20.16189'E
4	51° 51.14871'N	01° 26.78016'E
5	51° 52.50692'N	01° 27.14152'E
6	51° 52.57065'N	01° 27.16916'E
7	51° 52.64883'N	01° 27.22273'E
8	51° 52.72182'N	01° 27.29646'E
9	51° 52.78924'N	01° 27.39211'E
10	51° 52.86734'N	01° 27.55868'E
11	51° 53.26911'N	01° 29.04967'E
12	51° 53.29595'N	01° 29.19064'E
13	51° 53.30653'N	01° 29.39203'E
14	51° 53.28761'N	01° 29.59449'E
15	51° 52.70790'N	01° 31.99872'E
16	51° 52.63952'N	01° 32.20092'E
17	51° 52.47783'N	01° 32.62017'E
18	51° 52.44756'N	01° 32.68431'E
19	51° 52.40237'N	01° 32.74776'E
20	51° 51.05315'N	01° 34.25159'E
21	51° 50.81073'N	01° 37.13538'E

22	51° 50.96701'N	01° 38.26250'E
23	51° 51.10934'N	01° 38.88062'E
24	51° 51.46878'N	01° 40.28054'E
25	51° 51.48276'N	01° 40.47097'E
26	51° 51.47070'N	01° 40.63503'E
27	51° 51.43842'N	01° 40.78925'E
28	51° 51.37801'N	01° 40.94765'E
29	51° 51.28360'N	01° 41.08521'E
30	51° 48.92805'N	01° 43.48196'E
31	51° 48.81263'N	01° 43.54037'E
32	51° 47.56548'N	01° 43.88635'E
33	51° 47.50920'N	01° 43.94405'E
34	51° 47.47326'N	01° 44.01182'E
35	51° 47.31551'N	01° 44.55852'E
36	51° 46.18399'N	01° 51.52207'E
36	51° 46.18399'N	01° 51.52207'E
37	51° 46.45215'N	01° 51.46739'E
38	51° 47.79417'N	01° 56.0602'E
39	51° 45.96006'N	01° 54.98406'E
40	51° 44.20008'N	01° 56.16270'E
41	51° 43.43466'N	01° 58.08954'E
42	51° 44.92260'N	02° 02.79174'E
43	51° 44.20590'N	02° 02.65992'E
44	51° 44.16756'N	02° 02.36766'E
45	51° 43.89822'N	02° 01.62702'E
46	51° 43.70418'N	02° 01.18500'E
47	51° 43.46172'N	02° 00.54066'E
48	51° 42.90816'N	01° 59.73738'E
49	51° 42.25464'N	01° 58.18482'E
50	51° 41.80842'N	01° 58.22082'E
51	51° 38.66118'N	01° 54.67986'E
52	51° 37.76189'N	01° 52.32853'E
53	51° 39.03140'N	01° 52.10085'E
54	51° 40.08359'N	01° 52.71647'E
55	51° 40.32461'N	01° 52.55921'E
56	51° 40.41888'N	01° 52.66356'E
57	51° 40.36970'N	01° 52.53295'E
58	51° 40.36967'N	01° 52.52982'E
59	51° 40.80925'N	01° 52.24298'E
60	51° 41.18441'N	01° 51.71421'E
61	51° 41.78502'N	01° 51.60623'E
62	51° 45.61162'N	01° 51.61163'E
62	51° 45.61162'N	01° 51.61163'E
63	51° 46.80531'N	01° 44.27081'E
64	51° 47.02029'N	01° 43.53214'E
65	51° 47.14620'N	01° 43.29432'E
66	51° 47.35775'N	01° 43.07473'E
67	51° 48.70770'N	01° 42.68329'E
68	51° 50.92504'N	01° 40.42289'E
69	51° 50.60854'N	01° 39.20429'E
70	51° 50.44922'N	01° 38.51020'E
71	51° 50.26732'N	01° 37.16414'E
72	51° 50.53831'N	01° 33.91006'E

73	51° 50.55473'N	01° 33.82809'E
74	51° 50.58713'N	01° 33.73900'E
75	51° 50.63161'N	01° 33.66473'E
76	51° 52.05000'N	01° 32.08189'E
77	51° 52.22165'N	01° 31.61943'E
78	51° 52.76395'N	01° 29.36475'E
79	51° 52.4014'N	01° 27.99607'E
80	51° 50.89889'N	01° 27.59335'E
81	51° 50.83063'N	01° 27.54393'E
82	51° 50.76639'N	01° 27.45303'E
83	51° 48.42854'N	01° 20.46655'E
84	51° 48.41280'N	01° 20.40213'E
85	51° 48.40234'N	01° 20.31730'E
86	51° 48.33800'N	01° 14.52722'E
87	51° 48.87115'N	01° 13.61544'E
88	51° 48.98239'N	01° 13.82661'E
89	51° 48.98187'N	01° 13.82982'E
90	51° 49.04064'N	01° 13.94325'E
91	51° 49.03475'N	01° 13.95772'E
92	51° 49.09068'N	01° 14.07320'E
93	51° 49.09716'N	01° 14.07885'E

General provisions

6. This marine licence remains in force until the authorised development has been decommissioned in accordance with a programme approved by the Secretary of State under section 106 (approval of decommissioning programmes) of the 2004 Act, including any modification to the programme under section 108 (reviews and revisions of decommissioning programmes) of the 2004 Act, and the completion of such programme has been confirmed by the Secretary of State in writing.

7. The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this marine licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 5 (benefit of the Order).

8. With respect to any condition which requires the licensed activities be carried out in accordance with the plans, protocols or statements approved under this licence, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved in writing by the MMO.

9. Any amendments to or variations from the approved details, plan or scheme must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of the MMO that it is unlikely to give rise to any materially new or materially greater environmental effects from those assessed in the environmental statement.

PART 2

CONDITIONS

Design parameters

10.—(1) The dimensions of any offshore substation platform forming part of the authorised development (including cranes and helideck) must not exceed—

- (a) 61.68 metres in height when measured from MHWS;

- (b) 60 metres in length; and
- (c) 2,400 m² topside area.

(2) Offshore substation platform foundation structures forming part of the authorised development must be one of either monopile foundation, multi-leg pin pile jacket foundation or multi-leg suction bucket jacket foundation.

(3) No offshore substation platform—

- (a) jacket foundation employing pin piles forming part of the authorised development may—
- (b) have a pin pile diameter of greater than 3.5 metres; and
- (c) employ more than 12 pin piles per jacket foundation; and
- (d) monopile foundation forming part of the authorised development may not have a diameter greater than 17 metres.

(4) Any part of the authorised development located within the following areas shown on the Deep Water Route Cable Installation Area (Future Dredging Depths) Plan, must be designed, installed, operated and maintained at a level which would not preclude or impede dredging:

- (a) of the area shown shaded in orange and labelled Sunk A – Sunk DW Buffer, to a level of 22 metres below Chart Datum;
- (b) of the area shown shaded in pink and labelled Trinity – Trinity DW Buffer, to a level of 22 metres below Chart Datum;
- (c) of the area shown shaded in green and labelled Sunk B – Sunk DW Buffer, to a level of 19 metres below Chart Datum; and
- (d) of the area shown shaded in blue and labelled Sunk Pilotage Area – Sunk Pilot Diamond Buffer, to a level of 22 metres below Chart Datum.

11.—(1) The total number of offshore platforms constructed under this licence and the licence granted under Schedule 10 to the Order must not exceed two.

(2) The total permanent seabed footprint area for offshore platform foundations must not exceed—

- (a) 5,890 square metres excluding scour protection; and
- (b) 166,715 square metres including scour protection.

(3) The total volume of scour protection material for the offshore platform foundations is 50,316 cubic metres.

(4) The total volume of drill arisings under this licence and the licence granted under Schedule 10 must not exceed 11,451 cubic metres.

12. The total length of the cable circuits in Work Nos. 2, 3 and 4A, and the area and volume of their cable protection (including cable crossings) must not exceed the following—

<i>(1)</i> <i>Work No.</i>	<i>(2)</i> <i>Parameter</i>	<i>(3)</i> <i>Value</i>
Work No. 2	Maximum total length	20 km
	Maximum protection area	24,000 m ²
	Maximum protection volume	14,000 m ³
Work Nos. 3 and 4A	Maximum total length	125.4 km
	Maximum protection area	75,240 m ²
	Maximum protection volume	43,890 m ³

Maintenance of the authorised development

13.—(1) The undertaker may at any time maintain the authorised development, except to the extent that this licence or an agreement made under this licence provide otherwise.

(2) Maintenance works include but are not limited to—

- (a) repair, maintenance, refurbishment and replacement of offshore electrical components;
- (b) painting and applying other coatings;
- (c) bird waste and marine growth removal;
- (d) cable remedial burial;
- (e) cable repairs and replacement;
- (f) cable protection replenishment;
- (g) access ladder and boat landing replacement;
- (h) replacement of offshore platform anodes; and
- (i) J-tube repair/replacement.

(3) In undertaking activities under sub-paragraphs (2)(a), (2)(d), (2)(e) and (2)(f), other than in the Areas of Interest where navigable depth may not be reduced to any extent, the undertaker must not reduce water depth by more than 5% Chart Datum unless agreed with the MMO and the MCA in writing.

(4) An operations and maintenance plan in accordance with the outline offshore operations and maintenance plan shall be submitted to the MMO for approval in consultation with the relevant SNCB, the MCA and (only to the extent that the plan relates to the Areas of Interest) the local harbour authorities at least six months prior to the commencement of operations. All operation and maintenance activities must be carried out in accordance with the approved operations and maintenance plan and the approved cable specification and installation plan.

Vessels under the undertaker's control

14.—(1) The undertaker must issue to operators of vessels under its control operating within the Order limits a code of conduct to prevent collision risk or injury to marine mammals which must be in accordance with the outline project environmental management plan.

(2) The undertaker must ensure appropriate co-ordination of vessels within its control operating within the Order limits so as to reduce collision risk to other vessels including advisory safe passing distances for vessels.

Extension of time periods

15. Any time period given in this licence given to either the undertaker or the MMO may be extended with the agreement of the other party in writing such agreement not to be unreasonably withheld or delayed.

Notifications and inspections

16.—(1) The undertaker must ensure that a copy of this marine licence (issued as part of the grant of the Order) and any subsequent amendments or revisions to it is provided to—

- (a) all agents and contractors notified to the MMO in accordance with condition 26; and
- (b) the masters and offshore operations managers responsible for the vessels notified to the MMO in accordance with condition 26;

(2) Only those persons and vessels notified to the MMO in accordance with condition 26 are permitted to carry out the licensed activities.

(3) The documents referred to in sub-paragraph (1)(a) must be available for inspection at the following locations—

- (a) the undertaker's registered address;
- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and

- (c) on board each vessel and at the office of any offshore operations managers with responsibility for vessels from which authorised deposits or removals are to be made.
- (4) The undertaker must ensure that a copy of this marine licence and any subsequent revisions or amendments has been read and understood by the masters of any vessel being used to carry on any licensed activity set out in condition 26(3), and that a copy of this marine licence is held on board any such vessel.
- (5) The undertaker must provide access, and if necessary appropriate transportation, to the offshore construction site or any other associated works or vessels to facilitate any inspection that the MMO considers necessary to inspect the works during construction and operation of the authorised development.
- (6) The undertaker must inform the MMO Local Office in writing at least 14 days prior to the commencement of the licensed activities or any part of them and within 14 days of the completion of each licensed activity.
- (7) The undertaker must inform the Kingfisher Information Service, by email to kingfisher@seafish.co.uk, of details regarding the vessel routes, timings and locations relating to the construction of the authorised development or relevant stage—
 - (a) at least fourteen days prior to the commencement of offshore activities, for inclusion in the Kingfisher bulletin and offshore hazard awareness data; and
 - (b) as soon as reasonably practicable, and in any event no later than 24 hours after completion of construction of all offshore activities, confirmation of notification must be provided to the MMO in writing within five days.
- (8) The undertaker must ensure that a local notification to mariners is issued at least 14 days prior to the commencement of the authorised development or any relevant stage advising of the start date of the relevant Work No. and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, MCA and UK Hydrographic Office within five days of issue.
- (9) The undertaker must ensure that local notifications to mariners are updated and reissued at weekly intervals during construction activities and at least five days before any planned operations and maintenance works and the notices must be supplemented with VHF radio broadcasts agreed with the MCA in accordance with the project environmental management plan approved under deemed marine licence condition 22(1)(d) and monitoring plan approved under condition 22(1)(f). Copies of all local notifications must be provided to the MMO and UK Hydrographic Office within five days of issue, save for in the case of a notice relating to operations and maintenance, which must be provided within 24 hours of issue.
- (10) The undertaker must notify the UK Hydrographic Office of the commencement (within 14 days), progress and completion of construction (within 14 days) of the licenced activities in order that all necessary amendments to nautical and aeronautical charts are made and the undertaker must send a copy of such notifications to the MMO and MCA within five days of the notification.
- (11) In case of damage to, or destruction or decay of, the authorised development seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker must as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify the MMO, the MMO Local Office, the MCA, Trinity House, the Kingfisher Information Service and the UK Hydrographic Office.
- (12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners and inform the Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO, the MCA, Trinity House and the UK Hydrographic Office within five days of notifying mariners.
- (13) The undertaker must notify the MMO in writing a minimum of 14 days in advance of the commencement of each discrete incident of cable repair, replacement, or protection replenishment activity. Such a notification must include proposed timings and a description of proposed methodologies.

(14) The undertaker must ensure that the MMO, the MMO Local Office, local mariners, local fishermen's organisations and the Source Data Receipt Team at the UK Hydrographic Office, Taunton, Somerset, TA1 2DN (sdr@ukho.gov.uk) are notified within 14 days of completion of each instance of cable repair, replacement or protection replenishment activity.

(15) Where any notice required by sub-paragraphs (8) to (14) above relates to any works or any part of the authorised development within the Areas of Interest, the undertaker must also send copies of any such notice to the local harbour authorities.

Aids to navigation

17.—(1) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised development seaward of MHWS exhibit such lights, marks, sounds, signals and other aids to navigation, and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must during the period from the start of construction of the authorised development to completion of decommissioning of the authorised development seaward of MHWS keep Trinity House, the MMO and (only to the extent such relates to the Areas of Interest) the local harbour authorities informed in writing of progress of the authorised development seaward of MHWS including the following—

- (a) notice of commencement of construction of the authorised development within 24 hours of commencement having occurred;
- (b) notice within 24 hours of any aids to navigation being established by the undertaker; and
- (c) notice within five days of completion of construction of the authorised development.

(3) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan agreed pursuant to condition 22(1)(i) using the reporting system provided by Trinity House.

(4) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised development seaward of MHWS notify Trinity House and the MMO in writing of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.

(5) In the event that the provisions of condition 16(12) are invoked, the undertaker must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

(6) Any jack up barges or vessels utilised during the licensed activities, when jacked up, must exhibit signals in accordance with the UK Standard Marking Schedule for Offshore Installations.

Colouring of structures

18. Except as otherwise required by Trinity House, the undertaker must colour all offshore substation platform structures yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House.

Aviation safety

19.—(1) The undertaker must exhibit such lights, with such shape, colour and character as are required in writing by The Air Navigation Order 2016(a) and determined necessary for aviation safety in consultation with the Defence Infrastructure Organisation Safeguarding and as directed by the Civil Aviation Authority. Lighting installed specifically to meet Ministry of Defence aviation safety requirements must remain operational for the life of the authorised development unless otherwise agreed in writing with the Ministry of Defence.

(a) S.I. 2016/765.

(2) The undertaker must notify the Defence Infrastructure Organisation Safeguarding, the Civil Aviation Authority and the MMO, at least 14 days prior to the commencement of the licensed activities, in writing of the following information—

- (a) the date of the commencement of the licensed activities;
- (b) the date any offshore substation platforms are to be installed;
- (c) the maximum height of any construction equipment or vessels to be used;
- (d) the maximum heights of offshore substation platforms to be constructed (including any antennae);
- (e) the latitude and longitude of each offshore substation platform to be constructed,

and the Defence Infrastructure Organisation Safeguarding and the Civil Aviation Authority must be notified of any changes to the information supplied under this paragraph of this condition and of the completion of the construction of the authorised development. Copies of notifications must be provided to the MMO.

Chemicals, drilling and debris

20.—(1) The undertaker must ensure that any coatings and/or treatments are suitable for use in the marine environment and are used in accordance with relevant guidelines approved by Health and Safety Executive.

(2) The storage, handling, transport and use of fuels, lubricants, chemicals and other substances must be undertaken so as to prevent releases into the marine environment, including bunding of 110% of the total volume of all reservoirs and containers.

(3) The undertaker must inform the MMO of the location and quantities of material disposed of each month under the Order, by submission of a disposal return by 15 February each year for the months August to January inclusive, and by 15 August each year for the months February to July inclusive.

(4) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation of or seabed preparation for foundations, vessels or cables or cable installation, and drilling mud is disposed of within the Order limits seaward of MHWS.

(5) The undertaker must ensure that any rock material used in the construction of the authorised development is from a recognised source, free from contaminants and containing minimal fines.

(6) In the event that any rock material used in the construction of the authorised development is misplaced or lost below MHWS, the undertaker must report the loss to the MMO Local Office in writing within 48 hours of becoming aware of it and if the MMO, in consultation with the MCA and Trinity House, reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker must endeavour to locate the material and recover it at its own expense.

(7) The undertaker must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment. Concrete and cement mixing and washing areas should be contained to prevent run off entering the marine environment through the freeing ports.

(8) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported in writing to the MMO, Marine Pollution Response Team in accordance with the marine pollution contingency plan agreed under condition 22(1)(d)(i).

(9) Regarding incidents of dropped objects—

- (a) Debris or dropped objects within the Order limits which are considered a danger or hazard to navigation must be reported as soon as reasonably practicable but no later than six hours from the undertaker becoming aware of an incident, to the relevant HM Coastguard Maritime Rescue Co-ordination Centre by telephone (Dover Maritime Rescue Coordination Centre: 0344 382 0593), and the UK Hydrographic Office email: navwarnings@btconnect.com.

- (b) All dropped objects, including those in (a), within the Order limits must be reported to the MMO using the dropped object procedure form (including any updated form as provided by the MMO) as soon as reasonably practicable and in any event within 24 hours of the undertaker becoming aware of an incident, unless otherwise agreed in writing with the MMO.
- (c) On receipt of notification or the dropped object procedure form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the marine environment at the undertaker's expense if reasonable to do so.

Force majeure

21.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to deposit the authorised deposits within or outside of the Order limits because the safety of human life and/or of the vessel is threatened (an “unauthorised deposit”), full details of the circumstances of the deposit must be notified to the MMO in the manner provided in condition 20(9) within 48 hours.

(2) Any unauthorised deposit must be removed at the expense of the undertaker unless written approval is obtained from the MMO.

Pre-construction plans and documentation

22.—(1) The licensed activities for each stage of construction of the authorised development must not commence until the following (insofar as relevant to that activity or stage of activity) has been submitted to and approved in writing by the MMO, in consultation with, where relevant, Trinity House, the MCA, UK Hydrographic Office, relevant SNCB and (in relation to the cable specification and installation plan, the navigation and installation plan and the sediment disposal management plan (under paragraphs (h), (n) and (o)) only) the local harbour authorities—

- (a) A design plan at a scale of between 1:25,000 and 1:50,000, or in such other format as may be appropriate, including detailed representation on the most suitably scaled chart, to ensure conformity with the description of Work Nos. 2, 3 and 4A and compliance with conditions 10, 11, 12 and 13, which shows for the relevant stage—
 - (i) the proposed location, including grid co-ordinates of the centre point of the proposed location for each offshore substation platform, subject to any micro-siting required due to anthropological constraints, environmental constraints or difficult ground conditions discovered post approval under this condition and choice of foundation types for all offshore platforms;
 - (ii) the dimensions of each offshore substation platform to be installed, including any antennae;
 - (iii) the length, depth and arrangement of cables comprising Work Nos. 2, 3 and 4A including cable crossings;
 - (iv) the type and dimensions of all foundations for the offshore substation platforms;
 - (v) the proposed layout of all offshore substation platforms including any exclusion zones identified under sub-paragraph (2)(d); and
 - (vi) any exclusion zones or micro-siting requirements identified in any mitigation plan pursuant to sub-paragraph (2)(d) or relating to any habitats of principal importance identified as part of surveys undertaken in accordance with condition 27;
- (b) a construction programme for the relevant stage, unless otherwise agreed in writing with the MMO, to include details of—
 - (i) the proposed construction start date;
 - (ii) proposed timings for mobilisation of plant delivery of materials and installation works; and

- (iii) an indicative written construction programme for all offshore substation platforms and cable comprised in the Work Nos. 2, 3 and 4A and the works in paragraph 2 (insofar as not shown in sub-paragraph (ii) above);
- (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details for the relevant stage of—
 - (i) foundation installation methodology, including drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation and cable installation works and cable installation works, and having regard to any mitigation scheme pursuant to paragraph (g);
 - (ii) contractors; and
 - (iii) associated ancillary works;
- (d) a project environmental management plan covering the period of construction for the relevant stage to include details of—
 - (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with and report any spills and collision incidents of the authorised development in relation to all activities carried out;
 - (ii) a chemical risk register for all chemicals that have a pathway to the marine environment and may be used for the licensed activities (with the exception of any chemicals used in the course of normal navigation), submitted to the MMO for approval at least ten weeks prior to the use of such chemicals, to include details of—
 - (aa) the function of the chemicals;
 - (bb) the quantities being used and the frequency of use; and
 - (cc) the physical, chemical and ecotoxicological properties of the chemical (save for any chemicals present on the OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment (PLONOR));
 - (iii) a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised; and
 - (iv) waste management and disposal arrangements;
- (e) a scour protection plan for the relevant stage providing details of the need, type, sources, quantity and installation methods for scour protection, which must be updated and resubmitted in writing for approval if changes to it are proposed following cable laying operations;
- (f) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring (which shall include all benthic, ornithological and marine mammal monitoring) and related reporting in accordance with conditions 27, 28 and 29;
- (g) in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol (in accordance with the outline marine mammal mitigation protocol), the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant SNCB and which must include details of noise reduction methods through project design (primary measures) and/or, deployment of noise mitigation systems or noise abatement systems (secondary measures) that will be utilised to manage sounds from those piling activities and such protocol must include full details and justification for the mitigation chosen or excluded for deployment;
- (h) a cable specification and installation plan for the relevant stage, in accordance with the outline cable specification and installation plan, to include—
 - (i) technical specification of offshore cables (including fibre optic cable) below MHWS within that stage, including a desk-based assessment of attenuation of electromagnetic field strengths, shielding and cable burial depth in accordance with good industry practice;

- (ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment demonstrating compliance with condition 10(4);
- (iii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to Chart Datum (excluding the Areas of Interest where navigable depth may not be reduced) and, in the event that any area of cable protection exceeding 5% of navigable depth is identified (in areas other than the Areas of Interest), details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection;
- (iv) proposals for the volume, depth and areas of cable protection to be used for each cable crossing, and proposals for timing and methodology for reporting on actual volumes, actual depths and areas post construction; and
- (v) proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised development which includes a risk based approach to the management of unburied or shallow buried cables;
- (i) an aids to navigation management plan to be agreed in writing by the MMO following consultation with Trinity House, the MCA and the CAA to include details of how the undertaker will comply with the provisions of condition 17 relating to that stage for the lifetime of the authorised development;
- (j) an offshore monitoring plan for the relevant stage which accords with the principles set out in the outline offshore in-principle monitoring plan.
- (k) a fisheries liaison and co-existence plan for the relevant stage which accords with the principles set out in the outline fisheries liaison and co-existence plan;
- (l) a vessel traffic monitoring plan for the relevant stage which accords with the principles set out in the outline vessel traffic monitoring plan;
- (m) in the event that driven or part-driven pile foundations are proposed to be used, a site integrity plan for the southern north sea special area of conservation which accords with the principles set out in the outline site integrity plan for the southern north sea special area of conservation;
- (n) a navigation and installation plan for the relevant stage which accords with the principles set out in the outline navigation and installation plan;
- (o) a sediment disposal management plan for the relevant stage which is substantially in accordance with the principles set out in the outline sediment disposal management plan; and
- (p) no percussive piling associated with offshore substation platform foundations may take place between 25th November to 3rd January (inclusive) in any year for the protection of spawning herring unless otherwise agreed in writing with the MMO.

(2) Subject to sub-paragraph (2), the licensed activities or any relevant stage of those activities must not commence unless no later than six months prior to the commencement a marine written scheme of archaeological investigation for the stage in construction has been submitted to and approved by the MMO in writing, in accordance with the outline offshore written scheme of investigation, and in accordance with industry good practice, in consultation with the statutory historic body to include—

- (a) details of responsibilities of the undertaker, archaeological consultant and contractor;
- (b) a method statement for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
- (c) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within six months of any survey being completed;
- (d) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones prior to construction;

- (e) monitoring of archaeological exclusion zones during and post construction, including provision of a report on such monitoring;
- (f) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS ('online access to the index of archaeological investigations') form with a digital copy of the report within six months of completion of construction of the authorised development, and to notify the MMO that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;
- (g) a reporting and recording protocol, designed in reference to the Offshore Renewables Protocol for Reporting Archaeological Discoveries as set out by the Crown Estate and reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised development; and
- (h) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.

(3) Pre-construction archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a method statement produced under the written scheme of investigation specific to the relevant pre-construction activities (which must accord with the details set out in the outline offshore written scheme of investigation) which has been submitted to and approved by the MMO in consultation with the statutory historic body.

(4) In the event that driven or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive monopile foundations must not exceed 6,000kJ and the hammer energy used to drive or part-drive pin pile foundations must not exceed 3,000kJ.

(5) No more than two main vessels may be engaged at any time in activities related to piling for the licenced activities. There will only be a maximum installation of three monopiles foundations or six pin piles within a 24-hour period.

(6) The undertaker must, before submitting any pre-construction plans and documentation required under this condition, provide a copy of the plans and documentation to any person to whom part of the benefit of the Order applying seaward of MHWS has been transferred or leased pursuant to article 5 (benefit of the order) of the Order.

(7) A person receiving the plans and documents under sub-paragraph (6) must provide any comments on the plans and documentation to the undertaker within 14 days of receipt.

(8) The undertaker must participate in liaison meetings as requested from time to time by the MMO in writing in advance and must consider such matters as are determined by the MMO relating to the efficient operation of a deemed marine licence issued under this Order (including as varied or transferred).

23.—(1) Except where otherwise stated or agreed in writing with the MMO, each programme, statement, plan, protocol or scheme required to be approved under condition 22 (save for that required under condition 22(1)(f)) must be submitted for approval at least six months prior to the intended commencement of the relevant stage of the licensed activities.

(2) The pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting required under condition 22(1)(f) must be submitted in accordance with the following, unless otherwise agreed in writing with the MMO—

- (a) at least six months prior to the first survey of the relevant stage, detail of any pre-construction surveys and an outline of all proposed monitoring;
- (b) at least six months prior to construction, detail on construction monitoring; and
- (c) at least six months prior to commissioning, detail of postconstruction (and operational) monitoring.

(3) The MMO must determine an application for approval made under condition 22 within a period of six months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker such agreement not to be unreasonably withheld or delayed.

(4) The licensed activities must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 22, unless otherwise agreed in writing by the MMO (provided that before giving any such agreement the MMO must consult with any party that it was required to consult with, or who would have given a prior approval, in relation to a relevant plan, protocol, statement, scheme or details pursuant to condition 22).

(5) The plans, protocols, statements, schemes and details submitted under condition 22 must ensure that any residual effects fall within the scope of those predicted in the environmental statement.

Site Integrity Plan

24.—(1) No piling activities can take place until a southern north sea special area of conservation site integrity plan (“SIP”), which accords with the principles set out in the outline southern north sea special area of conservation site integrity plan, has been submitted to, and approved in writing, by the MMO in consultation with the relevant statutory nature conservation body.

(2) The SIP submitted for approval must contain a description of the conservation objectives for the Southern North Sea Special Area of Conservation (“SNS SAC”) as well as any relevant management measures and it must set out the key statutory nature conservation body advice on activities within the SNS SAC relating to piling as set out within the JNCC Guidance and how this has been considered in the context of the authorised scheme.

(3) The SIP must be submitted in writing to the MMO no later than six months prior to the commencement of piling activities.

(4) In approving the SIP the MMO must determine whether the authorised scheme at the preconstruction stage, in-combination with other plans and projects, would be in line with the JNCC Guidance.

(5) The approved SIP may be amended with the prior written approval of the MMO, in consultation with the relevant statutory nature conservation body, where the MMO determines that the authorised development, in-combination with other plans or projects at the pre-construction stage, is in line with the JNCC Guidance.

Offshore safety management

25. No stage of the authorised development may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and adequately addressed all MCA recommendations as appropriate to the authorised development contained within MGN654.

Reporting of engaged agents, contractors and vessels

26.—(1) The undertaker must provide the following information to the MMO—

- (a) the name, company number, address and function of any agent, contractor or subcontractor appointed to engage in the licensed activities not less than ten working days prior to such agent or contractor commencing any licensed activity; and
- (b) each week during the construction of the authorised development a list of the vessels currently and to be used in relation to the licensed activities, including the master’s name, vessel type, vessel IMO number and vessel owner or operating company.

(2) Any changes to the supplied details must be notified to the MMO in writing, as far as practicable, prior to the agent, contractor or vessel engaging in the licensed activities.

(3) The undertaker must notify the MMO in writing not less than 24 hours prior to the commencement of major component exchanges, ladder replacements or cable related works—

- (a) any agents, contractors or subcontractors that will carry out such works; and
- (b) any vessel proposed to be used for such works, including the master's name, vessel type, vessel IMO number and vessel owner or operating company.

Pre-construction monitoring and surveys

27.—(1) The undertaker must in discharging condition 22(1)(f) for construction submit a monitoring plan in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB, which must contain details of proposed surveys, including methodologies and timings, and a proposed format and content for a pre-construction baseline report and—

- (a) the survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the post-construction position or will enable the validation or otherwise of key predictions in the environmental statement; and
- (b) the baseline report proposals must ensure that the outcome of the agreed surveys together with existing data and reports are drawn together to present a valid statement of the preconstruction position, with any limitations, and must make clear what postconstruction comparison is intended and the justification for this being required.

(2) Subject to receipt from the undertaker of specific proposals pursuant to this condition, the pre-construction survey proposals must comprise, in outline—

- (a) a full sea floor coverage swath–bathymetry survey of the Order limits and a buffer outside, that meets the requirements of IHO S44ed5 Order 1a, to—
 - (i) determine the location, extent and composition of any biogenic or geogenic reef features, as set out within the outline offshore in-principle monitoring plan;
 - (ii) inform future navigation risk assessments as part of the cable specification and installation plan; and
 - (iii) inform the identification of any archaeological exclusion zone and post consent monitoring of any such archaeological exclusion zone;
- (b) a bathymetric survey that meets the requirements of IHO S44ed5 Order 1a of the area within the Order Limits within which it is proposed to carry out construction works.

(3) The pre-construction survey(s) carried out pursuant to sub-paragraphs (2)(a) and (2)(b) must fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developer' (as relevant).

(4) The undertaker must carry out the surveys specified within the approved monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant SNCB.

(5) Following completion of a survey carried out pursuant to this condition and prior to construction of the relevant stage, the undertaker must provide a report and full density data of the survey outcomes to the MMO, the relevant SNCB, the MCA and UK Hydrographic Office as relevant.

Construction monitoring

28.—(1) The undertaker must, in discharging condition 22(1)(f) in respect of construction monitoring, submit a construction monitoring plan or plans for that stage in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB, which must include details of any proposed construction monitoring, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in

the outline offshore in-principle monitoring plan and must specify the objectives for each survey and explain how the survey will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) If the plan or plans submitted to the MMO under this condition contain survey proposals, the construction monitoring plan must include, in outline—

- (a) vessel traffic monitoring by automatic identification system for the duration of the construction period, with provision for a report to be submitted to the MMO, Trinity House, and the MCA annually during the construction period for the authorised development; and
- (b) where piled foundations are to be employed, unless otherwise agreed by the MMO in writing, details of proposed monitoring of the noise generated by the installation of the first four piled foundations of each piled foundation type to be constructed collectively under this licence and the deemed marine licences granted under Schedules 8 and 10 of the Order.

(3) If, in the reasonable opinion of the MMO in consultation with the SNCB the monitoring carried out pursuant to condition 28(2)(b) above shows impacts significantly in excess to those assessed in the environmental statement and there has been a failure of the mitigations set out in the marine mammal mitigation protocol, all piling activity must cease until either contingency measures approved within the marine management mitigation protocol have been implemented or an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

(4) The undertaker must carry out the surveys specified within the approved construction monitoring plan or plans in accordance with that plan or plans, and provide the approved reports in the format and to timings approved pursuant to sub-paragraph (1), unless otherwise agreed in writing by the MMO in consultation with the relevant SNCB.

Post-construction monitoring

29.—(1) The undertaker must, in discharging condition 22(1)(f) in respect of post-construction monitoring, submit a post-construction monitoring plan or plans for that stage in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB including details of proposed post-construction surveys, including methodologies (including appropriate buffers, where relevant) and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify objectives for each survey and explain how the survey will assist in either informing a useful and valid comparison with the preconstruction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) If the plan or plans submitted to the MMO under this condition contain survey proposals, the post-construction survey plan or plans must include, in outline—

- (a) details of a survey to determine any change in the location, extent and composition of any biogenic or geogenic reef feature identified in the pre-construction survey in the parts of the offshore Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
- (b) a bathymetric survey to monitor the effectiveness of archaeological exclusion zones. The data will be analysed by an accredited archaeologist as defined in the marine written scheme of archaeological investigation required under condition 22(2); and
- (c) vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of the authorised development, unless otherwise agreed in writing by the MMO, with provision for a report to be submitted annually to the MMO, Trinity House, and the MCA.

(3) The undertaker must conduct a swath bathymetric survey to IHO S44ed5 Order 1a of the installed export cable route and provide the data and survey report(s) to the MCA and UKHO. The

MMO should be notified once this has been done, with a copy of the Report of Survey also sent to the MMO.

(4) The undertaker must carry out the surveys specified within the approved post-construction monitoring plan or plans in accordance with that plan or plans and provide the agreed reports in the agreed format, unless otherwise agreed in writing with the MMO in consultation with the relevant SNCB.

(5) Within 12 weeks of completion of any cable repair or replacement works, the undertaker must undertake a post installation survey along the section of cable that has undergone repair or replacement to demonstrate the successful burial of the cable, and submit a report to the MMO in writing on its findings.

(6) To the extent that a survey under sub-paragraphs (3), (4) or (5) relates to the Areas of Interest, the undertaker must provide a copy of it to the local harbour authorities.

Timing of monitoring report

30. Any monitoring report compiled in accordance with the monitoring plans provided under conditions 27, 28 and 29 must be provided to the relevant body no later than four months following receipt by the undertaker of the results of monitoring to which it relates, unless otherwise agreed with the relevant body in writing.

Reporting of impact pile driving

31.—(1) In the event that driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the marine noise registry—

- (a) no less than six months prior to the commencement of each stage of construction of the licensed activities, information on the expected location, start and end dates of impact pile driving to satisfy the marine noise registry's Forward Look requirements;
- (b) within two weeks after commencement of each stage of construction of the licensed activities, information on the location, start and end dates of impact pile driving to satisfy the Marine Noise Registry's Forward Look requirements;
- (c) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the marine noise registry's Close Out requirements by 7 April for winter season October – March inclusive and 7 October for summer season April – September inclusive; or within 12 weeks of completion of impact pile driving, whichever is earlier.

(2) The undertaker must notify the MMO in writing of the successful submission of Forward Look or Close Out data pursuant to sub-paragraph (1) above within 7 days of the submission.

(3) For the purpose of this condition, "Forward Look" and "Close Out" mean the requirements as set out in the UK Marine Noise Registry Information Document Version 1 (July 2015) as amended, updated or superseded from time to time.

Maintenance reporting

32.—(1) An annual maintenance report must be submitted to the MMO in writing within one month following the first anniversary of the date of commencement of operations, and every year thereafter until the permanent cessation of operation.

(2) The report must provide a record of the licensed activities as set out in condition 13 during the preceding year, the timing of activities and methodologies used.

(3) Every fifth year, the undertaker must submit to the MMO in writing, within one month of that date, a consolidated maintenance report, which will—

- (a) include a review of licensed activities undertaken during the preceding five years with reference to the reports submitted in accordance with sub-paragraph (1) of this condition;

- (b) reconfirm the applicability of the methodologies and frequencies of the licensable activities permitted by this licence for the remaining duration of this licence.

Stages of construction

33.—(1) The licenced activities must not be commenced until a written scheme setting out the stages of construction of the authorised development seaward of MHWS has been submitted to and approved by the MMO in writing.

(2) The scheme must be implemented as approved.

(3) The written scheme referred to in sub-paragraph (1) must be submitted to the MMO in writing four months prior to the planned commencement of the licenced activities.

Completion of construction

34.—(1) The undertaker must submit a close out report in writing to the MMO and the relevant SNCB within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the final number of installed offshore substation platforms.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

35. The undertaker must submit a close out report to the MCA, Trinity House and the UK Hydrographic Office within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following—

- (a) the final number of installed offshore substation platforms;
- (b) a plan of the layout of installed offshore substation platforms; and
- (c) latitude and longitude coordinates of the centre point of the location of each offshore substation platform, provided as Geographical Information System data referenced to WGS84 datum.

Deployment of cable protection

36. Any cable protection authorised under this licence must be deployed within 10 years from the date the Order comes into force unless otherwise agreed by the MMO in writing.

Placement of cable and cable protection proximate to Margate and Long Sands SAC

37.—(1) Unless otherwise agreed in writing by the MMO in consultation with the relevant SNCB, no cable circuits comprised in Work No. 3 or cable protection measures shall be installed within the area defined by the coordinates as specified in the table in sub-paragraph (3).

(2) If agreement with the MMO is obtained pursuant to sub-paragraph (1), the undertaker must install any cable circuits or cable protection measures in accordance with the details approved under sub-paragraph (1).

(3) The coordinates referred to in sub-paragraph (1) are specified in the table—

(1) <i>Point</i>	(2) <i>Latitude</i>	(3) <i>Longitude</i>
1	51° 48.36144N	001° 42.77159E
2	51° 48.37295N	001° 42.76875E
3	51° 48.41343N	001° 42.75876E
4	51° 48.66988N	001° 42.69547E
5	51° 48.67455N	001° 42.69432E
6	51° 48.67936N	001° 42.69320E
7	51° 48.69382N	001° 42.69006E

8	51° 48.70770N	001° 42.68329E
9	51° 49.05786N	001° 42.32663E
10	51° 49.07583N	001° 42.30832E
11	51° 49.21771N	001° 42.16377E
12	51° 49.68296N	001° 41.68965E
13	51° 49.72103N	001° 41.65085E
14	51° 50.89144N	001° 40.45719E
15	51° 50.92384N	001° 40.42412E
16	51° 50.90057N	001° 40.57444E
17	51° 50.73624N	001° 40.74293E
18	51° 50.71250N	001° 40.76728E
19	51° 48.88430N	001° 42.64015E
20	51° 48.75971N	001° 42.76767E
21	51° 48.75135N	001° 42.77623E
22	51° 48.74687N	001° 42.78049E
23	51° 48.74223N	001° 42.78428E
24	51° 48.73745N	001° 42.78759E
25	51° 48.73255N	001° 42.79039E
26	51° 48.72755N	001° 42.79267E
27	51° 48.72246N	001° 42.79444E
28	51° 48.71751N	001° 42.79563E
29	51° 48.71659N	001° 42.79576E
30	51° 48.71252N	001° 42.79634E
31	51° 48.70751N	001° 42.79654E
32	51° 48.70246N	001° 42.79632E
33	51° 48.69742N	001° 42.79576E
34	51° 48.61790N	001° 42.78554E
35	51° 48.58695N	001° 42.78167E
36	51° 48.57932N	001° 42.78155E
37	51° 48.51798N	001° 42.78057E
38	51° 48.49747N	001° 42.78025E
39	51° 48.49537N	001° 42.78021E
40	51° 48.44900N	001° 42.77947E
41	51° 48.37184N	001° 42.77338E
42	51° 48.36482N	001° 42.77282E
43	51° 48.36309N	001° 42.77269E
44	51° 48.36148N	001° 42.77256E
45	51° 48.35849N	001° 42.77232E
46	51° 48.35989N	001° 42.77198E

Pre-construction, construction and post-construction monitoring and the local harbour authorities

38.—(1) The undertaker must consult the local harbour authorities on the proposed activities and programme for any pre-construction monitoring, construction monitoring, postconstruction monitoring and related reporting within the Areas of Interest no less than 20 business days before such survey work is programmed to commence. The undertaker must have regard to any request made by the local harbour authorities for reasonable amendment to the proposed activities or programme, which request must be made to the undertaker within 5 business days of receipt of the details of the proposed activities and programme.

(2) The undertaker must notify the local harbour authorities of the final planned programme for any pre-construction monitoring, construction monitoring, postconstruction monitoring within the Areas of Interest no less than 5 business days before such survey work is programmed to begin.

(3) The undertaker must consult the local harbour authorities on any application for marine licensing for the clearance of unexploded ordnance within or which may affect the Areas of Interest before such applications are submitted to the MMO. The undertaker must have regard to any request made by the local harbour authorities for reasonable amendment to the proposed application, which request must be made to the undertaker within 10 business days of receipt of the details of the proposed application.

(4) The undertaker must notify the local harbour authorities of the final programme for any clearance of unexploded ordnance to be undertaken within the Areas of Interest no less than 20 business days before such disposal is programmed to begin.

Remediation

39.—(1) Where, following the installation or maintenance of cables forming Work No. 3, located within the Areas of Interest, it is identified by the undertaker (who shall notify the MMO and the local harbour authorities as soon as reasonably practicable of this fact and in any event within 2 business days) or, following inspection by a local harbour authority (and the same is notified to the undertaker as soon as reasonably practicable), that the level of any cable is such that the condition 10(4) has not been achieved or at any time following installation or maintenance the cable has moved such that the requirements of condition 10(4) are no longer being achieved, then, unless otherwise agreed in writing with the MMO and the local harbour authorities, the undertaker is required to carry out remediation works as specified in the cable specification and installation plan subject to subject to sub paragraph (2) below.

(2) Unless otherwise agreed in writing with the MMO and the local harbour authorities, the undertaker will carry out the following arrangements for the carrying out the remediation works:

- (a) the undertaker will re-bury the cable to the required specification to achieve the requirements of condition 10(4); and
- (b) following the completion of the works in sub-paragraph (2)(a), if it is identified by the undertaker or the local harbour authorities (following inspection) that the required specification is not achieved, then the undertaker will remove the cable without unreasonable delay and thereafter relay a new cable pursuant to an updated cable specification and installation plan approved by the MMO and the local harbour authorities which updated cable specification and installation plan specifically identifies and addresses why the previous cable burial was not successful, how that has been addressed and what measures are to be used in relaying the cable to prevent the failure reoccurring.

(3) The steps in this paragraph shall be repeated until the requirement in condition 10(4) is achieved or the cable is permanently removed from the areas referred to in paragraph 38(1).

SCHEDULE 10

Article 36

DEEMED MARINE LICENCE UNDER THE 2009 ACT – TRANSMISSION ASSETS (OFFSHORE CONVERTER PLATFORM)

PART 1

LICENSED MARINE ACTIVITIES

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004(a);

“the 2008 Act” means the Planning Act 2008(b);

(a) 2004 c. 20.

“the 2009 Act” means the Marine and Coastal Access Act 2009(a);

“2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017(b);

“aids to navigation management plan” means the aids to navigation management plan to be submitted to the MMO under condition 21(1)(i) of this licence;

“authorised deposits” means the substances and articles specified in paragraph 4 of Part 1 of this licence;

“authorised development” means Work No. 2(b) as described in paragraph 3 of Part 1 of this marine licence or any stage of that work;

“buoy” means any floating device used for navigational purposes or measurement purposes, including LIDAR buoys, wave buoys and guard buoys;

“cable circuits” means a number of electrical conductors necessary to transmit electricity between two points, comprising one or more conductors which may be bundled as one cable or take the form of separate cables, and in either case the circuit may include one or more auxiliary cables for the purpose of control, monitoring, protection or general communication;

“cable crossings” means a crossing of existing cables, pipelines or other existing infrastructure by cable circuits authorised by this Order together with cable protection;

“cable protection” means physical measures for the protection of cables including but not limited to concrete mattresses, split pipe system, and/or rock placement (including material used for cable crossings);

“cable protection replenishment” means the restoration to a former level or condition of cable protection lost by natural seabed processes or human activity;

“Chart Datum” means the level below which the tide will not normally fall at a given location, usually the lowest astronomical tide;

“chemical” means a chemical element and will include both substances and preparations;

“commence” means the first carrying out of any licensed marine activities authorised by this marine licence, save for any operations consisting of pre-construction surveys and monitoring approved under this marine licence and the activities set out in paragraph 2(e), and “commenced” and “commencement” must be construed accordingly;

“commissioning” means the process of assuring that all systems and components of the authorised development are tested to verify that they function and are operable in accordance with the specifications and operational requirements of the undertaker;

“condition” means a condition in Part 2 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation – Safeguarding, St George’s House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire, WS14 9PY and any successor body to its functions;

“Defra” means the Department for Environment, Food and Rural Affairs;

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“dropped object procedure form” means the MMO notification proforma with reference MLDIR1 for reporting the loss or dumping of synthetic materials and other refuse at sea or any other format advised in writing by the MMO;

“enforcement officer” means a person authorised to carry out enforcement duties under Chapter 3 Part 4 (marine licensing) of the 2009 Act;

(b) 2008 c. 29.
(a) 2009 c. 23.
(b) S.I. 2017/13.

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.);

“habitats of principal importance” means a habitat designated as being of principal importance in accordance with section 41 (biodiversity lists and action (England)) of the Natural Environment and Rural Communities Act 2006(a);

“IHO S44ed5 Order 1a” means order 1a from the fifth edition of the International Hydrographic Organisation’s Standards for Hydrographic Surveys as updated or amended from time to time;

“jacket foundation” means a lattice type structure constructed of steel and additional equipment such as, J-tubes, corrosion protection systems and access platforms attached to the seabed at 3 or more points with pin piles or suction buckets;

“JNCC” means the Joint Nature Conservation Committee;

“Kingfisher bulletin” means the bulletin published by the Humber Seafood Institute or such other alternative publication approved in writing by the MMO for the purposes of this licence;

“Kingfisher Information Service” means the information service from non-departmental government body Seafish;

“licensed activities” means the activities specified in Part 1 of this licence;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including replenishment of cable protection) to the extent assessed in the environmental statement, and “maintenance” must be construed accordingly;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH who is the body created under the 2009 Act and who is responsible for the monitoring and enforcement of this licence;

“marine noise registry” means the database developed and maintained by JNCC on behalf of Defra to record the spatial and temporal distribution of impulsive noise generating activities in UK seas;

“MCA” means the Maritime and Coastguard Agency;

“MGN654” means “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes, as may be updated or amended from time to time;

“MHWS” or “mean high water springs” means the average throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide is at its greatest (Spring tides);

“monopile foundation” means a steel pile driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“offshore converter platform” means a structure above MHWS and attached to the seabed by means of a foundation, with equipment to convert three-phase HVAC power generated by the wind turbine generators into HVDC power;

“the offshore order limits and boundary co-ordinates plan” means the plan certified as the offshore order limits and boundary co-ordinates plan by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.);

“offshore platform” means the offshore substation platform(s) and/or the offshore converter platform authorised by this licence;

“Offshore Renewables Protocol for Reporting Archaeological Discoveries” means the Offshore Renewables Protocol for Reporting Archaeological Discoveries, the Crown Estate

(a) 2006 c. 16.

(2014), Protocol for Archaeological Discoveries: Offshore Renewables Projects, Salisbury, Wessex Archaeology as amended, updated or superseded from time to time;

“offshore substation platform” means a structure, authorised by the deemed marine licence in Schedule 9 to the Order, above MHWS and attached to the seabed by means of a foundation, with one or more decks, whether open or fully clad, accommodating electrical power transformers switchgear, instrumentation, protection and control systems, and other associated equipment and facilities to enable the transmission of electronic communications and for electricity to be collected at, and exported from, the platform;

“operation” means the undertaking of the licensed activities which are not part of the construction, commissioning or decommissioning of the authorised development;

“Order” means the North Falls Offshore Wind Farm Order 202[];

“the Order limits” means the limits shown on the works plans (offshore) within which the authorised development may be carried out, the grid coordinates for the area seaward of MHWS are set out in paragraph 5 of Part 1 of this licence;

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore in-principle monitoring plan” means the document certified as the outline offshore in-principle monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore operations and maintenance plan” means the document certified as the outline offshore operations and maintenance plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline offshore written scheme of investigation” means the document certified as the outline offshore written scheme of investigation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline project environmental management plan” means the document certified as the outline project environmental management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline sediment disposal management plan” means the document certified as the outline sediment disposal management plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline site integrity plan for the southern north sea special area of conservation” means the document certified as the outline site integrity plan for the southern north sea special area of conservation by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“outline vessel traffic monitoring plan” means the document certified as the outline vessel traffic monitoring plan by the Secretary of State for the purposes of this Order under article 41 (certification of plans and documents, etc.);

“pathway to the marine environment” means open systems or closed systems that require top up;

“pin piled jacket” means a jacket attached to the seabed using pin piles;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“preparation” means a mixture or solution composed of two or more substances;

“scour protection” means measures to prevent loss of seabed sediment around any structure placed in or on the seabed by use of protective aprons, mattresses, or rock and gravel placement;

“SNCB” means the statutory nature conservation body, being the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017(a) or its equivalent in the 2017 Regulations;

“statutory historic body” means Historic England or its successor in function;

“substance” means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition;

“suction caisson (or bucket)” means a steel cylindrical structure attached to the legs of a jacket foundation which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential;

“suction caisson jacket” means a jacket attached to the seabed using suction caissons (typically one per leg);

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“UK Hydrographic Office” means the UK Hydrographic Office of Admiralty Way, Taunton, Somerset, TA1 2DN;

“UK Standard Marking Schedule for Offshore Installations” means the Standard Marking Schedule for Offshore Installations published by the Department of Energy & Climate Change with reference DECC 04/11;

“undertaker” means, subject to article 5 (benefit of the Order), North Falls Offshore Wind Farm Limited (company number 12435947);

“vessel” means every description of vessel, however propelled or moved, and includes a non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

“working day” means a day which is not a weekend, bank holiday or public holiday in England; and

“works plans (offshore)” means the plan or plans certified as the works plans (offshore) by the Secretary of State for the purposes of the Order under article 41 (certification of plans and documents, etc.).

(2) A reference to any statute, order, regulation or similar instrument is construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(3) Unless otherwise indicated—

(a) all times are taken to be Greenwich Mean Time;

(b) all co-ordinates are taken to be latitude and longitude degrees and minutes to two decimal places.

(4) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence are—

(a) Civil Aviation Authority

Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

(b) Historic England

(a) S.I. 2017/1012.

- East of England Regional Office
 Brooklands
 24 Brooklands Avenue
 Cambridge
 CB2 8BU
- (c) Marine Management Organisation
 Marine Licensing Team
 Lancaster House Hampshire Court
 Newcastle Business Park
 Newcastle upon Tyne
 NE4 7YH
 Tel: 0300 123 1032;
- (d) Marine Management Organisation (Local Office)
 Pakefield Road
 Lowestoft
 NR33 0HT
 Tel: 0208 026 0654
- (e) Maritime and Coastguard Agency
 UK Technical Services Navigation
 Spring Place
 105 Commercial Road
 Southampton
 SO15 1EG
 Email: navigationsafety@mcga.gov.uk;
- (f) Ministry of Defence (as represented by Defence Infrastructure Organisation –
 Safeguarding)
 St George's House
 153
 DIO Head Office
 DMS Whittington
 Lichfield
 Staffordshire
 WS14 9PY;
- (g) Natural England
 Guildbourne House
 Chatsworth Road
 Worthing
 BN11 1LD
 Tel: 0300 060 4911;
- (h) Trinity House
 Tower Hill
 London
 EC3N 4DH

Tel: 020 7481 6900;

- (i) The United Kingdom Hydrographic Office

Admiralty Way

Taunton

Somerset

TA1 2DN

Tel: 01823 337 900.

(5) Unless otherwise advised in writing by the MMO, the address for electronic communication with the MMO for the purposes of this licence is marine.consents@marinemanagement.org.uk, or where contact to the Local Office if the MMO is required, harwich@marinemanagement.org.uk.

(6) Unless otherwise advised in writing by the MMO, the Marine Case Management System ("MCMS") must be used for all licence returns or applications to vary this licence. The MCMS address is: <https://marinelicensing.marinemanagement.org.uk/>.

Details of licensed marine activities

2. Subject to the licence conditions in Part 2, this licence authorises the undertaker (and any agent or contractor acting on its behalf) to carry out the following licensable marine activities under section 66(1) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea within the Order limits seaward of MHWS of the substances and articles specified in paragraph 4 below and in Work No. 2(b) of up to 19,242.3 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin produced during construction drilling or seabed preparation for foundation works;
- (b) the construction of works in or over the sea, and or on or under the seabed;
- (c) dredging for the purposes of seabed preparation for foundation works, preparation for construction vessels and/or electrical circuit works;
- (d) boulder clearance works by displacement ploughing or subsea grab technique or any other equivalent method;
- (e) the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation;
- (f) removal of static fishing equipment;
- (g) wet storage; and
- (h) site preparation works.

3. Such activities described in paragraph 2 are authorised in relation to the construction, maintenance and operation of—

Work No. 2(b)—up to one offshore converter platform fixed to the seabed by one of the following foundation types: monopile, multi-leg pin pile jacket or multi-leg suction bucket jacket.

In connection with Work No. 2(b) and to the extent that they do not otherwise form part of that work, further associated development within the meaning of section 115(2) (development for which development consent may be granted) of the 2008 Act comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement and the provisions of this licence, including—

- (a) scour protection around the foundations of the offshore converter platform;
- (b) the removal of material from the seabed required for the construction of Work No. 2(b);
- (c) temporary landing places, moorings or other means of accommodating or anchoring vessels in the construction and/or maintenance of the authorised development and buoys.

4. The substances or articles authorised for deposit at sea are—

- (a) iron and steel, copper and aluminium;
- (b) stone and rock;
- (c) concrete and grout;
- (d) sand and gravel;
- (e) plastic, synthetic and rubber;
- (f) material extracted from the seabed within the offshore Order limits during construction drilling or seabed preparation for foundation works, vessels, cable installation preparation works and cable installation works, and excavation of drilling pits for trenchless installation techniques;
- (g) anchors and weights used for the calibration of vessels, consisting of a hessian sack, metal shackles or chains; and
- (h) marine coatings, other chemicals and timber.

5. The grid coordinates within which that part of the authorised development comprising Work No. 2(b) must be located are specified below and more particularly on the offshore order limits and boundary co-ordinates plan—

(1) <i>Point ID</i>	(2) <i>Latitude (WGS84 (DDM))</i>	(3) <i>Longitude (WGS84 (DDM))</i>
36	51° 46.18399'N	01° 51.52207'E
37	51° 46.45215'N	01° 51.46739'E
38	51° 47.79417'N	01° 56.0602'E
39	51° 45.96006'N	01° 54.98406'E
40	51° 44.20008'N	01° 56.16270'E
41	51° 43.43466'N	01° 58.08954'E
42	51° 44.92260'N	02° 02.79174'E
43	51° 44.20590'N	02° 02.65992'E
44	51° 44.16756'N	02° 02.36766'E
45	51° 43.89822'N	02° 01.62702'E
46	51° 43.70418'N	02° 01.18500'E
47	51° 43.46172'N	02° 00.54066'E
48	51° 42.90816'N	01° 59.73738'E
49	51° 42.25464'N	01° 58.18482'E
50	51° 41.80842'N	01° 58.22082'E
51	51° 38.66118'N	01° 54.67986'E
52	51° 37.76189'N	01° 52.32853'E
53	51° 39.03140'N	01° 52.10085'E
54	51° 40.08359'N	01° 52.71647'E
55	51° 40.32461'N	01° 52.55921'E
56	51° 40.41888'N	01° 52.66356'E
57	51° 40.36970'N	01° 52.53295'E
58	51° 40.36967'N	01° 52.52982'E
59	51° 40.80925'N	01° 52.24298'E
60	51° 41.18441'N	01° 51.71421'E
61	51° 41.78502'N	01° 51.60623'E
62	51° 45.61162'N	01° 51.61163'E

General provisions

6. This marine licence remains in force until the authorised development has been decommissioned in accordance with a programme approved by the Secretary of State under section 106 (approval of decommissioning programmes) of the 2004 Act, including any modification to the programme under section 108 (reviews and revisions of decommissioning

programmes) of the 2004 Act, and the completion of such programme has been confirmed by the Secretary of State in writing.

7. The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this marine licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 5 (benefit of the Order).

8. With respect to any condition which requires the licensed activities be carried out in accordance with the plans, protocols or statements approved under this licence, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved in writing by the MMO.

9. Any amendments to or variations from the approved details, plan or scheme must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of the MMO that it is unlikely to give rise to any materially new or materially greater environmental effects from those assessed in the environmental statement.

PART 2

CONDITIONS

Design parameters

10.—(1) The dimensions of the offshore converter platform forming part of the authorised development (including cranes and helideck) must not exceed—

- (a) 111.62 metres in height when measured from MHWS;
- (b) 130 metres in length; and
- (c) 10,400 m² topside area.

(2) Offshore converter platform foundation structures forming part of the authorised development must be one of either monopile foundation, multi-leg pin pile jacket foundation or multi-leg suction bucket jacket foundation.

(3) No offshore converter platform—

- (a) jacket foundation employing pin piles forming part of the authorised development may—
 - (i) have a pin pile diameter of greater than 3.5 metres; and
 - (ii) employ more than 12 pin piles per jacket foundation; and
- (b) monopile foundation forming part of the authorised development may not have a diameter greater than 17 metres.

11.—(1) The total number of offshore platforms constructed under this licence and the licence granted under Schedule 9 of the Order must not exceed two.

(2) The total permanent seabed footprint area for offshore platform foundations must not exceed—

- (a) 5,890 square metres excluding scour protection; and
- (b) 166,715 square metres including scour protection.

(3) The total volume of scour protection material for the offshore platform foundations is 50,316 cubic metres.

(4) The total volume of drill arisings under this licence and the licence granted under Schedule 9 must not exceed 11,451 cubic metres.

Maintenance of the authorised development

12.—(1) The undertaker may at any time maintain the authorised development, except to the extent that this licence or an agreement made under this licence provide otherwise.

(2) Maintenance works include but are not limited to—

- (a) repair, maintenance, refurbishment and replacement of offshore electrical components;
- (b) painting and applying other coatings;
- (c) bird waste and marine growth removal;
- (d) cable remedial burial;
- (e) cable repairs and replacement;
- (f) cable protection replenishment;
- (g) access ladder and boat landing replacement;
- (h) replacement of offshore platform anodes; and
- (i) J-tube repair/replacement.

(3) In undertaking activities under sub-paragraph (2)(f), the undertaker must not reduce water depth by more than 5% Chart Datum unless agreed with the MMO and the MCA in writing.

(4) An operations and maintenance plan in accordance with the outline offshore operations and maintenance plan shall be submitted to the MMO for approval in consultation with the relevant SNCB at least six months prior to the commencement of operations. All operation and maintenance activities must be carried out in accordance with the approved plan.

Vessels under the undertaker's control

13.—(1) The undertaker must issue to operators of vessels under its control operating within the Order limits a code of conduct to prevent collision risk or injury to marine mammals which must be in accordance with the outline project environmental management plan.

(2) The undertaker must ensure appropriate co-ordination of vessels within its control operating within the Order limits so as to reduce collision risk to other vessels including advisory safe passing distances for vessels.

Extension of time periods

14. Any time period given in this licence given to either the undertaker or the MMO may be extended with the agreement of the other party in writing such agreement not to be unreasonably withheld or delayed.

Notifications and inspections

15.—(1) The undertaker must ensure that a copy of this marine licence (issued as part of the grant of the Order) and any subsequent amendments or revisions to it is provided to—

- (a) all agents and contractors notified to the MMO in accordance with condition 24; and
- (b) the masters and offshore operations managers responsible for the vessels notified to the MMO in accordance with condition 24.

(2) Only those persons and vessels notified to the MMO in accordance with condition 24 are permitted to carry out the licensed activities.

(3) The documents referred to in sub-paragraph (1)(a) must be available for inspection at the following locations—

- (a) the undertaker's registered address;
- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and

- (c) on board each vessel and at the office of any offshore operations managers with responsibility for vessels from which authorised deposits or removals are to be made.
- (4) The undertaker must ensure that a copy of this marine licence and any subsequent revisions or amendments has been read and understood by the masters of any vessel being used to carry on any licensed activity set out in condition 24(3), and that a copy of this marine licence is held on board any such vessel.
- (5) The undertaker must provide access, and if necessary appropriate transportation, to the offshore construction site or any other associated works or vessels to facilitate any inspection that the MMO considers necessary to inspect the works during construction and operation of the authorised development.
- (6) The undertaker must inform the MMO Local Office in writing at least 14 days prior to the commencement of the licensed activities or any part of them and within 14 days of the completion of each licensed activity.
- (7) The undertaker must inform the Kingfisher Information Service, by email to kingfisher@seafish.co.uk, of details regarding the vessel routes, timings and locations relating to the construction of the authorised development or relevant stage—
 - (a) at least fourteen days prior to the commencement of offshore activities, for inclusion in the Kingfisher Bulletin and offshore hazard awareness data; and
 - (b) as soon as reasonably practicable, and in any event no later than 24 hours after completion of construction of all offshore activities, confirmation of notification must be provided to the MMO in writing within five days.
- (8) The undertaker must ensure that a local notification to mariners is issued at least 14 days prior to the commencement of the authorised development or any relevant stage advising of the start date of Work No. 2(b) and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, MCA and UK Hydrographic Office within five days of issue.
- (9) The undertaker must ensure that local notifications to mariners are updated and reissued at weekly intervals during construction activities and at least five days before any planned operations and maintenance works and the notices must be supplemented with VHF radio broadcasts agreed with the MCA in accordance with the project environmental management plan approved under deemed marine licence condition 21(1)(d) and monitoring plan approved under condition 21(1)(f). Copies of all local notifications must be provided to the MMO and UK Hydrographic Office within five days of issue, save for in the case of a notice relating to operations and maintenance, which must be provided within 24 hours of issue.
- (10) The undertaker must notify the UK Hydrographic Office of the commencement (within 14 days), progress and completion of construction (within 14 days) of the licenced activities in order that all necessary amendments to nautical and aeronautical charts are made and the undertaker must send a copy of such notifications to the MMO and MCA within five days of the notification.
- (11) In case of damage to, or destruction or decay of, the authorised development seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker must as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify the MMO, the MMO Local Office, the MCA, Trinity House, the Kingfisher Information Service and the UK Hydrographic Office.
- (12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners and inform the Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO, the MCA, Trinity House and the UK Hydrographic Office within five days of notifying mariners.
- (13) The undertaker must notify the MMO in writing a minimum of 14 days in advance of the commencement of each discrete incident of cable repair, replacement, or protection replenishment activity. Such a notification must include proposed timings and a description of proposed methodologies.

(14) The undertaker must ensure that the MMO, the MMO Local Office, local mariners, local fishermen's organisations and the Source Data Receipt Team at the UK Hydrographic Office, Taunton, Somerset, TA1 2DN (sdr@ukho.gov.uk) are notified within 14 days of completion of each instance of cable repair, replacement or protection replenishment activity.

Aids to navigation

16.—(1) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised development seaward of MHWS exhibit such lights, marks, sounds, signals and other aids to navigation, and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must during the period from the start of construction of the authorised development to completion of decommissioning of the authorised development seaward of MHWS keep Trinity House and the MMO informed in writing of progress of the authorised development seaward of MHWS including the following—

- (a) notice of commencement of construction of the authorised development within 24 hours of commencement having occurred;
- (b) notice within 24 hours of any aids to navigation being established by the undertaker; and
- (c) notice within five days of completion of construction of the authorised development.

(3) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan agreed pursuant to condition 21(1)(a)(i) using the reporting system provided by Trinity House.

(4) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised development seaward of MHWS notify Trinity House and the MMO in writing of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.

(5) In the event that the provisions of condition 15(12) are invoked, the undertaker must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

(6) Any jack up barges or vessels utilised during the licensed activities, when jacked up, must exhibit signals in accordance with the UK Standard Marking Schedule for Offshore Installations.

Colouring of structures

17. Except as otherwise required by Trinity House, the undertaker must colour offshore converter platform structure yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House.

Aviation safety

18.—(1) The undertaker must exhibit such lights, with such shape, colour and character as are required in writing by The Air Navigation Order 2016^(a) and determined necessary for aviation safety in consultation with the Defence Infrastructure Organisation Safeguarding and as directed by the Civil Aviation Authority. Lighting installed specifically to meet Ministry of Defence aviation safety requirements must remain operational for the life of the authorised development unless otherwise agreed in writing with the Ministry of Defence.

(2) The undertaker must notify the Defence Infrastructure Organisation Safeguarding, the Civil Aviation Authority and the MMO, at least 14 days prior to the commencement of the licensed activities, in writing of the following information—

- (a) the date of the commencement of the licensed activities;

(a) S.I. 2016/765.

- (b) the date the offshore converter platform is to be installed;
- (c) the maximum height of any construction equipment or vessels to be used;
- (d) the maximum heights of the offshore converter platform to be constructed (including any antennae);
- (e) the latitude and longitude of the offshore converter platform to be constructed,

and the Defence Infrastructure Organisation Safeguarding and the Civil Aviation Authority must be notified of any changes to the information supplied under this paragraph of this condition and of the completion of the construction of the authorised development. Copies of notifications must be provided to the MMO.

Chemicals, drilling and debris

19.—(1) The undertaker must ensure that any coatings and/or treatments are suitable for use in the marine environment and are used in accordance with relevant guidelines approved by Health and Safety Executive.

(2) The storage, handling, transport and use of fuels, lubricants, chemicals and other substances must be undertaken so as to prevent releases into the marine environment, including bunding of 110% of the total volume of all reservoirs and containers.

(3) The undertaker must inform the MMO of the location and quantities of material disposed of each month under the Order, by submission of a disposal return by 15 February each year for the months August to January inclusive, and by 15 August each year for the months February to July inclusive.

(4) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation of or seabed preparation for foundations, vessels or cables or cable installation, and drilling mud is disposed of within the Order limits seaward of MHWS.

(5) The undertaker must ensure that any rock material used in the construction of the authorised development is from a recognised source, free from contaminants and containing minimal fines.

(6) In the event that any rock material used in the construction of the authorised development is misplaced or lost below MHWS, the undertaker must report the loss to the MMO Local Office in writing within 48 hours of becoming aware of it and if the MMO, in consultation with the MCA and Trinity House, reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker must endeavour to locate the material and recover it at its own expense.

(7) The undertaker must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment. Concrete and cement mixing and washing areas should be contained to prevent run off entering the marine environment through the freeing ports.

(8) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported in writing to the MMO, Marine Pollution Response Team in accordance with the marine pollution contingency plan agreed under condition 21(1)(d)(i).

(9) Regarding incidents of dropped objects—

- (a) Debris or dropped objects within the Order limits which are considered a danger or hazard to navigation must be reported as soon as reasonably practicable but no later than six hours from the undertaker becoming aware of an incident, to the relevant HM Coastguard Maritime Rescue Co-ordination Centre by telephone (Dover Maritime Rescue Coordination Centre: 0344 382 0593), and the UK Hydrographic Office email: navwarnings@btconnect.com.
- (b) All dropped objects, including those in (a) within the Order limits must be reported to the MMO using the dropped object procedure form (including any updated form as provided by the MMO) as soon as reasonably practicable and in any event within 24 hours of the undertaker becoming aware of an incident, unless otherwise agreed in writing with the MMO.

- (c) On receipt of notification or the dropped object procedure form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the marine environment at the undertaker's expense if reasonable to do so.

Force majeure

20.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to deposit the authorised deposits within or outside of the Order limits because the safety of human life and/or of the vessel is threatened (an “unauthorised deposit”), within 48 hours full details of the circumstances of the deposit must be notified to the MMO in the manner provided in condition 19(9).

(2) Any unauthorised deposit must be removed at the expense of the undertaker unless written approval is obtained from the MMO.

Pre-construction plans and documentation

21.—(1) The licensed activities for each stage of construction of the authorised development must not commence until the following (insofar as relevant to that activity or stage of activity) has been submitted to and approved in writing by the MMO, in consultation with, where relevant, Trinity House, the MCA, UK Hydrographic Office and relevant SNCB—

- (a) A design plan at a scale of between 1:25,000 and 1:50,000, or in such other format as may be appropriate, including detailed representation on the most suitably scaled chart, to ensure conformity of the description of Work No. 2(b) and compliance with conditions 10, 11 and 12, which shows for the relevant stage—
 - (i) the proposed location, including grid co-ordinates of the centre point of the proposed location for the offshore converter platform, subject to any micro-siting required due to anthropological constraints, environmental constraints or difficult ground conditions discovered post approval under this condition and choice of foundation types for all offshore platforms;
 - (ii) the dimensions of the offshore converter platform to be installed, including any antennae;
 - (iii) the type and dimensions of all foundations for the offshore substation platform;
 - (iv) the proposed layout of the offshore substation platform including any exclusion zones identified under sub-paragraph (2)(d); and
 - (v) any exclusion zones or micro-siting requirements identified in any mitigation plan pursuant to sub-paragraph (2)(d) or relating to any habitats of principal importance identified as part of surveys undertaken in accordance with condition 25;
- (b) a construction programme to include details of—
 - (i) the proposed construction start date;
 - (ii) proposed timings for mobilisation of plant delivery of materials and installation works; and
 - (iii) an indicative written construction programme for the offshore converter platform comprised in the works at paragraphs 2 and 3 of Part 1 (licensed marine activities) of this Schedule (insofar as not shown in sub-paragraph (ii) above),
unless otherwise agreed in writing with the MMO;
- (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details for the relevant stage of—
 - (i) foundation installation methodology, including drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation and cable installation works and cable installation works, and having regard to any mitigation scheme pursuant to paragraph (g);

- (ii) contractors; and
- (iii) associated ancillary works.
- (d) a project environmental management plan covering the period of construction for the relevant stage to include details of—
 - (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with and report any spills and collision incidents of the authorised development in relation to all activities carried out;
 - (ii) a chemical risk register for all chemicals that have a pathway to the marine environment and may be used for the licensed activities (with the exception of any chemicals used in the course of normal navigation), submitted to the MMO for approval at least ten weeks prior to the use of such chemicals, to include details of—
 - (aa) the function of the chemicals;
 - (bb) the quantities being used and the frequency of use; and
 - (cc) the physical, chemical and ecotoxicological properties of the chemical (save for any chemicals present on the OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment (PLONOR));
 - (iii) a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised; and
 - (iv) waste management and disposal arrangements.
- (e) a scour protection plan for the relevant stage providing details of the need, type, sources, quantity and installation methods for scour protection, which must be updated and resubmitted in writing for approval if changes to it are proposed following cable laying operations;
- (f) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring (which shall include all benthic, ornithological and marine mammal monitoring) and related reporting in accordance with conditions 25, 26 and 27;
- (g) in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol for that stage, in accordance with the draft marine mammal mitigation protocol, the intention of which is to prevent injury to marine mammals, including details of soft start procedures with specified duration periods following current best practice as advised by the relevant SNCB;
- (h) a cable specification and installation plan for the relevant stage, to include—
 - (i) technical specification of offshore cables (including fibre optic cable) below MHWS within that stage, including a desk-based assessment of attenuation of electromagnetic field strengths, shielding and cable burial depth in accordance with good industry practice;
 - (ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to Chart Datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection;
 - (iii) proposals for the volume and areas of cable protection to be used for each cable crossing, and proposals for timing and methodology for reporting on actual volumes and areas post construction; and
 - (iv) proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised development which includes a risk based approach to the management of unburied or shallow buried cables;

- (i) an aids to navigation management plan to be agreed in writing by the MMO following consultation with Trinity House, the MCA and the CAA to include details of how the undertaker will comply with the provisions of condition 16 relating to that stage for the lifetime of the authorised development;
- (j) an offshore monitoring plan for the relevant stage which accords with the principles set out in the outline offshore in-principle monitoring plan;
- (k) a fisheries liaison and co-existence plan for the relevant stage which accords with the principles set out in the outline fisheries liaison and co-existence plan;
- (l) a vessel traffic monitoring plan for the relevant stage which accords with the principles set out in the outline vessel traffic monitoring plan;
- (m) in the event that driven or part-driven pile foundations are proposed to be used, a site integrity plan for the southern north sea special area of conservation which accords with the principles set out in the outline site integrity plan for the southern north sea special area of conservation;
- (n) a sediment disposal management plan for the relevant stage which accords with the principles set out in the outline sediment disposal management plan.

(2) Subject to sub-paragraph (3), the licensed activities or any relevant stage of those activities must not commence unless no later than six months prior to the commencement a marine written scheme of archaeological investigation for the stage in construction has been submitted to and approved by the MMO in writing, in accordance with the outline offshore written scheme of investigation, and in accordance with industry good practice, in consultation with the statutory historic body to include—

- (a) details of responsibilities of the undertaker, archaeological consultant and contractor;
- (b) a method statement for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
- (c) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within six months of any survey being completed;
- (d) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones prior to construction;
- (e) monitoring of archaeological exclusion zones during and post construction, including provision of a report on such monitoring;
- (f) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS ('online access to the index of archaeological investigations') form with a digital copy of the report within six months of completion of construction of the authorised development, and to notify the MMO that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;
- (g) a reporting and recording protocol, designed in reference to the Offshore Renewables Protocol for Reporting Archaeological Discoveries as set out by the Crown Estate and reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised development; and
- (h) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.

(3) Pre-construction archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a method statement produced under the written scheme of investigation specific to the relevant pre-construction activities (which must accord with the details set out in the outline offshore written scheme of investigation) which has been submitted to and approved by the MMO in consultation with the statutory historic body.

(4) In the event that driven or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive monopile foundations must not exceed 6,000kJ and the hammer energy used to drive or part-drive pin pile foundations must not exceed 3,000kJ.

(5) No more than two main vessels may be engaged at any time in activities related to piling for the licenced activities. There will only be a maximum installation of three monopiles foundations or six pin piles within a 24-hour period.

(6) The undertaker must, before submitting any pre-construction plans and documentation required under this condition, provide a copy of the plans and documentation to any person to whom part of the benefit of the Order applying seaward of MHWS has been transferred or leased pursuant to article 5 (benefit of the order) of the Order.

(7) A person receiving the plans and documents under sub-paragraph (6) must provide any comments on the plans and documentation to the undertaker within 14 days of receipt.

(8) The undertaker must participate in liaison meetings as requested from time to time by the MMO in writing in advance and must consider such matters as are determined by the MMO relating to the efficient operation of a deemed marine licence issued under this Order (including as varied or transferred).

22.—(1) Except where otherwise stated or agreed in writing with the MMO, each programme, statement, plan, protocol or scheme required to be approved under condition 21 (save for that required under condition 21(1)(f)) must be submitted for approval at least six months prior to the intended commencement of the relevant stage of the licensed activities.

(2) The pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting required under condition 21(1)(f) must be submitted in accordance with the following, unless otherwise agreed in writing with the MMO—

- (a) at least six months prior to the first survey of the relevant stage, detail of any pre-construction surveys and an outline of all proposed monitoring;
- (b) at least six months prior to construction, detail on construction monitoring; and
- (c) at least six months prior to commissioning, detail of postconstruction (and operational) monitoring.

(3) The MMO must determine an application for approval made under condition 21 within a period of six months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker such agreement not to be unreasonably withheld or delayed.

(4) The licensed activities must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 21, unless otherwise agreed in writing by the MMO.

(5) The plans, protocols, statements, schemes and details submitted under condition 21 must ensure that any residual effects fall within the scope of those predicted in the environmental statement.

Offshore safety management

23.—(1) No stage of the authorised development may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and adequately addressed all MCA recommendations as appropriate to the authorised development contained within MGN654.

Reporting of engaged agents, contractors and vessels

24.—(1) The undertaker must provide the following information to the MMO—

- (a) the name, company number, address and function of any agent, contractor or subcontractor appointed to engage in the licensed activities not less than ten working days prior to such agent or contractor commencing any licensed activity; and

- (b) each week during the construction of the authorised development a list of the vessels currently and to be used in relation to the licensed activities, including the master's name, vessel type, vessel IMO number and vessel owner or operating company.
- (2) Any changes to the supplied details must be notified to the MMO in writing, as far as practicable, prior to the agent, contractor or vessel engaging in the licensed activities.
- (3) The undertaker must notify the MMO in writing not less than 24 hours prior to the commencement of major component exchanges, ladder replacements or cable related works—
 - (a) any agents, contractors or subcontractors that will carry out such works; and
 - (b) any vessel proposed to be used for such works, including the master's name, vessel type, vessel IMO number and vessel owner or operating company.

Pre-construction monitoring and surveys

25.—(1) The undertaker must in discharging condition 21(1)(f) for construction submit a monitoring plan in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB, which must contain details of proposed surveys, including methodologies and timings, and a proposed format and content for a pre-construction baseline report and—

- (a) the survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the post-construction position or will enable the validation or otherwise of key predictions in the environmental statement; and
- (b) the baseline report proposals must ensure that the outcome of the agreed surveys together with existing data and reports are drawn together to present a valid statement of the preconstruction position, with any limitations, and must make clear what postconstruction comparison is intended and the justification for this being required.
- (2) Subject to receipt from the undertaker of specific proposals pursuant to this condition, the pre-construction survey proposals must comprise, in outline—
 - (a) a full sea floor coverage swath–bathymetry survey of the Order limits and a buffer outside, that meets the requirements of IHO S44ed5 Order 1a, to—
 - (i) determine the location, extent and composition of any biogenic or geogenic reef features, as set out within the outline offshore in-principle monitoring plan;
 - (ii) inform future navigation risk assessments as part of the cable specification and installation plan; and
 - (iii) inform the identification of any archaeological exclusion zone and post consent monitoring of any such archaeological exclusion zone;
 - (b) a bathymetric survey that meets the requirements of IHO S44ed5 Order 1a of the area within the Order Limits within which it is proposed to carry out construction works.
- (3) The pre-construction survey(s) carried out pursuant to sub-paragraphs (2)(a)(ii) and (2)(b) must fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developer' (as relevant).
- (4) The undertaker must carry out the surveys specified within the approved monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant SNCB.
- (5) Following completion of a survey carried out pursuant to this condition and prior to construction of the relevant stage, the undertaker must provide a report and full density data of the survey outcomes to the MMO, the relevant SNCB, the MCA and UK Hydrographic Office as relevant.

Construction monitoring

26.—(1) The undertaker must, in discharging condition 21(1)(f) in respect of construction monitoring, submit a construction monitoring plan or plans for that stage in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB, which must include details of any proposed construction monitoring, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify the objectives of each survey and explain how the survey will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) If the plan or plans submitted to the MMO under this condition contain survey proposals, the construction monitoring plan must include, in outline—

- (a) vessel traffic monitoring by automatic identification system for the duration of the construction period, with provision for a report to be submitted to the MMO, Trinity House, and the MCA annually during the construction period for the authorised development; and
- (b) where piled foundations are to be employed, unless otherwise agreed by the MMO in writing, details of proposed monitoring of the noise generated by the installation of the first four piled foundations of each piled foundation type to be constructed collectively under this licence and the deemed marine licences granted under Schedules 8 and 9 of the Order.

(3) If, in the reasonable opinion of the MMO in consultation with the SNCB the monitoring carried out pursuant to condition 26(2)(b) above shows impacts significantly in excess to those assessed in the environmental statement and there has been a failure of the mitigations set out in the marine mammal mitigation protocol, all piling activity must cease until either contingency measures approved within the marine management mitigation protocol have been implemented or an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

(4) The undertaker must carry out the surveys specified within the approved construction monitoring plan or plans in accordance with that plan or plans, and provide the approved reports in the format and to timings approved pursuant to sub-paragraph (1), unless otherwise agreed in writing by the MMO in consultation with the relevant SNCB.

Post-construction monitoring

27.—(1) The undertaker must, in discharging condition 21(1)(f) in respect of post-construction monitoring, submit a post-construction monitoring plan or plans for that stage in accordance with the outline offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant SNCB including details of proposed post-construction surveys, including methodologies (including appropriate buffers, where relevant) and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline offshore in-principle monitoring plan and must specify the objectives for each survey and explain how the survey will assist in either informing a useful and valid comparison with the preconstruction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) If the plan or plans submitted to the MMO under this condition contain survey proposals, the post-construction survey plan or plans must include, in outline—

- (a) details of a survey to determine any change in the location, extent and composition of any biogenic or geogenic reef feature identified in the pre-construction survey in the parts of the offshore Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;

- (b) a bathymetric survey to monitor the effectiveness of archaeological exclusion zones. The data will be analysed by an accredited archaeologist as defined in the marine written scheme of archaeological investigation required under condition 21(2); and
- (c) vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of the authorised development, unless otherwise agreed in writing by the MMO, with provision for a report to be submitted annually to the MMO, Trinity House, and the MCA.

(3) The undertaker must carry out the surveys specified within the post-construction monitoring plan or plans in accordance with that plan or plans and provide the agreed reports in the agreed format, unless otherwise agreed in writing with the MMO in consultation with the relevant SNCB.

(4) Within 12 weeks of completion of any cable repair or replacement works, the undertaker must undertake a post installation survey along the section of cable that has undergone repair or replacement to demonstrate the successful burial of the cable, and submit a report to the MMO in writing on its findings.

Timing of monitoring report

28. Any monitoring report compiled in accordance with the monitoring plans provided under conditions 25, 26 and 27 must be provided to the relevant body no later than four months following receipt by the undertaker of the results of monitoring to which it relates, unless otherwise agreed with the relevant body in writing.

Reporting of impact pile driving

29.—(1) In the event that driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the marine noise registry—

- (a) no less than six months prior to the commencement of each stage of construction of the licensed activities, information on the expected location, start and end dates of impact pile driving to satisfy the marine noise registry’s Forward Look requirements;
- (b) within two weeks after commencement of each stage of construction of the licensed activities, information on the location, start and end dates of impact pile driving to satisfy the Marine Noise Registry’s Forward Look requirements;
- (c) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the marine noise registry’s Close Out requirements by 7 April for winter season October – March inclusive and 7 October for summer season April – September inclusive; or within 12 weeks of completion of impact pile driving, whichever is earlier.

(2) The undertaker must notify the MMO in writing of the successful submission of Forward Look or Close Out data pursuant to sub-paragraph (1) above within 7 days of the submission.

(3) For the purpose of this condition, “Forward Look” and “Close Out” mean the requirements as set out in the UK Marine Noise Registry Information Document Version 1 (July 2015) as amended, updated or superseded from time to time.

Maintenance reporting

30.—(1) An annual maintenance report must be submitted to the MMO in writing within one month following the first anniversary of the date of commencement of operations, and every year thereafter until the permanent cessation of operation.

(2) The report must provide a record of the licensed activities as set out in condition 12 during the preceding year, the timing of activities and methodologies used.

(3) Every fifth year, the undertaker must submit to the MMO in writing, within one month of that date, a consolidated maintenance report, which will—

- (a) include a review of licensed activities undertaken during the preceding five years with reference to the reports submitted in accordance with sub-paragraph (1) of this licence;
- (b) reconfirm the applicability of the methodologies and frequencies of the licensable activities permitted by this licence for the remaining duration of this licence.

Stages of construction

31.—(1) The licenced activities must not be commenced until a written scheme setting out the stages of construction of the authorised development seaward of MHWS has been submitted to and approved by the MMO in writing.

(2) The scheme must be implemented as approved.

(3) The written scheme referred to in sub-paragraph (1) must be submitted to the MMO in writing four months prior to the planned commencement of the licenced activities.

Completion of construction

32.—(1) The undertaker must submit a close out report in writing to the MMO and the relevant SNCB within three months of the date of completion of construction. The close out report must confirm the date of completion of construction.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

33. The undertaker must submit a close out report to the MCA, Trinity House and the UK Hydrographic Office within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following—

- (a) a plan of the layout of installed offshore converter platform; and
- (b) latitude and longitude coordinates of the centre point of the location of the offshore converter platform, provided as Geographical Information System data referenced to WGS84 datum.

SCHEDULE 11

HEDGEROWS

Article 39

PART 1

REMOVAL OF HEDGEROWS

(1) <i>Extent of and purpose for removal</i>	(2) <i>Location of hedgerow</i>
small scale removal for haul road crossing and/or accesses	between points 2a and 2b on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 2c and 2d on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 2e and 2f on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 2o and 2p on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 3a and 3b on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 3e and 3f on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 4o and 4p on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 10c and 10d on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 10e and 10f on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 10g and 10h on the tree preservation order and hedgerow plan
removal for trenched crossing	between points 10i and 10j on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 12a and 12b on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 12c and 12d on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 12e and 12f on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13a and 13b on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13c and 13d on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13e and 13f on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13l and 13m on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13v and 13w on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13z and 13aa on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13ab and 13ac on the tree preservation order and hedgerow plan

removal for Bentley Road improvement works	between points 13ae and 13af on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13al and 13am on the tree preservation order and hedgerow plan
removal for Bentley Road improvement works	between points 13an and 13ao on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 13ap and 13aq on the tree preservation order and hedgerow plan

PART 2

REMOVAL OF IMPORTANT HEDGEROWS

<i>(1)</i> <i>Extent of and purpose for removal</i>	<i>(2)</i> <i>Location of hedgerow</i>
small scale removal for haul road crossing and/or accesses	between points 1b and 1c on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 2k and 2l on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 2m and 2n on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 3i and 3j on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 3m and 3n on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 4a and 4b on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 4e and 4f on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 4i and 4j on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 5c and 5d on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 6a and 6b on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 6c and 6d on the tree preservation order and hedgerow plan
removal for trenched crossing	between points 6e and 6f on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 6g and 6h on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 6i and 6j on the tree preservation order and hedgerow plan
removal for trenched crossing	between points 6k and 6l on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 7a and 7b on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 7c and 7d on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 7e and 7f on the tree preservation order and hedgerow plan
small scale removal for haul road crossing and/or accesses	between points 7g and 7h on the tree preservation order and hedgerow plan
small scale removal for haul road crossing	between points 7i and 7j on the tree

and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 removal for trenched crossing

small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 removal for trenched crossing

small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 small scale removal for haul road crossing
 and/or accesses
 removal for Bentley Road improvement works

removal for Bentley Road improvement works

removal for Bentley Road improvement works

removal for Bentley Road improvement works

removal for Bentley Road improvement works

small scale removal for haul road crossing
 and/or accesses

preservation order and hedgerow plan
 between points 7k and 7l on the tree
 preservation order and hedgerow plan
 between points 7m and 7n on the tree
 preservation order and hedgerow plan
 between points 7u and 7v on the tree
 preservation order and hedgerow plan
 between points 7w and 7x on the tree
 preservation order and hedgerow plan
 between points 8a and 8b on the tree
 preservation order and hedgerow plan
 between points 8c and 8d on the tree
 preservation order and hedgerow plan
 between points 8j and 8k on the tree
 preservation order and hedgerow plan
 between points 8m and 8n on the tree
 preservation order and hedgerow plan
 between points 8o and 8p on the tree
 preservation order and hedgerow plan
 between points 8s and 8t on the tree
 preservation order and hedgerow plan
 between points 8u and 8v on the tree
 preservation order and hedgerow plan
 between points 9c and 9d on the tree
 preservation order and hedgerow plan
 between points 10a and 10b on the tree
 preservation order and hedgerow plan
 between points 10o and 10p on the tree
 preservation order and hedgerow plan
 between points 11e and 11f on the tree
 preservation order and hedgerow plan
 between points 12g and 12h on the tree
 preservation order and hedgerow plan
 between points 13g and 13h on the tree
 preservation order and hedgerow plan
 between points 13n and 13o on the tree
 preservation order and hedgerow plan
 between points 13u and 13v on the tree
 preservation order and hedgerow plan
 between points 13x and 13y on the tree
 preservation order and hedgerow plan
 between points 13ad and 13ae on the tree
 preservation order and hedgerow plan
 between points 13af and 13ag on the tree
 preservation order and hedgerow plan
 between points 14c and 14d on the tree
 preservation order and hedgerow plan

SCHEDULE 12

DOCUMENTS TO BE CERTIFIED

Article 41

PART 1

DOCUMENTS FORMING THE ENVIRONMENTAL STATEMENT TO BE CERTIFIED

1. The following documents are included in the list referred to in article 41—

<i>(1)</i> <i>Document Number</i>	<i>(2)</i> <i>Examination Library Reference</i>	<i>(3)</i> <i>Name</i>	<i>(4)</i> <i>Version</i>	<i>(5)</i> <i>Date</i>
3.1.1.1	AS-008	Non Technical Summary	Revision 1	October 2024
3.1.2	APP-014	Chapter 0 - Glossary	Revision 0	July 2024
3.1.3	APP-015	Chapter 1 - Introduction	Revision 0	July 2024
3.1.4	APP-016	Chapter 2 - Need for the Project	Revision 0	July 2024
3.1.5	APP-017	Chapter 3 - Policy and Legislative Context	Revision 0	July 2024
3.1.6	APP-018	Chapter 4 - Site Selection and Assessment of Alternatives	Revision 0	July 2024
3.1.7	APP-019	Chapter 5 - Project Description	Revision 0	July 2024
3.1.8	APP-020	Chapter 6 - EIA Methodology	Revision 0	July 2024
3.1.9	APP-021	Chapter 7 - Technical Consultation	Revision 0	July 2024
3.1.10	APP-022	Chapter 8 - Marine Geology, Oceanography and Physical Processes	Revision 0	July 2024
3.1.11	APP-023	Chapter 9 - Marine Water and Sediment Quality	Revision 0	July 2024
3.1.12	APP-024	Chapter 10 - Benthic and Intertidal Ecology	Revision 0	July 2024
3.1.13	APP-025	Chapter 11 - Fish	Revision 0	July 2024

		and Shellfish Ecology		
3.1.14	APP-026	Chapter 12 - Marine Mammals	Revision 0	July 2024
3.1.15	APP-027	Chapter 13 - Offshore Ornithology	Revision 0	July 2024
3.1.16	APP-028	Chapter 14 - Commercial Fisheries	Revision 0	July 2024
3.1.17	APP-029	Chapter 15 - Shipping and Navigation	Revision 0	July 2024
3.1.18	APP-030	Chapter 16 - Offshore and Intertidal Archaeology and Cultural Heritage	Revision 0	July 2024
3.1.19	APP-031	Chapter 17 - Aviation and Radar	Revision 0	July 2024
3.1.20	APP-032	Chapter 18 - Infrastructure and Other Users	Revision 0	July 2024
3.1.21	APP-033	Chapter 19 - Ground Conditions and Contamination	Revision 0	July 2024
3.1.22	APP-034	Chapter 20 - Onshore Air Quality	Revision 0	July 2024
3.1.23	APP-035	Chapter 21 - Water Resources and Flood Risk	Revision 0	July 2024
3.1.24	APP-036	Chapter 22 - Land Use and Agriculture	Revision 0	July 2024
3.1.25	APP-037	Chapter 23 - Onshore Ecology	Revision 0	July 2024
3.1.26	APP-038	Chapter 24 - Onshore Ornithology	Revision 0	July 2024
3.1.27	APP-039	Chapter 25 - Onshore Archaeology and Cultural Heritage	Revision 0	July 2024
3.1.28	APP-040	Chapter 26 - Noise and Vibration	Revision 0	July 2024
3.1.29	APP-041	Chapter 27 - Traffic and Transport	Revision 0	July 2024
3.1.30	APP-042	Chapter 28 - Human Health	Revision 0	July 2024
3.1.31	APP-043	Chapter 29 -	Revision 0	July 2024

3.1.32	APP-044	Seascape, Landscape and Visual Impact Assessment Chapter 30 - Landscape and Visual Impact Assessment	Revision 0	July 2024
3.1.33.1	AS-010	Chapter 31 - Socio-economics	Revision 1	October 2024
3.1.34	APP-046	Chapter 32 - Tourism and Recreation	Revision 0	July 2024
3.1.35	APP-047	Chapter 33 - Climate Change	Revision 0	July 2024
3.1.36.1	AS-013	Chapter 34 - Major Accidents and Disasters	Revision 1	October 2024

PART 2

EXAMINATION DOCUMENTS FORMING PART OF THE ENVIRONMENTAL STATEMENT TO BE CERTIFIED

2. The following documents are included in the list referred to in article 41—

<i>(1)</i> <i>Document</i> <i>Number</i>	<i>(2)</i> <i>Examination</i> <i>Library</i> <i>Reference</i>	<i>(3)</i> <i>Name</i>	<i>(4)</i> <i>Version</i>	<i>(5)</i> <i>Date</i>
3.3.65	REP1-008	Environmental Statement Appendix 27.2 Abnormal Indivisible Load Access Report	Revision 1	February 2025
9.33	REP5-038	Assessment of the Special Qualities of the Suffolk and Essex East Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note	Revision 1	May 2025
9.37	REP5-040	Environmental Statement Chapter 23 Onshore Ecology Supplemental Information – Technical Note	Revision 1	May 2025
9.29	REP3-040	Updated	Revision 0	March 2025

		Offshore Ornithology Cumulative Effects Assessment		
9.35	REP3-046	Further Information Regarding Marine Mammals Disturbance due to Vessel Presence	Revision 0	March 2025
9.14	REP1-057	Further Information Regarding Marine Mammals	Revision 0	February 2025
9.45	REP4-031	Addendum to Environmental Statement Chapter 33 Climate Change	Revision 0	April 2025
9.49	REP4-035	Addendum to Environmental Statement Chapter 25 Onshore Archaeology and Cultural Heritage	Revision 0	April 2025
9.81	REP5-069	Marine Mammal Assessment Clarifications	Revision 0	May 2025
9.95	REP7-050	Updated offshore ornithology in- combination tables	Revision 0	July 2025

PART 3

OTHER DOCUMENTS TO BE CERTIFIED

3. The following documents are included in the list referred to in article 41—

<i>(1)</i> <i>Document Number</i>	<i>(2)</i> <i>Examination Library Reference</i>	<i>(3)</i> <i>Name</i>	<i>(4)</i> <i>Version</i>	<i>(5)</i> <i>Date</i>
5.1	APP-196	location plan (onshore)	Revision 0	July 2024
5.2	APP-197	location plan (offshore)	Revision 0	July 2024
5.3.1	AS-018	land plans	Revision 1	October 2024
5.4	REP7-006	Crown land plan	Revision 1	July 2025
5.5	APP-200	special category	Revision 0	July 2024

5.6.1	AS-019	land plan works plans (onshore)	Revision 1	October 2024
5.7.1	AS-020	works plans (offshore)	Revision 1	October 2024
5.8	REP6-004	offshore order limits and boundary co- ordinates plan	Revision 2	June 2025
5.9.1	AS-021	access to works plan	Revision 1	October 2024
5.10	APP-205	streets plan	Revision 0	July 2024
5.11	REP3-006	public rights of way plan	Revision 1	March 2025
5.12	REP3-007	tree preservation order and hedgerow plan	Revision 1	March 2025
5.19	REP1-010	temporary traffic regulation order plan	Revision 1	February 2025
6.3	REP7-009	book of reference	Revision 5	July 2025
7.2.2.1		outline LBBG compensation implementation and monitoring plan	Revision 3	July 2025
7.2.4.1	REP6-021	outline kittiwake compensation implementation and monitoring plan	Revision 2	June 2025
7.2.5.1	REP6-025	outline guillemot and razorbill compensation implementation and monitoring plan	Revision 2	June 2025
7.6	REP6-027	outline project environmental management plan	Revision 2	June 2025
7.7		draft marine mammal mitigation protocol	Revision 4	July 2025
7.8	REP5-014	outline site integrity plan for the southern north sea special area of conservation	Revision 1	May 2025
7.9	REP7-021	outline fisheries liaison and coexistence plan	Revision 2	July 2025
7.10	REP8-009	offshore in principle monitoring plan	Revision 3	July 2025

7.11	REP3-015	outline offshore written scheme of investigation	Revision 2	March 2025
7.12	REP5-016 REP5-018 REP5-020	onshore outline written scheme of investigation	Revision 1	May 2025
7.13	REP7-025	outline code of construction practice	Revision 5	July 2025
7.14	REP7-027	outline landscape and ecological management strategy	Revision 6	July 2025
7.15		outline horizontal directional drill method statement and contingency plan	Revision 4	July 2025
7.16		outline construction traffic management plan	Revision 5	July 2025
7.17	REP3-023	outline public rights of way management plan	Revision 1	March 2025
7.18	APP-253	outline skills and employment plan	Revision 0	July 2024
7.19	APP-254	outline operational drainage strategy	Revision 0	July 2024
7.20		outline offshore operations and maintenance plan	Revision 3	July 2025
7.21	APP-256	outline vessel traffic monitoring plan	Revision 0	July 2024
7.22		biodiversity net gain strategy	Revision 2	July 2025
7.24		outline navigation and installation plan	Revision 4	July 2025
2.3	REP5-004	design vision	Revision 1	May 2025
9.52		outline sediment disposal management plan	Revision 3	July 2025
9.53		outline cable specification and installation plan	Revision 4	July 2025
9.57	REP6-055	deep water route cable installation areas (future dredging depths) plan	Revision 1	June 2025
9.65	REP5-046 REP5-047	archaeological mitigation strategy	Revision 0	May 2025

9.66	REP5-048	groundwater risk assessment and monitoring plan – private water supplies and licenced abstractions	Revision 0	May 2025
	REP5-049			
	REP5-050			
	REP5-051			
	REP5-052			
2.5	REP1-004	co-ordination report	Revision 2	February 2025

SCHEDULE 13

ARBITRATION RULES

Article 42

Primary objective

1.—(1) The primary objective of these arbitration rules is to achieve a fair, impartial, final and binding award on the substantive difference between the parties (save as to costs) within four months from the date the arbitrator is appointed pursuant to article 42 (arbitration) of the Order.

(2) The parties will first use their reasonable endeavours to settle a dispute amicably through negotiations undertaken in good faith by the senior management of the parties. Any dispute which is not resolved amicably by the senior management of the parties within twenty working days of the dispute arising, or such longer period as agreed in writing by the parties, will be subject to arbitration in accordance with the terms of this Schedule.

(3) The arbitration will be deemed to have commenced when a party (the “claimant”) serves a written notice of arbitration on the other party (the “respondent”).

Time periods

2.—(1) All time periods in these arbitration rules will be measured in working days and this will exclude weekends and bank holidays.

(2) Time periods will be calculated from the day after the arbitrator is appointed which will be either—

- (a) the date the arbitrator notifies the parties in writing of his/her acceptance of an appointment by agreement of the parties; or
- (b) the date the arbitrator is appointed by the Secretary of State.

Timetable

3.—(1) The timetable for the arbitration will be that set out in sub-paragraphs (2) to (4) below unless amended in accordance with paragraph 5(3).

(2) Within 15 days of the arbitrator being appointed, the claimant must provide both the respondent and the arbitrator with—

- (a) a written statement of claim which describes the nature of the difference between the parties, the legal and factual issues, the claimant’s contentions as to those issues, and the remedy it is seeking; and
- (b) all statements of evidence and copies of all documents on which it relies, including contractual documentation, correspondence (including electronic documents), legal precedents and expert witness reports.

(3) Within 15 days of receipt of the claimant’s statements under sub-paragraph (2) by the arbitrator and respondent, the respondent must provide the claimant and the arbitrator with—

- (a) a written statement of defence responding to the claimant’s statement of claim, its statement in respect of the nature of the difference, the legal and factual issues in the claimant’s claim, its acceptance of any element(s) of the claimant’s claim, its contentions as to those element(s) of the claimant’s claim it does not accept;
- (b) all statements of evidence and copies of all documents on which it relies, including contractual documentation, correspondence (including electronic documents), legal precedents and expert witness reports; and
- (c) any objections it wishes to make to the claimant’s statements, comments on the claimant’s expert report(s) (if submitted by the claimant) and explanations for the objections.

(4) Within five days of the respondent serving its statements sub-paragraph (3), the claimant may make a statement of reply by providing both the respondent and the arbitrator with—

- (a) a written statement responding to the respondent's submissions, including its reply in respect of the nature of the difference, the issues (both factual and legal) and its contentions in relation to the issues;
- (b) all statements of evidence and copies of documents in response to the respondent's submissions;
- (c) any expert report in response to the respondent's submissions;
- (d) any objections to the statements of evidence, expert reports or other documents submitted by the respondent; and
- (e) its written submissions in response to the legal and factual issues involved.

Procedure

4.—(1) The arbitrator will make an award on the substantive difference based solely on the written material submitted by the parties unless the arbitrator decides that a hearing is necessary to explain or resolve any matters.

(2) Either party may, within two days of delivery of the last submission, request a hearing giving specific reasons why it considers a hearing is required.

(3) Within five days of receiving the last submission, the arbitrator will notify the parties whether a hearing is to be held and the length of that hearing.

(4) Within ten days of the arbitrator advising the parties that he will hold a hearing, the date and venue for the hearing will be fixed by agreement with the parties, save that if there is no agreement the arbitrator must direct a date and venue which he considers is fair and reasonable in all the circumstances. The date for the hearing must not be less than 35 days from the date of the arbitrator's direction confirming the date and venue of the hearing.

(5) A decision will be made by the arbitrator on whether there is any need for expert evidence to be submitted orally at the hearing. If oral expert evidence is required by the arbitrator, then any expert(s) attending the hearing may be asked questions by the arbitrator.

(6) There will be no process of examination and cross-examination of experts, but the arbitrator will invite the parties to ask questions of the experts by way of clarification of any answers given by the expert(s) in response to the arbitrator's questions. Prior to the hearing the procedure for the expert(s) will be that—

- (a) at least 20 days before a hearing, the arbitrator will provide a list of issues to be addressed by the expert(s);
- (b) if more than one expert is called, they will jointly confer and produce a joint report or reports within ten days of the issues being provided; and
- (c) the form and content of a joint report will be as directed by the arbitrator and must be provided at least five days before the hearing.

(7) Within ten days of a hearing or a decision by the arbitrator that no hearing is to be held the parties may by way of exchange provide the arbitrator with a final submission in connection with the matters in dispute and any submissions on costs. The arbitrator will take these submissions into account in the award.

(8) The arbitrator may make other directions or rulings as considered appropriate in order to ensure that the parties comply with the timetable and procedures to achieve an award on the substantive difference within four months of the date on which they are appointed, unless both parties otherwise agree to an extension to the date for the award.

(9) If a party fails to comply with the timetable, procedure or any other direction then the arbitrator may continue in the absence of a party or submission or document, and may make a decision on the information before them attaching the appropriate weight to any evidence submitted beyond any timetable or in breach of any procedure and/or direction.

(10) The arbitrator's award must include reasons. The parties will accept that the extent to which reasons are given is to be proportionate to the issues in dispute and the time available to the arbitrator to deliver the award.

Arbitrator's powers

5.—(1) The arbitrator has all the powers of the Arbitration Act 1996^(a), including the non-mandatory sections, save where modified by these rules.

(2) There will be no discovery or disclosure, except that the arbitrator has the power to order the parties to produce such documents as are reasonably requested by another party no later than the statement of reply, or by the arbitrator, where the documents are manifestly relevant, specifically identified and the burden of production is not excessive. Any application and orders should be made by way of a Redfern Schedule without any hearing.

(3) Any time limits fixed in accordance with this procedure or by the arbitrator may be varied by agreement between the parties, subject to any such variation being acceptable to and approved by the arbitrator. In the absence of agreement, the arbitrator may vary the timescales and/or procedure—

- (a) if the arbitrator is satisfied that a variation of any fixed time limit is reasonably necessary to avoid a breach of the rules of natural justice and then; and
- (b) only for such a period that is necessary to achieve fairness between the parties.

(4) On the date the award is made, the arbitrator will notify the parties that the award is completed, signed and dated, and that it will be issued to the parties on receipt of cleared funds for the arbitrator's fees and expenses.

Costs

6.—(1) The costs of the arbitration will include the fees and expenses of the arbitrator, the reasonable fees and expenses of any experts and the reasonable legal and other costs incurred by the parties for the arbitration.

(2) Subject to sub-paragraph (3), the arbitrator will award recoverable costs on the general principle that each party should bear its own costs.

(3) The arbitrator may depart from the general principle in sub-paragraph (2) and make such other costs award as it considers reasonable where a party has behaved unreasonably as defined within the National Planning Practice Guidance or such other guidance as may replace it.

Confidentiality

7.—(1) Subject to sub-paragraphs (2) and (3), any arbitration hearing and documentation will be confidential and will only be publicly disclosed where required by law or with the agreement of both parties.

(2) The arbitrator may direct that the whole or part of a hearing is to be private or any documentation to be confidential where it is necessary in order to protect commercially sensitive information.

(3) Nothing in this paragraph prevents any disclosure of a document by a party pursuant to an order of a court in England and Wales or where disclosure is required under any enactment.

(a) 1996 c. 23.

PROTECTIVE PROVISIONS

PART 1

PROTECTION FOR ELECTRICITY, GAS, WATER AND SEWERAGE
UNDERTAKERS

1. The provisions of this Part have effect for the protection of utility undertakers referred to in this part of this Schedule (save for any utility undertakers which are specifically protected by any other Part of this Schedule, which will take precedence), unless otherwise agreed in writing between the undertaker and the utility undertaker in question.

2. In this Part—

“alternative apparatus” means alternative apparatus adequate to enable the utility undertaker in question to fulfil its statutory functions in a manner no less efficient than previously;

“apparatus” means—

- (a) in the case of a utility undertaker within paragraph (a) of the definition of that term, electric lines or electrical plant (as defined in the Electricity Act 1989^(a)), belonging to or maintained by that licence holder;
- (b) in the case of a utility undertaker within paragraph (b) of the definition of that term, any mains, pipes or other apparatus belonging to or maintained by that gas transporter within the meaning of Part 1 of the Gas Act 1986^(b) for the purposes of gas supply;
- (c) in the case of a utility undertaker within paragraph (c) of the definition of that term, mains, pipes or other apparatus belonging to or maintained by that water undertaker for the purposes of water supply; and
- (d) in the case of a utility undertaker within paragraph (d) of the definition of that term—
 - (i) any drain or works vested in the sewerage undertaker under the Water Industry Act 1991^(c); and
 - (ii) any sewer which is so vested or is the subject of a notice of intention to adopt given under section 102(4) (adoption of sewers and disposal works) of that Act or an agreement to adopt made under section 104 (agreements to adopt sewer, drain or sewerage disposal works, at future date) of that Act^(d),

and includes a sludge main, disposal main (within the meaning of section 219 (general interpretation) of that Act) or sewer outfall and any manholes, ventilating shafts, pumps or other accessories forming part of any such sewer, drain or works,

and includes any structure in which apparatus is or is to be lodged or which gives or will give access to apparatus;

“functions” includes powers and duties;

“in” in a context referring to apparatus or alternative apparatus in land includes a reference to apparatus or alternative apparatus under, over or upon land;

“plan” includes all designs, drawings, specifications, method statements, soil reports, programmes, calculations, risk assessments and other documents that are reasonably necessary properly and sufficiently to describe the works to be executed; and

(a) 1989 c. 29.

(b) 1986 c. 44.

(c) 1991 c. 56.

(d) Section 104 was amended by section 42(3) of the Flood and Water Management Act 2010 (c.29).

“utility undertaker” means—

- (a) any licence holder within the meaning of Part 1 of the Electricity Act 1989;
 - (b) a gas transporter within the meaning of Part 1 of the Gas Act 1986;
 - (c) a water undertaker within the meaning of the Water Industry Act 1991; and
 - (d) a sewerage undertaker within the meaning of Part 1 of the Water Industry Act 1991,
- for the area of the onshore works, and in relation to any apparatus, means the utility undertaker to whom it belongs or by whom it is maintained.

On street apparatus and offshore works

3. This Part does not apply to—

- (a) apparatus in respect of which the relations between the undertaker and the utility undertaker are regulated by the provisions of Part 3 (street works in England and Wales) of the 1991 Act; and
- (b) the offshore works.

Acquisition of land

4. Regardless of any provision of this Order or anything shown on the land plans, the undertaker must not acquire any apparatus otherwise than by agreement.

Removal of apparatus

5.—(1) If, in the exercise of the powers conferred by this Order, the undertaker acquires any interest in any land in which any apparatus is placed or requires that the utility undertaker’s apparatus is relocated or diverted, that apparatus must not be removed under this Part, and any right of a utility undertaker to maintain that apparatus in that land must not be extinguished until alternative apparatus has been constructed and is in operation to the reasonable satisfaction of the utility undertaker in question.

(2) If, for the purpose of executing any works in, on or under any land purchased, held, appropriated or used under this Order, the undertaker requires the removal of any apparatus placed in that land, the undertaker must give to the utility undertaker in question 28 days’ written notice of that requirement, together with a plan of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed; and in that case (or if in consequence of the exercise of any of the powers conferred by this Order a utility undertaker reasonably needs to remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), afford to the utility undertaker the necessary facilities and rights for the construction of alternative apparatus in other land of the undertaker and subsequently for the maintenance of that apparatus.

(3) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2) in the land in which the alternative apparatus or part of such apparatus is to be constructed, the utility undertaker in question must, on receipt of a written notice to that effect from the undertaker, as soon as reasonably possible use reasonable endeavours to obtain the necessary facilities and rights in the land in which the alternative apparatus is to be constructed.

(4) Any alternative apparatus to be constructed in land of the undertaker under this Part must be constructed in such manner and in such line or situation as may be agreed between the utility undertaker in question and the undertaker or in default of agreement settled by arbitration in accordance with article 42 (arbitration).

(5) The utility undertaker in question must, after the alternative apparatus to be provided or constructed has been agreed or settled by arbitration in accordance with article 42 (arbitration), and after the grant to the utility undertaker of any such facilities and rights as are referred to in sub-paragraph (2) or (3), proceed without unnecessary delay to construct and bring into operation

the alternative apparatus and subsequently to remove any apparatus required by the undertaker to be removed under the provisions of this Part.

(6) Regardless of anything in sub-paragraph (5), if the undertaker gives notice in writing to the utility undertaker in question that the undertaker desires itself to execute any work, or part of any work, in connection with the construction or removal of apparatus in any land of the undertaker, that work, instead of being executed by the utility undertaker, must be executed by the undertaker without unnecessary delay under the superintendence, if given, and to the reasonable satisfaction of the utility undertaker.

(7) Nothing in sub-paragraph (6) authorises the undertaker to execute the placing, installation, bedding, packing, removal, connection or disconnection of any apparatus, or execute any filling around the apparatus (where the apparatus is laid in a trench) within 300 millimetres of the apparatus.

Facilities and rights for alternative apparatus

6.—(1) Where, in accordance with the provisions of this Part, the undertaker affords to a utility undertaker facilities and rights for the construction and maintenance in land of the undertaker of alternative apparatus in substitution for apparatus to be removed, those facilities and rights must be granted upon such terms and conditions as may be agreed between the undertaker and the utility undertaker in question or in default of agreement settled by arbitration in accordance with article 42 (arbitration).

(2) In settling those terms and conditions in respect of alternative apparatus to be constructed in or along the authorised development, the arbitrator must—

- (a) give effect to all reasonable requirements of the undertaker for ensuring the safety and efficient operation of the authorised development and for securing any subsequent alterations or adaptations of the alternative apparatus that may be required to prevent interference with any proposed works of the undertaker; and
- (b) so far as it may be reasonable and practicable to do so in the circumstances of the particular case, give effect to the terms and conditions, if any, applicable to the apparatus constructed in or along the authorised project for which the alternative apparatus is to be substituted.

(3) If the facilities and rights to be afforded by the undertaker in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are in the opinion of the arbitrator less favourable on the whole to the utility undertaker in question than the facilities and rights enjoyed by it in respect of the apparatus to be removed and the terms and conditions to which those facilities and rights are subject, the arbitrator must make such provision for the payment of compensation by the undertaker to that utility undertaker as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case.

Retained apparatus

7.—(1) Not less than 28 days before starting the execution of any works in, on or under any land purchased, held, appropriated or used under this Order that are near to, or will or may affect, any apparatus the removal of which has not been required by the undertaker under paragraph 5(2), the undertaker must submit to the utility undertaker in question a plan, section and description of the works to be executed.

(2) Those works must be executed only in accordance with the plan, section and description submitted under sub-paragraph (1) and in accordance with such reasonable requirements as may be made in accordance with sub-paragraph (3) by the utility undertaker for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and the utility undertaker is entitled to watch and inspect the execution of those works.

(3) Any requirements made by a utility undertaker under sub-paragraph (2) must be made within a period of 21 days beginning with the date on which a plan under sub-paragraph (1) is submitted to it.

(4) If a utility undertaker, in accordance with sub-paragraph (3) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, the provisions of this Part apply as if the removal of the apparatus had been required by the undertaker under paragraph 5(2).

(5) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 28 days before commencing the execution of any works, a new plan instead of the plan, section and description previously submitted, and having done so the provisions of this paragraph apply to and in respect of the new plan, section and description.

(6) The undertaker is not required to comply with sub-paragraph (1) in a case of emergency but in that case it must give to the utility undertaker in question notice as soon as is reasonably practicable and a plan of those works as soon as reasonably practicable subsequently and must comply with sub-paragraph (2) in so far as is reasonably practicable in the circumstances.

Expenses and costs

8.—(1) Subject to the following provisions of this paragraph, the undertaker must repay to a utility undertaker the reasonable expenses agreed with the undertaker in advance and reasonably incurred by that utility undertaker in, or in connection with, the inspection, removal, alteration or protection of any apparatus or the construction of any new apparatus which may be required in consequence of the execution of any such works as are referred to in paragraph 5(2).

(2) The value of any apparatus removed under the provisions of this Part must be deducted from any sum payable under sub-paragraph (1), that value being calculated after removal.

(3) If in accordance with the provisions of this Part—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was situated,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement, is not determined by arbitration in accordance with article 42 (arbitration) to be necessary then, if such placing involves cost in the construction of works under this Part exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to the utility undertaker in question by virtue of sub-paragraph (1) must be reduced by the amount of that excess.

(4) For the purposes of sub-paragraph (3)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus must not be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and
- (b) where the provision of a joint in a pipe or cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole must be treated as if it also had been agreed or had been so determined.

(5) An amount which apart from this sub-paragraph would be payable to a utility undertaker in respect of works by virtue of sub-paragraph (1) must, if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on the utility undertaker any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, be reduced by the amount which represents that benefit.

9.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any such works referred to in paragraph 5(2) any damage is caused to any apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of those works) or property of a utility undertaker, or there is any interruption in any service provided, or in the supply of any goods, by any utility undertaker, the undertaker must—

- (a) bear and pay the cost reasonably incurred by that utility undertaker in making good such damage or restoring the supply; and
- (b) make reasonable compensation to that utility undertaker for any other expenses, loss, damages, penalty or costs incurred by the utility undertaker,

by reason or in consequence of any such damage or interruption.

(2) Nothing in sub-paragraph (1) imposes any liability on the undertaker with respect to any damage or interruption to the extent that it is attributable to the act, neglect or default of a utility undertaker, its officers, servants, contractors or agents.

(3) A utility undertaker must give the undertaker reasonable notice of any such claim or demand and no settlement or compromise is to be made without the consent of the undertaker and, if such consent is withheld, the undertaker has the sole conduct of any settlement or compromise or of any proceedings necessary to resist the claim or demand.

Miscellaneous

10. Nothing in this Part affects the provisions of any enactment or agreement regulating the relations between the undertaker and a utility undertaker in respect of any apparatus in land belonging to the undertaker on the date on which this Order is made.

PART 2

FOR THE PROTECTION FOR OPERATORS OF ELECTRONIC COMMUNICATIONS CODE NETWORKS

11. The provisions of this Part have effect unless otherwise agreed in writing between the undertaker and the operator in question.

12. In this Part—

“the 2003 Act” means the Communications Act 2003(a);

“electronic communications apparatus” has the same meaning as in the electronic communications code;

“the electronic communications code” has the same meaning as in section 106(b) (application of the electronic communications code) of the 2003 Act;

“electronic communications code network” means—

- (a) so much of an electronic communications network or infrastructure system provided by an electronic communications code operator as is not excluded from the application of the electronic communications code by a direction under section 106 of the 2003 Act; and
- (b) an electronic communications network which the Secretary of State is providing or proposing to provide;

“electronic communications code operator” means a person in whose case the electronic communications code is applied by a direction under section 106 of the 2003 Act;

“infrastructure system” has the same meaning as in the electronic communications code and references to providing an infrastructure system are to be construed in accordance with paragraph 7 (infrastructure system) of that code; and

“operator” means the operator of an electronic communications code network.

13. The exercise of the powers conferred by article 33 (statutory undertakers) are subject to Part 10 (undertaker’s works affecting electronic communications apparatus) of the electronic communications code.

(a) 2003 c. 21.

(b) Section 106 was amended by section 4 of the Digital Economy Act 2017 (c. 30).

14.—(1) Subject to sub-paragraphs (2) to (4), if as a result of the authorised development or its construction, or of any subsidence resulting from the authorised development—

- (a) any damage is caused to any electronic communications apparatus belonging to an operator (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of the authorised development), or other property of an operator; or
- (b) there is any interruption in the supply of the service provided by an operator,

the undertaker must bear and pay the cost agreed by the undertaker in advance and reasonably incurred by the operator in making good such damage or restoring the supply and must make reasonable compensation to that operator for any loss sustained by it, and must indemnify the operator against claims, demands, proceedings, costs, damages and expenses which may be made or taken against, or recovered from, or incurred by, that operator by reason, or in consequence of, any such damage or interruption.

(2) Nothing in sub-paragraph (1) imposes any liability on the undertaker with respect to any damage or interruption to the extent that it is attributable to the act, neglect or default of an operator, its officers, servants, contractors or agents.

(3) The operator must give the undertaker reasonable notice of any such claim or demand and no settlement or compromise of the claim or demand is to be made without the consent of the undertaker and, if such consent is withheld, the undertaker has the sole conduct of any settlement or compromise or of any proceedings necessary to resist the claim or demand.

(4) Any difference arising between the undertaker and the operator under this Part must be referred to and settled by arbitration under article 42 (arbitration).

(5) This Part does not apply to—

- (a) any apparatus in respect of which the relations between the undertaker and an operator are regulated by the provisions of Part 3 (street works in England and Wales) of the 1991 Act; or
- (b) any damage, or any interruption, caused by electro-magnetic interference arising from the construction or use of the authorised project.

(6) Nothing in this Part affects the provisions of any enactment or agreement regulating the relations between the undertaker and an operator in respect of any apparatus in land belonging to the undertaker on the date on which this Order is made.

PART 3

FOR THE PROTECTION OF THE ENVIRONMENT AGENCY

15. The following provisions apply for the protection of the Agency unless otherwise agreed in writing between the undertaker and the Agency.

16. In this Part of this Schedule—

“the Agency” means the Environment Agency;

“construction” includes execution, placing, altering, replacing, relaying and removal and excavation and “construct” and “constructed” are to be construed accordingly;

“drainage work” means (i) any main river and includes any land which provides flood storage capacity for any main river and any bank, wall, embankment or other structure, or any appliance, constructed or used for land drainage, flood defence or tidal monitoring and (ii) any sea defence;

“emergency” means an occurrence which presents a risk of—

- (a) serious flooding which presents an immediate risk to health, life, property or environment;
- (b) serious detrimental impact on drainage which presents an immediate risk to health, life, property or environment; or

(c) serious harm to the environment which presents an immediate risk of an incident which is likely to cause an impact to a species or habitats.

“fishery” means any waters containing fish and fish in, or migrating to or from, such waters and the spawn, spawning ground, habitat or food of such fish;

“main river” has the same meaning given in section 113 of the Water Resources Act 1991;

“non-tidal main river” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25 to the Environmental Permitting (England and Wales) Regulations 2016;

“plans” includes plans, sections, elevations, drawings, specifications, programmes, calculations, method statements and descriptions;

“remote defence” means any berm, wall or embankment that is constructed for the purposes of preventing or alleviating flooding from, or in connection with, any main river;

“sea defence” means any bank, wall, embankment (and any berm, counterwall or cross-wall connected to any such bank, wall or embankment), barrier, tidal sluice and other defence, whether natural or artificial, against the inundation of land by sea water or tidal water, including natural or artificial high ground which forms part of or makes a contribution to the efficiency of the defences of the Environment Agency’s area against flooding, but excludes any sea defence works which are for the time being maintained by a coast protection authority under the provisions of the Coast Protection Act 1949 or by any local authority or any navigation, harbour or conservancy authority;

“specified work” means—

(a) so much of any work or operation authorised by this Order as is in, on, under, over or within—

(i) 16 metres of the base of a sea defence which is likely to—

(aa) endanger the stability of, cause damage or reduce the effectiveness of that sea defence,

(bb) interfere with the Agency’s access to or along that sea defence or the Agency’s ability to undertake works to ensure the efficacy of that sea defence; or

(ii) 8 metres of the base of a remote defence which is likely to endanger the stability of, cause damage or reduce the effectiveness of that remote defence, or interfere with the Agency’s access to or along that remote defence;

(iii) is within 16 metres of a drainage work involving a tidal main river;

(iv) 8 metres of a drainage work involving a non-tidal main river;

(v) any distance of a drainage work and is likely to—

(aa) affect any drainage work or the volumetric rate of flow of water in or flowing to or from any drainage work;

(bb) affect the flow, purity or quality of water in any main river;

(cc) cause obstruction to the free passage of fish or damage to any fishery;

(dd) affect the conservation, distribution or use of water resources; or

(ee) affect the conservation value of the main river and habitats in its immediate vicinity; or

(b) so much of any work or operation authorised by this Order as is in, on under, over or within 16 metres of a sea defence which is likely to endanger the stability of, cause damage to or reduce the effectiveness of that sea defence, or interfere with the Agency’s access to or along that sea defence;

(c) or which involves an activity that includes dredging, raising or taking of any sand, silt, ballast, clay, gravel or other materials from or off the bed or banks of a drainage work (or causing such materials to be dredged, raised or taken), including hydrodynamic dredging or desilting; and

- (d) which involves an activity any quarrying or excavation within 16 metres of a drainage work which is likely to cause damage to or endanger the stability of the banks or structure of that drainage work; and

“tidal main river” has the meaning given in paragraph 2(1) of Part 1 of Schedule 25 to the Environmental Permitting (England and Wales) Regulations 2016.

Submission and approval of plans

17.—(1) Before beginning to construct any specified work, the undertaker must submit to the Agency plans of the specified work and such further particulars available to it as the Agency may within 28 days of the receipt of the plans reasonably request.

(2) Any such specified work must not be constructed except in accordance with such plans as may be approved in writing by the Agency, or determined under paragraph 29.

(3) Any approval of the Agency required under this paragraph—

- (a) must not be unreasonably withheld or delayed;
- (b) subject to sub-paragraph 17(4), is deemed to have been refused if it is neither given nor refused within 2 months of the submission of the plans or such later date as is agreed between the Agency and the undertaker, and if, further particulars have been requested by the Agency for approval pursuant to sub-paragraph (1) the period between the making of this request and the provision of further particulars in response to it shall not be taken into account in the calculation of the 2 months for the purposes of this sub-paragraph; and
- (c) may be given subject to such reasonable requirements as the Agency may have for the protection of any drainage work or the fishery or for the protection of water resources, or for the prevention of flooding or pollution, or the prevention of environmental harm, or for nature conservation or in the discharge of its environmental duties.

(4) The Agency must use its reasonable endeavours to respond to the submission of any plans before the expiration of the period mentioned in sub-paragraph (3)(b).

(5) If the Agency refuses any approval required under this paragraph then the refusal must be accompanied by a statement of the grounds for refusal.

Construction of protective works

18. Without limiting paragraph 17, but subject always to the provisions of that paragraph as to reasonableness the requirements which the Agency may have under that paragraph include conditions requiring the undertaker at its own expense to construct such protective works, whether temporary or permanent, before or during the construction of the specified works (including the provision of flood banks, walls or embankments or other new works and the strengthening, repair or renewal of existing banks, walls or embankments) as are reasonably necessary—

- (a) to safeguard any drainage work against damage;
- (b) to secure that its efficiency for flood defence purposes is not impaired and that the risk of flooding is not otherwise increased; or
- (c) by reason of any specified work.

Timing of works and service of notices

19.—(1) Subject to sub-paragraph (2), any specified work, and all protective works required by the Agency under paragraph 18, must be constructed—

- (a) without unreasonable delay in accordance with the plans approved under this Part of this Schedule; and
- (b) to the reasonable satisfaction of the Agency, and
- (c) the Agency is entitled by its officer to watch and inspect the construction of such works.

(2) The undertaker must give to the Agency not less than 14 days' notice in writing of its intention to commence construction of any specified work and notice in writing of its completion not later than 7 days after the date on which it is completed.

(3) If the Agency reasonably requires, the undertaker must construct all or part of the protective works so that they are in place prior to the construction of any specified work to which the protective works relate.

Works not in accordance with this Part of this Schedule

20.—(1) If any part of a specified work or any protective work required by the Agency is constructed otherwise than in accordance with the requirements of this Part of this Schedule, the Agency may by notice in writing require the undertaker at the undertaker's own expense to comply with the requirements of this Part of this Schedule or (if the undertaker so elects and the Agency in writing consents, such consent not to be unreasonably withheld or delayed) to remove, alter or pull down the work and, where removal is required, to restore the site to its former condition to such extent and within such limits as the Agency reasonably requires.

(2) Subject to sub-paragraph (3), if, within a reasonable period, being not less than 28 days beginning with the date when a notice under sub-paragraph (1) is served upon the undertaker, the undertaker has failed to begin taking steps to comply with the requirements of the notice and has not subsequently made reasonably expeditious progress towards their implementation, the Agency may execute the works specified in the notice, and any expenditure incurred by the Agency in so doing shall be recoverable from the undertaker.

(3) In the event of any dispute as to whether sub-paragraph (1) is properly applicable to any work in respect of which notice has been served under that sub-paragraph, or as to the reasonableness of any requirement of such a notice, the Agency shall not, except in the case of an emergency, exercise the powers conferred by sub-paragraph (2) until the dispute has been finally determined in accordance with paragraph 29.

Maintenance of works

21.—(1) Subject to sub-paragraph (7) the undertaker must from the commencement of the construction of the specified works maintain in good repair and condition and free from obstruction any drainage work which is situated within the Order limits and on land held by the undertaker for the purposes of or in connection with the specified works, whether or not the drainage work is constructed under the powers conferred by this Order or is already in existence.

(2) If any such drainage work which the undertaker is liable to maintain is not maintained to the reasonable satisfaction of the Agency, the Agency may by notice in writing require the undertaker to repair and restore the work, or any part of such work, or (if the undertaker so elects and the Agency in writing consents, such consent not to be unreasonably withheld or delayed), to remove the work and restore the site to its former condition, to such extent and within such limits as the Agency reasonably requires.

(3) Subject to sub-paragraph (5), if, within a reasonable period, being not less than 28 days beginning with the date on which a notice in respect of any drainage work is served under sub-paragraph (2) on the undertaker, the undertaker has failed to begin taking steps to comply with the requirements of the notice and has not subsequently made reasonably expeditious progress towards their implementation, the Agency may do what is reasonably necessary for such compliance and any reasonable expenditure incurred by the Agency in so doing is recoverable from the undertaker.

(4) If there is any failure by the undertaker to obtain consent or comply with conditions imposed by the Agency in accordance with these Protective Provisions and where the Agency (acting reasonably) considers it necessary to avoid any of the risks specified in sub-paragraph (5), the Agency may serve written notice requiring the undertaker to cease all or part of the specified works as may be specified within the notice within such reasonable period specified in the notice, and the undertaker must cease the specified works or part thereof until it has obtained the consent

or complied with the condition unless the cessation of the specified works or part thereof would cause greater damage than compliance with the written notice.

(5) The risks specified in sub-paragraph (4) are:

- (a) risk of flooding;
- (b) risk of harm to the environment;
- (c) risk of detrimental impact on drainage; and
- (d) damage to the fishery.

(6) In the event of any dispute as to the reasonableness of any requirement of a notice served under sub-paragraph (2), the Agency must not, except in the case of an emergency, exercise the powers conferred by sub-paragraph (3) until the dispute has been finally determined in accordance with paragraph 29.

(7) This paragraph does not apply to:

- (a) drainage works which are vested in the Agency, or which the Agency or another person is liable to maintain and is not proscribed by the powers of the Order from doing so; and
- (b) any obstruction of a drainage work for the purpose of a work or operation authorised by this Order and carried out in accordance with the provisions of this Part of this Schedule.

Remediating impaired drainage work

22. If by reason of the construction of any specified work or of the failure of any such work, the efficiency of any drainage work for flood defence purposes is impaired, or that drainage work is otherwise damaged, such impairment or damage must be made good by the undertaker to the reasonable satisfaction of the Agency and if the undertaker fails to do so, the Agency may make good the impairment or damage and recover any expenditure reasonably incurred by the Agency in so doing from the undertaker.

Agency access

23. If by reason of the construction of any specified work the Agency's access to flood defences or equipment maintained for flood defence purposes is materially obstructed, the undertaker must notify the Agency as soon as reasonably practicable and provide such alternative means of access that will allow the Agency to maintain the flood defence or use the equipment no less effectively than was possible before the obstruction occurred, and such alternative access must be made available as soon as reasonably practicable after the undertaker becoming aware of such obstruction, except in the case of an emergency in which case the undertaker must provide such alternative means of access on demand

Free passage of fish.

24.—(1) The undertaker must take all such measures as may be reasonably practicable to prevent any interruption of the free passage of fish in the fishery during the construction of any specified work.

(2) If by reason of—

- (a) the construction of any specified work; or
- (b) the failure of any such work,

damage to the fishery is caused, or the Agency has reason to expect that such damage may be caused, the Agency may serve notice on the undertaker requiring it to take such steps as may be reasonably practicable to make good the damage, or, as the case may be, to protect the fishery against such damage.

(3) If within such time as may be reasonably practicable for that purpose after the receipt of written notice from the Agency of any damage or expected damage to a fishery, the undertaker fails to take such steps as are described in the notice served under sub-paragraph (2), the Agency

may take those steps and any expenditure incurred by the Agency in so doing are recoverable from the undertaker.

(4) In any case where immediate action by the Agency is reasonably required in an emergency in order to secure that the risk of damage to the fishery is avoided or reduced, the Agency may take such steps as are reasonable for the purpose, and may recover from the undertaker any expenditure incurred in so doing provided that notice specifying those steps is served on the undertaker as soon as reasonably practicable after the Agency has taken, or commenced to take, the steps specified in the notice.

Monitoring of Sea Defence

25.—(1) Prior to commencing any work using any trenchless installation technique forming part of Work Nos. 3 or 4A within plots 01-001, 01-002, 01-004, 01-005 and 01-006, the undertaker must obtain the approval in writing of the Agency of a plan specifying the monitoring of the sea defence which is to be carried out by the undertaker.

(2) The plan required under sub-paragraph (1) must set out how monitoring on the seawall of the sea defence during construction to measure any movement will be carried out including:

- (a) The outcomes of detailed ground investigation and baseline monitoring of any preexisting seawall movement work undertaken by the undertaker;
- (b) the methodology of the trenchless installation technique to be used under the seawall;
- (c) the risk assessment for the selected trenchless installation technique works under the seawall;
- (d) details and plans of the proposed works under the seawall including sections;
- (e) the equipment to be used to carry out monitoring of the seawall;
- (f) the location(s) for the installation of monitoring equipment;
- (g) the scope and timing of the monitoring to be carried out; and
- (h) a process for the reporting of the results of the monitoring to the Agency by the undertaker.

(3) Any work to which sub-paragraph (1) applies may not be commenced unless and until the monitoring plan has been approved by the Agency.

(4) Any approval of the Agency required under this paragraph—

- (a) must not be unreasonably withheld or delayed;
- (b) is deemed to have been approved if it is neither given nor refused within 2 months of the submission of the monitoring plan required by sub-paragraph (1).
- (c) may be given subject to such reasonable requirements as the Agency may have for the protection of any drainage work or the fishery or for the protection of water resources, or for the prevention of flooding or pollution or for nature conservation or in the discharge of its environmental duties.

(5) If the Agency refuses any approval required under this paragraph then the refusal must be accompanied by a statement of the grounds for refusal.

Heavy vehicle movements during construction

26.—(1) Access for the undertaker over plot 01-001 and 01-004 during the construction of the relevant authorised works must not be used by vehicles that exceed a maximum gross weight of 7.5 tonnes unless otherwise agreed in writing, including details of any additional protection measures, between the undertaker and the agency (acting reasonably).

(2) The undertaker is not required to comply with sub-paragraph (1) in the case of an emergency.

As built drawings

27. As soon as reasonably practicable following the completion of the construction of Works Nos. 4B or 4C within plots 01-001, 01-002, 01-004, 01-005 and 01-006, , the undertaker must provide to the Agency as-built drawings in a form and scale to be agreed in writing between the undertaker and the Agency (acting reasonably) to show location and depths of the cable ducts as installed which must include identification markings on the sea defence.

Indemnity

28.—(1) The undertaker indemnifies the Agency in respect of all costs, charges and expenses which the Agency may reasonably incur—

- (a) in the examination or approval of plans under this Part of this Schedule;
- (b) in the inspection of the construction of the specified works or any protective works required by the Agency under this Part of this Schedule; and
- (c) in the carrying out of any surveys or tests by the Agency which are reasonably required in connection with the construction of the specified works.

(2) The undertaker is responsible for and indemnifies the Agency against all costs and losses, liabilities, claims and demands, not otherwise provided for in this Schedule which may be reasonably incurred or suffered by the Agency by reason of—

- (a) the construction, operation or maintenance of any specified works comprised within the authorised development or the failure of any such works comprised within them; or
- (b) any act or omission of the undertaker, its employees, contractors or agents or others whilst engaged upon the construction, operation or maintenance of the authorised development or dealing with any failure of the authorised development.

(3) For the avoidance of doubt, in sub-paragraph (1)—

“costs” includes—

- (a) expenses and charges;
- (b) staff costs and overheads;
- (c) legal costs;

“losses” includes physical damage.

(4) For the avoidance of doubt, in sub-paragraph (3)—

“claims” and “demands” include as applicable—

- (a) costs (within the meaning of sub-paragraph (2)) incurred in connection with any claim or demand; and
- (b) any interest element of sums claimed or demanded;

“liabilities” includes—

- (a) contractual liabilities;
- (b) tortious liabilities (including liabilities for negligence or nuisance);
- (c) liabilities to pay statutory compensation or for breach of statutory duty;
- (d) liabilities to pay statutory penalties imposed on the basis of strict liability (but does not include liabilities to pay other statutory penalties).

(5) The Agency must give to the undertaker reasonable written notice of any such claim or demand as is referred to in sub-paragraph (1) as soon as reasonably practicable after it becomes aware of such claim or demand, and no settlement or compromise of any such claim or demand is to be made without the prior agreement of the undertaker and that agreement must not be unreasonably withheld or delayed.

(6) The Agency must, at all times take reasonable steps to prevent and mitigate any such claims, demands, proceedings, costs, damages, expenses or loss.

(7) The fact that any work or thing has been executed or done by the undertaker in accordance with a plan approved by the Agency, or to its satisfaction, or in accordance with any directions or award of an arbitrator, must not relieve the undertaker from any liability under the provisions of this Part of this Schedule.

(8) Nothing in this paragraph imposes any liability on the undertaker with respect to any costs, charges, expenses, damages, claims, demands or losses to the extent that they are attributable to the neglect or default of the Agency, its officers, servants, contractors or agents.

Disputes

29. Any dispute arising between the undertaker and the Agency under this Part of this Schedule will, if the parties agree, be determined by arbitration under article 42 (arbitration), but failing agreement will be determined by the Secretary of State for the Environment, Food and Rural Affairs or its successor and the Secretary of State for Energy Security and Net Zero or its successor acting jointly on a reference to them by the undertaker or the Agency, after notice in writing by one to the other.

PART 4

FOR THE PROTECTION OF DRAINAGE AUTHORITIES

30. The provisions of this Part have effect for the protection of the drainage authority unless otherwise agreed in writing between the undertaker and the drainage authority.

31. In this Part of this Schedule—

“construction” includes execution, placing, altering, replacing, relaying and removal and excavation and “construct” and “constructed” is to be construed accordingly;

“drainage authority” means in relation to an ordinary watercourse, the drainage board concerned within the meaning of section 23 (prohibition on obstructions etc. in watercourses) of the Land Drainage Act 1991^(a);

“drainage work” means any ordinary watercourse and includes any bank, wall, embankment or other structure, or any appliance, constructed or used for land drainage or flood defence in connection with an ordinary watercourse within the jurisdiction of the drainage authority;

“emergency” means a situation where, if the relevant action is not taken, there will be adverse health, safety, security or environmental consequences;

“independent review” means a review carried out by a third party confirming the findings of the undertaker in the assessment of the impact of the proposed specified work on flood risk;

“ordinary watercourse” has the meaning given by section 72 (interpretation) of the Land Drainage Act 1991;

“plans” includes any information reasonably required by the drainage authority including location details, grid references, sections, drawings, specifications, assessments and method statements; and

“specified work” means so much of any work or operation authorised by this Order as is in, on, under over or within 9 metres of a drainage work and which comprises any of the following works carried out in relation to or which may affect any ordinary watercourse—

- (a) the erection of any mill, dam, weir, or other similar obstruction to the flow of an ordinary watercourse, or raising or otherwise altering any such obstruction;
- (b) the construction or installation of a bridge or other structure;
- (c) the erection of a culvert in an ordinary watercourse;

(a) 1991 c. 59.

- (d) the alteration of an ordinary watercourse or a culvert or other form of drainage infrastructure in a manner that would be likely to affect the flow of an ordinary watercourse.

32.—(1) Before commencing construction of a specified work, the undertaker must submit to the drainage authority plans of the specified work, including an independent review and such further particulars available to it as the drainage authority may within 21 days of the submission of the plans reasonably request.

(2) The undertaker must not commence construction of the specified work until approval, unconditionally or conditionally, has been given as provided in this paragraph.

(3) A specified work must not be constructed except in accordance with such plans as may be approved in writing by the drainage authority or determined under this paragraph.

(4) Any approval of the drainage authority required under this paragraph—

- (a) must not be unreasonably withheld or delayed;
- (b) is deemed to have been given if it is neither given nor refused within 56 days of the submission of the plans for approval, or submission of further particulars (where required by the drainage authority under sub-paragraph (1)) whichever is the later; and
- (c) may be given subject to such reasonable requirements as the drainage authority may make for the protection of any drainage work, for the protection of any ordinary watercourse or for the prevention of flooding.

(5) Any refusal under this paragraph must be accompanied by a statement of the reasons for refusal.

(6) “Reasonable” in this paragraph means appropriate in the circumstances and, for avoidance of doubt any recommendation or requirement from the drainage authority relating to health and safety shall be considered reasonable;

33. Without limiting paragraph 32, the requirements which the drainage authority may make under that paragraph include conditions requiring the undertaker at its own expense to construct such protective works, whether temporary or permanent, during the construction of the specified work (including the provision of flood banks, walls or embankments or other new works and the strengthening, repair or renewal of existing banks, walls or embankments) as are reasonably necessary—

- (a) to safeguard any drainage work against damage by reason of any specified work; or
- (b) to secure that the efficiency of any drainage work for flood defence and land drainage purposes is not impaired, and that the risk of flooding is not otherwise increased, by reason of any specified work.

34.—(1) Subject to sub-paragraph (2), any specified work, and all protective works required by the drainage authority under paragraph 33, must be constructed—

- (a) without unreasonable delay in accordance with the plans approved or deemed to have been approved or settled under this Part of this Schedule; and
- (b) to the reasonable satisfaction of the drainage authority, and an officer of the drainage authority is entitled to watch and inspect the construction of such works.

(2) The undertaker must give to the drainage authority—

- (a) not less than 14 days’ notice in writing of its intention to commence construction of any specified work; and
- (b) notice in writing of its completion not later than 7 days after the date of completion.

(3) If the drainage authority reasonably requires, the undertaker must construct all or part of the protective works so that they are in place before the construction of the specified work to which the protective works relate.

(4) If any part of a specified work or any protective work required by the drainage authority is constructed otherwise than in accordance with the requirements of this Part of this Schedule, the drainage authority may by notice in writing require the undertaker at the undertaker’s expense to

comply with the requirements of this Part of this Schedule or (if the undertaker so elects and the drainage authority in writing consents, such consent not to be unreasonably withheld or delayed) to remove, alter or pull down the work and, where removal is agreed, to restore the site to its former condition to such extent and within such limits as the drainage authority reasonably requires.

(5) Subject to sub-paragraph (6) and paragraphs 38 and 39, if within a reasonable period, being not less than 28 days from the date when a notice under sub-paragraph (4) is served on the undertaker, the undertaker has failed to begin taking steps to comply with the requirements of the notice and subsequently to make reasonably expeditious progress towards their implementation, the drainage authority may execute the works specified in the notice and any reasonable expenditure incurred by it in so doing is recoverable from the undertaker.

(6) In the event of any dispute as to whether sub-paragraph (4) is properly applicable to any work in respect of which notice has been served under that sub-paragraph, or as to the reasonableness of any requirement of such a notice, the drainage authority must not except in an emergency exercise the powers conferred by sub-paragraph (5) until the dispute has been finally determined in accordance with paragraph 40.

35.—(1) Subject to sub-paragraph (5), the undertaker must from the commencement of the construction of the specified work maintain in good repair and condition and free from obstruction any drainage work which is situated within the limits of deviation on land held by the undertaker for the purpose of or in connection with the specified work, whether or not the drainage work is constructed under the powers conferred by this Order or is already in existence.

(2) If any drainage work which the undertaker is liable to maintain is not maintained to the reasonable satisfaction of the drainage authority, the drainage authority may by notice in writing require the undertaker to repair and restore the work, or any part of the work, or (if the undertaker so elects and the drainage authority in writing consents, such consent not to be unreasonably withheld or delayed), to remove the specified work and restore the site to its former condition, to such extent and within such limits as the drainage authority reasonably requires.

(3) Subject to sub-paragraph (4) and paragraphs 38 and 39, if, within a reasonable period being not less than 28 days beginning with the date on which a notice in respect of any drainage work is served under sub-paragraph (2) on the undertaker, the undertaker has failed to begin taking steps to comply with the reasonable requirements of the notice and has not subsequently made reasonably expeditious progress towards their implementation, the drainage authority may do what is reasonably necessary for such compliance and may recover any reasonable expenditure reasonably incurred by it in so doing from the undertaker.

(4) In the event of any dispute as to the reasonableness of any requirement of a notice served under sub-paragraph (2), the drainage authority must not except in a case of emergency exercise the powers conferred by sub-paragraph (3) until the dispute has been finally determined in accordance with paragraph 42.

(5) This paragraph does not apply to—

- (a) drainage works which are vested in the drainage authority, or which the drainage authority or another person is liable to maintain and is not prevented by this Order from so doing; and
- (b) any obstruction of a drainage work for the purpose of a work or operation authorised by this Order and carried out in accordance with the provisions of this Part of this Schedule provided that any obstruction is removed as soon as reasonably practicable.

36. Subject to paragraphs 38 and 39 and paragraph 35(5)(b), if by reason of the construction of any specified work or of the failure of any such work the efficiency of any drainage work for flood defence purposes or land drainage is impaired, or that drainage work is otherwise damaged, such impairment or damage must be made good by the undertaker to the reasonable satisfaction of the drainage authority and, if the undertaker fails to do so, the drainage authority may make good the impairment or damage and recover from the undertaker any expenditure incurred by the drainage authority in so doing from the undertaker.

37. If by reason of the construction of the specified work the drainage authority's access to flood defences or equipment maintained for flood defence purposes is materially obstructed, the undertaker must provide such alternative means of access that will allow the drainage authority to maintain the flood defence or use the equipment no less effectively than was possible before the obstruction within 24 hours of the undertaker becoming aware of such obstruction.

38. The undertaker must make reasonable compensation for costs, charges and expenses which the drainage authority may reasonably incur—

- (a) in the examination or approval of plans under this Part of this Schedule;
- (b) in the inspection of the construction of the specified works or any protective works required by the drainage authority under this Part of this Schedule; and
- (c) in the carrying out of any surveys or tests by the drainage authority which are reasonably required in connection with the construction of the specified works.

39.—(1) Without limiting the other provisions of this Part, the undertaker must make reasonable compensation to the drainage authority from costs and losses which may be reasonably incurred or suffered by the drainage authority by reason of—

- (a) any damage to any drainage work;
- (b) any raising or lowering of the water table in land adjoining the authorised development or any sewers, drains and watercourses; or
- (c) any flooding or increased flooding of any such lands,

caused by the construction of any specified work or any act or omission of the undertaker, its contractors, agents or employees whilst engaged upon the construction of the specified work.

(2) The drainage authority must take such steps as are reasonable in the circumstances to mitigate in whole or in part and to minimise any costs, expenses, loss, claims, damages, demands, proceedings and penalties to which the indemnity under this paragraph applies where it is within the drainage authority's reasonable gift and control to do so and which expressly excludes any obligation to mitigate liability arising from third parties which is outside of the drainage authority's control. If reasonably requested to do so by the undertaker, the drainage authority must provide a written explanation of how any claim has been mitigated or minimised or where mitigation or minimisation is not possible an explanation as to why.

40.—(1) The drainage authority must give to the undertaker reasonable notice of any such claim or demand. The undertaker may at its own expense conduct all negotiations for the settlement of the same and any litigation that may arise therefrom. No settlement or compromise may be made to such claim or any admission made which might be prejudicial to the claim without the agreement of the undertaker which agreement must not be unreasonably withheld or delayed.

(2) The drainage authority must, at the request of the undertaker, afford all reasonable assistance for the purpose of contesting any such claim or action and is entitled to be repaid its reasonable expenses reasonably incurred in so doing.

41. The fact that any act or thing may have been done by the drainage authority on behalf of the undertaker or in accordance with a plan approved or deemed to have been approved by the drainage authority or in accordance with any requirement of the drainage authority or under its supervision does not, subject to paragraph 40(2), excuse the undertaker from liability under the provisions of paragraph 39(1) unless the drainage authority fails to carry out and execute the works properly with due care and attention and in a skilful and professional like manner or in a manner that does not accord with the approved plan.

42. Nothing in paragraph 39(1) imposes any liability on the undertaker with respect to any damage or loss to the extent that it is attributable to the act, neglect or default of the drainage authority, its officers, servants, contractors or agents.

43. The fact that any work or thing has been executed or done by the undertaker in accordance with a plan approved or deemed to be approved by the drainage authority, or to its satisfaction, or

in accordance with any directions or award of an arbitrator, does not relieve the undertaker from any liability under this Part of this Schedule.

44. Any dispute arising between the undertaker and the drainage authority under this Part of this Schedule, if the parties agree, is to be determined by arbitration under article 42 (arbitration), but otherwise is to be determined by the Secretary of State for Energy Security and Net Zero on a reference to them by the undertaker or the drainage authority, after notice in writing by one to the other.

PART 5

FOR THE PROTECTION OF NETWORK RAIL

45. The following provisions of this Part of this Schedule have effect, unless otherwise agreed in writing between the undertaker and Network Rail and, in the case of paragraph 51, of this Part of this Schedule any other person on whom rights or obligations are conferred by that paragraph.

46. In this Part of this Schedule—

“asset protection agreement” means an agreement to regulate the construction and maintenance of the specified work in a form prescribed from time to time by Network Rail;

“construction” includes execution, placing, alteration and reconstruction and “construct” and “constructed” have corresponding meanings;

“the engineer” means an engineer appointed by Network Rail for the purposes of this Order;

“network licence” means the network licence, as the same is amended from time to time, granted to Network Rail Infrastructure Limited by the Secretary of State in exercise of his powers under section 8(1)(licences) of the Railways Act 1993(a);

“Network Rail” means Network Rail Infrastructure Limited (company number 02904587, whose registered office is at 1 Eversholt Street, London NW1 2DN) and any associated company of Network Rail Infrastructure Limited which holds property for railway purposes, and for the purpose of this definition “associated company” means any company which is (within the meaning of section 1159 of the Companies Act 2006) the holding company of Network Rail Infrastructure Limited, a subsidiary of Network Rail Infrastructure Limited or another subsidiary of the holding company of Network Rail Infrastructure Limited and any successor to Network Rail Infrastructure Limited’s railway undertaking;

“plans” includes sections, designs, design data, software, drawings, specifications, soil reports, calculations, descriptions (including descriptions of methods of construction), staging proposals, programmes and details of the extent, timing and duration of any proposed occupation of railway property;

“protective works” means the underpinning, strengthening and any other works the purpose of which is to prevent damage that may be caused by the carrying out, maintenance or use of the authorised development;

“railway operational procedures” means procedures specified under any access agreement (as defined in the Railways Act 1993) or station lease;

“railway property” means any railway belonging to Network Rail and—

- (a) any station, land, works, apparatus and equipment belonging to Network Rail or connected with any such railway; and
- (b) any easement or other property interest held or used by Network Rail or a tenant or licensee of Network Rail for the purposes of such railway or works, apparatus or equipment;

“regulatory consents” means any consent or approval required under—

(a) 1993 c. 43.

- (a) the Railways Act 1993;
- (b) the network licence; and/or
- (c) any other relevant statutory or regulatory provisions;

by either the Office of Rail and Road or the Secretary of State for Transport or any other competent body including change procedures and any other consents, approvals of any access or beneficiary that may be required in relation to the authorised development;

“specified work” means so much of any of the authorised development as is situated upon, across, under, over or within 15 metres of, or may in any way adversely affect, railway property, and for the avoidance of doubt, includes the maintenance of such works under the powers conferred by article 4 (power to maintain the authorised development) in respect of such works.

47.—(1) Where under this Part of this Schedule Network Rail is required to give its consent or approval in respect of any matter, that consent or approval is subject to the condition that Network Rail complies with any relevant railway operational procedures and any obligations under its network licence or under statute.

(2) In so far as any specified work or the acquisition or use of railway property is or may be subject to railway operational procedures, Network Rail must—

- (a) co-operate with the undertaker with a view to avoiding undue delay and securing conformity as between any plans approved by the engineer and requirements emanating from those procedures; and
- (b) use their reasonable endeavours to avoid any conflict arising between the application of those procedures and the proper implementation of the authorised development pursuant to this Order.

(3) The undertaker must not in the exercise of the powers conferred by this Order prevent pedestrian or vehicular access to any railway property, unless preventing such access is with the consent of Network Rail.

(4) The undertaker must not exercise the powers conferred by sections 271 or 272 of the 1990 Act or article 33 (statutory undertakers) in relation to any right of access of Network Rail to railway property, but such right of access may be extinguished or diverted with the consent of Network Rail.

(5) The undertaker must not under the powers of this Order do anything which would directly result in railway property being incapable of being used or maintained or which would affect the safe running of trains on the railway.

(6) Where Network Rail is asked to give its consent pursuant to this paragraph, such consent must not be unreasonably withheld but may be given subject to reasonable conditions but it shall never be unreasonable to withhold consent for reasons of operational or railway safety (such matters to be in Network Rail’s absolute discretion).

(7) The undertaker must enter into an asset protection agreement prior to the carrying out of any specified work.

48.—(1) The undertaker must before commencing construction of any specified work supply to Network Rail proper and sufficient plans of that work for the reasonable approval of the engineer and the specified work must not be commenced except in accordance with such plans as have been approved in writing by the engineer or settled by arbitration under article 42 (arbitration).

(2) The approval of the engineer under sub-paragraph (1) must not be unreasonably withheld, and if by the end of the period of 28 days beginning with the date on which such plans have been supplied to Network Rail the engineer has not intimated their disapproval of those plans and the grounds of such disapproval, the undertaker may serve upon the engineer written notice requiring the engineer to intimate his approval or disapproval within a further period of 28 days beginning with the date upon which the engineer receives written notice from the undertaker. If by the expiry of the further 28 days the engineer has not intimated his approval or disapproval, the engineer shall be deemed to have approved the plans as submitted.

(3) If by the end of the period of 28 days beginning with the date on which written notice was served upon the engineer under sub-paragraph (2), Network Rail gives notice to the undertaker that Network Rail desires itself to construct any part of a specified work which in the opinion of the engineer will or may affect the stability of railway property or the safe operation of traffic on the railways of Network Rail then, subject to Network Rail seeking consent from the undertaker (the undertaker acting reasonably) and if the undertaker desires such part of the specified work to be constructed, Network Rail must construct it without unnecessary delay on behalf of and to the absolute satisfaction of the undertaker in accordance with the plans approved or deemed to be approved or settled under this paragraph, and under the supervision (where appropriate and if given) of the undertaker.

(4) When signifying their approval of the plans the engineer may specify any protective works (whether temporary or permanent) which in their reasonable opinion should be carried out before the commencement of the construction of a specified work to ensure the safety or stability of railway property or the continuation of safe and efficient operation of the railways of Network Rail or the services of operators using the same (including any relocation de-commissioning and removal of works, apparatus and equipment necessitated by a specified work and the comfort and safety of passengers who may be affected by the specified works), and such protective works as may be reasonably necessary for those purposes must be constructed by Network Rail or by the undertaker, if Network Rail so desires, and such protective works must be carried out at the reasonable expense of the undertaker in either case without reasonable delay and the undertaker must not commence the construction of the specified works until the engineer has notified the undertaker that the protective works have been completed to their reasonable satisfaction.

(5) The undertaker shall not be required to comply with sub-paragraph (1) in a case of emergency but in that case it shall give to Network Rail notice as soon as is reasonably practicable, and in addition to that notice shall provide a plan, section and description of those works as soon as reasonably practicable subsequently.

49.—(1) Any specified work and any protective works to be constructed by virtue of paragraph 48(4) must, when commenced, be constructed—

- (a) without unnecessary delay in accordance with the plans approved or deemed to have been approved or settled under paragraph 48;
- (b) under the supervision (where appropriate and if given) and to the reasonable satisfaction of the engineer;
- (c) in such manner as to cause as little damage as is possible to railway property; and
- (d) so far as is reasonably practicable, so as not to interfere with or obstruct the free, uninterrupted and safe use of any railway of Network Rail or the traffic thereon and the use by passengers of railway property.

(2) If any damage to railway property or any such interference or obstruction shall be caused by the carrying out of the construction of a specified work, the undertaker must, notwithstanding any such approval, make good such damage and must pay to Network Rail all reasonable expenses to which Network Rail may be put and reasonable compensation for any loss which it may sustain by reason of any such damage, interference or obstruction but always excluding any consequential loss or indirect loss.

(3) Nothing in this Part of this Schedule imposes any liability on the undertaker with respect to any damage, costs, expenses or loss attributable to the negligence of Network Rail or its employees, contractors or agents or any liability on Network Rail with respect of any damage, costs, expenses or loss attributable to the negligence of the undertaker or its employees, contractors or agents.

50. The undertaker must—

- (a) at all times afford reasonable facilities to the engineer for access to a specified work during its construction; and
- (b) supply the engineer with all such information as they may reasonably require with regard to a specified work or the method of constructing it.

51. Network Rail must at all times afford reasonable facilities to the undertaker and its employees, contractors or agents for access to any works carried out by Network Rail under this Part during their construction and must supply the undertaker with such information as it may reasonably require with regard to such works or the method of constructing them.

52.—(1) If any permanent or temporary alterations or additions to railway property, are reasonably necessary in consequence of the construction of a specified work in order to ensure the safety of railway property or the continued safe operation of the railway of Network Rail, such alterations and additions may be carried out by Network Rail and if Network Rail gives to the undertaker 56 days' written notice (or in the event of an emergency or safety critical issue such notice as is reasonable in the circumstances) of its intention to carry out such alterations or additions (which must be specified in the notice), the undertaker must pay to Network Rail the reasonable cost of those alterations or additions including, in respect of any such alterations and additions as are to be permanent, a capitalised sum representing the increase of the costs which may be expected to be reasonably incurred by Network Rail in maintaining, working, and when necessary, renewing any such alterations or additions.

(2) If during the construction of a specified work by the undertaker, Network Rail gives notice to the undertaker that Network Rail desires itself to construct that part of the specified work which in the opinion of the engineer is endangering the stability of railway property or the safe operation of traffic on the railways of Network Rail then, if the undertaker decides that part of the specified work is to be constructed and provides its consent, (such matters to be in the undertaker's absolute discretion) Network Rail must assume construction of that part of the specified work and the undertaker must, notwithstanding any such approval of a specified work under paragraph 48(3), pay to Network Rail all reasonable expenses to which Network Rail may be put and reasonable compensation for any loss which it may suffer by reason of the execution by Network Rail of that specified work provided that at all times Network Rail will be under an obligation to take reasonable steps to mitigate its loss and always excluding any consequential loss or indirect loss.

(3) The engineer must, in respect of the capitalised sums referred to in this paragraph and paragraph 53(a) provide such details of the formula by which those sums have been calculated as the undertaker may reasonably require.

(4) If the cost of maintaining, working or renewing railway property is reduced in consequence of any such alterations or additions a capitalised sum representing such saving must be set off against any sum payable by the undertaker to Network Rail under this paragraph.

53. The undertaker must repay to Network Rail all reasonable fees, costs, charges and expenses reasonably incurred by Network Rail—

- (a) in constructing any part of a specified work on behalf of the undertaker as provided by paragraph 48(3) or in constructing any protective works under the provisions of paragraph 48(4) including, in respect of any permanent protective works, a capitalised sum representing the cost of maintaining and renewing those works;
- (b) in respect of the approval by the engineer of plans submitted by the undertaker and the supervision by them of the construction of a specified work;
- (c) in respect of the employment or procurement of the services of any inspectors, signallers, guards and other persons whom it shall be reasonably necessary to appoint for inspecting, signalling, watching and lighting railway property and for preventing, so far as may be reasonably practicable, interference, obstruction, danger or accident arising from the construction or failure of a specified work;
- (d) in respect of any special traffic working resulting from any speed restrictions which may in the opinion of the engineer, require to be imposed by reason or in consequence of the construction or failure of a specified work or from the substitution or diversion of services which may be reasonably necessary for the same reason; and
- (e) in respect of any additional temporary lighting of railway property in the vicinity of the specified works, being lighting made reasonably necessary by reason or in consequence of the construction or failure of a specified work.

54.—(1) In this paragraph—

“EMI” means, subject to sub-paragraph (2), electromagnetic interference with Network Rail apparatus generated by the operation of the authorised development where such interference is of a level which adversely affects the safe operation of Network Rail’s apparatus; and

“Network Rail’s apparatus” means any lines, circuits, wires, apparatus or equipment (whether or not modified or installed as part of the authorised development) which are owned or used by Network Rail for the purpose of transmitting or receiving electrical energy or of radio, telegraphic, telephonic, electric, electronic or other like means of signalling or other communications.

(2) This paragraph applies to EMI only to the extent that such EMI is not attributable to any change to Network Rail’s apparatus carried out after approval of plans under paragraph 48(1) for the relevant part of the authorised development giving rise to EMI (unless the undertaker has been given notice in writing before the approval of those plans of the intention to make such change).

(3) Subject to sub-paragraph (5), the undertaker must in the design and construction of the authorised development take all measures necessary to prevent EMI and must establish with Network Rail (both parties acting reasonably) appropriate arrangements to verify their effectiveness.

(4) In order to facilitate the undertaker’s compliance with sub-paragraph (3)—

- (a) the undertaker must consult with Network Rail as early as reasonably practicable to identify all Network Rail’s apparatus which may be at risk of EMI, and thereafter must continue to consult with Network Rail (both before and after formal submission of plans under paragraph 48(1)) in order to identify all potential causes of EMI and the measures required to eliminate them;
- (b) Network Rail must make available to the undertaker all information in the possession of Network Rail reasonably requested by the undertaker in respect of Network Rail’s apparatus identified pursuant to paragraph (a); and
- (c) Network Rail must allow the undertaker reasonable facilities for the inspection of Network Rail’s apparatus identified pursuant to paragraph (a).

(5) In any case where it is established that EMI can only reasonably be prevented by modifications to Network Rail’s apparatus, Network Rail must not withhold its consent unreasonably to modifications of Network Rail’s apparatus, but the means of prevention and the method of their execution must be selected in the reasonable discretion of Network Rail, and in relation to such modifications paragraph 48(1) has effect subject to the sub-paragraph.

(6) Prior to the commencement of operation of the authorised development the undertaker shall test the use of the authorised development in a manner that shall first have been agreed with Network Rail and if, notwithstanding any measures adopted pursuant to sub-paragraph (3), the testing of the authorised development causes EMI then the undertaker must immediately upon receipt of notification by Network Rail of such EMI either in writing or communicated orally (such oral communication to be confirmed in writing as soon as reasonably practicable after it has been issued) forthwith cease to use (or procure the cessation of use of) the undertaker’s apparatus causing such EMI until all measures necessary have been taken to remedy such EMI by way of modification to the source of such EMI or (in the circumstances, and subject to the consent, specified in sub-paragraph (5)) to Network Rail’s apparatus.

(7) In the event of EMI having occurred—

- (a) the undertaker must afford reasonable facilities to Network Rail for access to the undertaker’s apparatus in the investigation of such EMI;
- (b) Network Rail must afford reasonable facilities to the undertaker for access to Network Rail’s apparatus in the investigation of such EMI;
- (c) Network Rail must make available to the undertaker any additional material information in its possession reasonably requested by the undertaker in respect of Network Rail’s apparatus or such EMI; and
- (d) the undertaker shall not allow the use or operation of the authorised development in a manner that has caused or will cause EMI until measures have been taken in accordance with this paragraph to prevent EMI occurring.

(8) Where Network Rail approves modifications to Network Rail's apparatus pursuant to sub-paragraphs (5) or (6)—

- (a) Network Rail must allow the undertaker reasonable facilities for the inspection of the relevant part of Network Rail's apparatus;
- (b) any modifications to Network Rail's apparatus approved pursuant to those sub-paragraphs must be carried out and completed by the undertaker in accordance with paragraph 49.

(9) To the extent that it would not otherwise do so, the indemnity in paragraph 58(1) applies to the costs and expenses reasonably incurred or losses suffered by Network Rail through the implementation of the provisions of this paragraph (including costs incurred in connection with the consideration of proposals, approval of plans, supervision and inspection of works and facilitating access to Network Rail's apparatus) or in consequence of any EMI to which sub-paragraph (6) applies.

(10) For the purpose of paragraph 53(a) any modifications to Network Rail's apparatus under this paragraph shall be deemed to be protective works referred to in that paragraph.

(11) In relation to any dispute arising under this paragraph the reference in article 42 (arbitration) to the Institution of Civil Engineers shall be read as a reference to the Institution of Engineering and Technology.

55. If at any time after the completion of a specified work, not being a work vested in Network Rail, Network Rail gives notice to the undertaker informing it that the state of maintenance of any part of the specified work appears to be such as that it adversely affects the operation of railway property, the undertaker must, on receipt of such notice, take such steps as may be reasonably necessary to put that specified work in such state of maintenance as not adversely to affect railway property.

56. The undertaker must not provide any illumination or illuminated sign or signal on or in connection with a specified work in the vicinity of any railway belonging to Network Rail unless it has first consulted Network Rail and it must comply with Network Rail's reasonable requirements for preventing confusion between such illumination or illuminated sign or signal and any railway signal or other light used for controlling, directing or securing the safety of traffic on the railway.

57. Any additional expenses which Network Rail may reasonably incur in altering, reconstructing or maintaining railway property under any powers existing at the making of this Order by reason of the existence of a specified work must, provided that 56 days' previous notice of the commencement of such alteration, reconstruction or maintenance has been given to the undertaker, be repaid by the undertaker to Network Rail.

58.—(1) The undertaker must pay to Network Rail all reasonable costs, charges, damages and expenses (but always excluding any consequential or indirect loss) not otherwise provided for in this Part of this Schedule (subject to article 49 (no double recovery)) which may be occasioned to or reasonably incurred by Network Rail—

- (a) by reason of the undertaker's construction, maintenance or operation of a specified work or the failure thereof;
- (b) by reason of any act or omission of the undertaker or of any person in its employment or of its contractors or others whilst engaged upon a specified work;
- (c) by reason of any act or omission of the undertaker or any person in its employment or of its contractors or others whilst accessing to or egressing from the authorised development;
- (d) in respect of any damage caused to or additional maintenance required to, railway property or any such interference or obstruction or delay to the operation of the railway as a result of access to or egress from the authorised development by the undertaker or any person in its employ or of its contractors or others; and

- (e) in respect of costs incurred by Network Rail in complying with any railway operational procedures or obtaining any regulatory consents which procedures are required to be followed or consents obtained to facilitate the construction or operation of the authorised development;

and the undertaker must indemnify and keep indemnified Network Rail from and against all claims and demands arising out of or in connection with a specified work or any such failure, act or omission, provided Network Rail will be under an obligation to take reasonable steps to mitigate its loss and always excluding any consequential loss or indirect loss.

(2) The fact that any act or thing may have been done by Network Rail on behalf of the undertaker or in accordance with plans approved by the engineer or in accordance with any requirement of the engineer or under the engineer's supervision shall not (if it was done without negligence on the part of Network Rail or of any person in its employ or of its contractors or agents) excuse the undertaker from any liability under this Part.

(3) Network Rail must give the undertaker reasonable written notice of any such claim or demand and no settlement or compromise of such a claim or demand shall be made without the prior consent of the undertaker. Network Rail must take such steps as are within its control and are reasonable in the circumstances to mitigate any liabilities relating to such claims or demands.

(4) The sums payable by the undertaker under sub-paragraph (1) shall include a sum equivalent to the relevant costs.

(5) Subject to the terms of any agreement between Network Rail and a train operator regarding the timing or method of payment of the relevant costs in respect of that train operator, Network Rail must promptly pay to each train operator the amount of any sums which Network Rail receives under sub-paragraph (3) which relates to the relevant costs of that train operator.

(6) The obligation under sub-paragraph (3) to pay Network Rail the relevant costs shall, in the event of default, be enforceable directly by any train operator concerned to the extent that such sums would be payable to that operator pursuant to sub-paragraph (4).

(7) In this paragraph—

“the relevant costs” means the costs, losses and expenses (including loss of revenue) reasonably incurred by each train operator as a consequence of any restriction of the use of Network Rail's railway network as a direct result of the construction, maintenance or failure of a specified work or any such act or omission as mentioned in sub-paragraph (1); and

“train operator” means any person who is authorised to act as the operator of a train by a licence under section 8 of the Railways Act 1993.

59. Network Rail must, on receipt of a request from the undertaker, from time to time provide the undertaker free of charge with written estimates of the costs, charges, expenses and other liabilities for which the undertaker is or will become liable under this Part (including the amount of the relevant costs reasonably incurred and mentioned in paragraph 58) and with such information as may reasonably enable the undertaker to assess the reasonableness of any such estimate or claim made or to be made pursuant to this Part of this Schedule (including any claim relating to those relevant costs).

60. In the assessment of any sums payable to Network Rail under this Part there must not be taken into account any increase in the sums claimed that is attributable to any action taken by or any agreement entered into by Network Rail if that action or agreement was not reasonably necessary and was taken or entered into with a view to obtaining the payment of those sums by the undertaker under this Part of this Schedule or increasing the sums so payable.

61. The undertaker and Network Rail may, subject in the case of Network Rail to compliance with the terms of its network licence, enter into, and carry into effect, agreements for the transfer to the undertaker of—

- (a) any railway property shown on the works and land plans and described in the book of reference;
- (b) any lands, works or other property held in connection with any such railway property; and

- (c) any rights and obligations (whether or not statutory) of Network Rail relating to any railway property or any lands, works or other property referred to in this paragraph.

62. Nothing in this Order, or in any enactment incorporated with or applied by this Order, prejudices or affects the operation of Part I of the Railways Act 1993.

63. The undertaker must give written notice to Network Rail if any application is proposed to be made by the undertaker for the Secretary of State's consent, under article 5 (benefit of the Order) of this Order and any such notice must be given no later than 28 days before any such application is made and must describe or give (as appropriate)—

- (a) the nature of the application to be made;
- (b) the extent of the geographical area to which the application relates; and
- (c) the name and address of the person acting for the Secretary of State to whom the application is to be made.

64. The undertaker must no later than 28 days from the date that the plans submitted to and certified by the Secretary of State in accordance with article 41 (certification of plans and documents, etc.) are certified by the Secretary of State, provide a set of those plans to Network Rail in the format reasonably specified by Network Rail.

65. In relation to any dispute arising under this Part of this Schedule (except for those disputes referred to in paragraph 54(11)) any such dispute, unless otherwise provided for, must be referred to and settled by a single arbitrator to be agreed between the parties or, failing agreement, to be appointed on the application of either party (after giving notice in writing to the other) to the President of the Institution of Civil Engineers.

PART 6

FOR THE PROTECTION OF NATIONAL HIGHWAYS

Application etc.,

66. The provisions of this Part of this Schedule apply for the protection of National Highways and have effect unless otherwise agreed in writing between the undertaker and National Highways.

Interpretation

67.—(1) Where the terms defined in article 2 (interpretation) of this Order are inconsistent with sub-paragraph (3) the latter prevail.

(2) Where any provision of this Part of this Schedule requires National Highways to act reasonably, then for the avoidance of doubt, any recommendation, request for information or condition for approval that relates to health and safety of the highway network within National Highways' jurisdiction will be considered reasonable.

(3) In this Part of this Schedule—

“as built information” means one electronic copy of the following information (in so far as it is relevant to the works concerned)—

- (a) as constructed drawings in both PDF and AutoCAD DWG formats for any SRN work designed by the undertaker; in compliance with Interim Advice Note 184 or any successor document, and for the cable works, showing the location and depth of the cable as installed and any ancillary or protective measures installed within the strategic road network;
- (b) list of suppliers and materials used, as well as any relevant test results and CCTV surveys (if required to comply with DMRB standards);
- (c) product data sheets and technical specifications for all materials used;

- (d) as constructed information for any utilities discovered or moved during the works;
- (e) method statements for the works carried out;
- (f) in relation to road lighting, signs, and traffic signals any information required by Series 1300 and 1400 of the Specification for Highway Works or any replacement or modification of it;
- (g) organisation and methods manuals for all products used;
- (h) as constructed programme;
- (i) test results and records as required by the detailed design information and during construction phase of the project;
- (j) a stage 3 road safety audit subject to any exceptions to the road safety audit standard as agreed by the undertaker and National Highways;
- (k) the health and safety file; and
- (l) such other information as is reasonably required by National Highways to be used to update all relevant databases and to ensure compliance with National Highway's Asset Data Management Manual as is in operation at the relevant time.

“the bond sum” means the sum equal to 200% of the cost of carrying out the SRN works (to include all costs) plus 100% of the commuted sum or such other sum as is agreed;

“cable works” means any works under this Order which consist of the installation of cables, cable ducts, tunnels for cables and cable ducts and related or associated works to those operations, all under the strategic road network and to be installed through the use of trenchless installation techniques where no works are required to or on the operational carriageway;

“cash surety” means the sum equal to 200% of the cost of carrying out the SRN works (to include all costs) or such other sum as is agreed;

“the commuted sum” means the sum agreed as being the necessary contribution by the undertaker to the increase in costs incurred by National Highways of maintaining new strategic highway assets constructed as SRN works under this Order for ten years from the issue of the final certificate;

“condition survey” means a survey of the condition of National Highways structures and assets within the Order limits that may be affected by the SRN works and cable works;

“contractor” means any contractor or subcontractor appointed by the undertaker to carry out the works;

“defects period” means the period from the date of the provisional certificate to the date of the final certificate which may be no less than 12 months from the date of the provisional certificate;

“detailed design information” means such of the following drawings specifications and calculations as are relevant—

for the SRN works—

- (a) site clearance details;
- (b) boundary, environmental and mitigation fencing;
- (c) road restraints systems and supporting road restraint risk appraisal process assessment;
- (d) drainage and ducting as required by DMRB CD 535 Drainage asset data and risk management and DMRB CS551 Drainage surveys – standards for Highways;
- (e) earthworks including supporting geotechnical assessments required by DMRB CD622 Managing geotechnical risk and any required strengthened earthworks appraisal form certification;
- (f) pavement, pavement foundations, kerbs, footways and paved areas;
- (g) traffic signs and road markings;
- (h) traffic signal equipment and associated signal phasing and timing detail;

- (i) road lighting (including columns and brackets);
- (j) regime of California Bearing Ratio testing;
- (k) electrical work for road lighting, traffic signs and signals;
- (l) motorway communications as required by DMRB;
- (m) highway structures and any required structural approval in principle;
- (n) landscaping;
- (o) proposed departures from DMRB standards;
- (p) walking, cycling and horse riding assessment and review report;
- (q) stage 1 and stage 2 road safety audits and exceptions agreed;
- (r) utilities diversions;
- (s) topographical survey;
- (t) maintenance and repair strategy in accordance with DMRB GD304 Designing health and safety into maintenance or any replacement or modification of it; or

for the cable works—

- (a) earthworks including supporting geotechnical assessments required by DMRB CD622 Managing geotechnical risk and any required strengthened earthworks appraisal form certification;
- (b) health and safety information including any asbestos survey required by GG105 or any successor document; and
- (c) other such information that may be required by National Highways to be used to inform the detailed design of the cable works;

“DMRB” means the Design Manual for Roads and Bridges or any replacement or modification of it;

“final certificate” means the certificate relating to those aspects of the SRN works that have resulted in any alteration to the strategic road network to be issued by National Highways pursuant to paragraph 79;

“the health and safety file” means the file or other permanent record containing the relevant health and safety information for the authorised development required by the Construction Design and Management Regulations 2015 (or such updated or revised regulations as may come into force from time to time);

“highway operations and maintenance contractor” means the contractor appointed by National Highways under the DBFO contract;

“nominated persons” means the undertaker’s representatives or the contractor’s representatives on site during the carrying out of the cable works or SRN works as notified to National Highways from time to time;

“programme of works” means a document setting out the sequence and timetabling of the cable works or SRN works;

“provisional certificate” means the certificate of provisional completion relating to those aspects of either the cable works or the SRN works that have resulted in any alteration to the strategic road network to be issued by National Highways in accordance with paragraph 74 or 75 as appropriate when it considers the SRN works or cable works are substantially complete;

“road safety audit” means an audit carried out in accordance with the road safety audit standard;

“road safety audit standard” means DMRB Standard HD GG119 or any replacement or modification of it;

“road space booking” means road space bookings in accordance with National Highways’ Asset Management Operational Requirements (AMOR) including Network Occupancy Management System (NOMS) used to manage road space bookings and network occupancy;

“SRN works” means so much of any work authorised by this Order which involve works to the carriageway or verge of any part of the strategic road network, or to operational assets ancillary thereto including highway drainage, and specifically including the alteration of a junction as authorised as part of Work No. 9, and including any maintenance of that work, as is on, in, or over the strategic road network for which National Highways is the highway authority;

“Specification for Highways Works” means the specification for highways works forming part of the manual of contract documents for highway works published by National Highways and setting out the requirements and approvals procedures for work, goods or materials used in the construction, improvement or maintenance of the strategic road network;

“strategic road network” means any part of the road network including trunk roads, special roads or streets for which National Highways is the highway authority including drainage infrastructure, street furniture, verges and vegetation and all other land, apparatus and rights located in, on, over or under the highway;

“utilities” means any pipes wires cables or equipment belonging to any person or body having power or consent to undertake street works under the New Roads and Street Works Act 1991; and

“winter maintenance” means maintenance of the road surface to deal with snow and ice.

(4) References to any standards, manuals, contracts, Regulations and Directives including to specific standards forming part of the DMRB are, for the purposes of this Part of this Schedule, to be construed as a reference to the same as amended, substituted or replaced, and with such modifications as are required in those circumstances.

General

68. No works in carrying out, maintaining or diverting the cable works may be carried out under the strategic road network at a distance within 4 metres of the lowest point of the ground.

69. In respect of a road that is managed under a DBFO contract both National Highways and the highway operations and maintenance contractor shall have the benefit of this Part of Schedule 14 but for the purposes of any approvals required under this Part of Schedule 14 the undertaker shall liaise directly with National Highways.

Works outside the Order limits

70. If the undertaker proposes to carry out works to the strategic road network that are outside of the Order Limits in connection with the authorised development, the undertaker must enter into an agreement with National Highways in respect of the carrying out of those works prior to the commencement of those works.

Prior approvals

71.—(1) The SRN works must not commence until—

- (a) a stage 1 and stage 2 road safety audit has been carried out and all recommendations raised by them or any exceptions are approved by National Highways (acting reasonably);
- (b) the programme of works has been approved by National Highways (acting reasonably);
- (c) the detailed design of the SRN works comprising of the following details, insofar as considered relevant by National Highways, has been submitted to and approved by National Highways (acting reasonably)—
 - (i) the detailed design information, incorporating all recommendations and any exceptions approved by National Highways under paragraph (a);
 - (ii) details of the proposed road space bookings;
 - (iii) the identity and suitability of the contractor and nominated persons;

- (iv) a process for stakeholder liaison, with key stakeholders to be identified and agreed between National Highways and the undertaker; and
 - (v) information demonstrating that the process undertaken by the undertaker in relation to the SRN works has been adhered to in accordance with DMRB GG142 – Designing for walking, cycling and horse riding;
- (d) a scheme of traffic management has been submitted by the undertaker and approved by National Highways such scheme to be capable of amendment by agreement between the undertaker and National Highways from time to time;
 - (e) stakeholder liaison has taken place in accordance with the process for such liaison agreed between the undertaker and National Highways under sub-paragraph (c)(iv) above;
 - (f) National Highways has approved the audit brief and CVs for all road safety audits and exceptions to items raised in accordance with the road safety audit standard;
 - (g) the undertaker has agreed the estimate of the commuted sum with National Highways;
 - (h) the scope of all maintenance operations (routine inspections, incident management, reactive and third party damage) to be carried out by the undertaker during the construction of the SRN works (which may include winter maintenance if relevant) has been agreed in writing by National Highways;
 - (i) the undertaker has procured to National Highways collateral warranties in a form approved by National Highways (acting reasonably) from the contractor and designer of the SRN works in favour of National Highways to include covenants requiring the contractor and designer to exercise all reasonable skill care and diligence in designing and constructing the SRN works, including in the selection of materials, goods, equipment and plant; and
 - (j) a condition survey and regime of monitoring of any National Highways assets or structures that National Highways reasonably considers will be affected by the SRN works, has been agreed in writing by National Highways.
- (2) The cable works must not commence until—
- (a) the detailed design of the cable works including supporting geotechnical assessments required by DMRB CD622 Managing geotechnical risk and any required strengthened earthworks appraisal form certification, has been submitted to and approved by National Highways; and
 - (b) a condition survey and regime of monitoring of any National Highways assets or structures that National Highways reasonably considers will be affected by the SRN works, has been agreed in writing by National Highways.
- (3) National Highways must prior to the commencement of the cable works and SRN works inform the undertaker of the identity of the person who will act as a point of contact on behalf of National Highways for consideration of the information required under sub-paragraph (1).
- (4) Any approval of National Highways required under this paragraph—
- (a) must not be unreasonably withheld;
 - (b) must be given in writing;
 - (c) will be deemed to have been refused if neither given nor refused within 2 months of the receipt of the information for approval or where further particulars are requested by National Highways, within 2 months of receipt of the information to which the request for further particulars relates; and
 - (d) may be subject to any conditions as National Highways acting reasonably considers necessary.
- (5) Any change to the identity of the contractor and/or designer of the SRN works will be notified to National Highways immediately and details of their suitability to deliver the SRN works will be provided on request along with collateral warranties in a form agreed by National Highways.

(6) Any change to the detailed design of the SRN works must be approved by National Highways in accordance with paragraph (1) of this Part.

Construction of the cable works and SRN works

72.—(1) The undertaker must give National Highways 14 days' notice in writing of the date on which the cable works and/or the SRN works will start unless otherwise agreed by National Highways.

(2) The undertaker must comply with National Highways' road space booking procedures prior to and during the carrying out the SRN works and no SRN works for which a road space booking is required may commence without a road space booking having first been secured from National Highways.

(3) The cable works and SRN works must be carried out by the undertaker to the reasonable satisfaction of National Highways in accordance with—

- (a) the relevant detailed design information and programme of works approved pursuant to paragraph 71(1) or 71(2) above or as subsequently varied by agreement between the undertaker and National Highways;
- (b) the DMRB, the Manual of Contract Documents for Highway Works, including the Specification for Highway Works, together with all other relevant standards as required by National Highways to include, inter alia; all relevant interim advice notes, the Traffic Signs Manual and the Traffic Signs Regulations and General Directions 2016 save to the extent that exceptions from those standards apply which have been approved by National Highways; and
- (c) all aspects of the Construction (Design and Management) Regulations 2015 or any statutory amendment or variation of the same.

(4) The undertaker must permit and must require the contractor to permit at all reasonable times persons authorised by National Highways (whose identity must have been previously notified to the undertaker by National Highways) to gain access to the cable works and SRN works for the purposes of inspection and supervision of those works.

(5) If any part of the cable works or SRN works is constructed—

- (a) other than in accordance with the requirements of this Part of this Schedule; or
- (b) in a way that causes damage to the highway, highway structure or asset or any other land of National Highways,
- (c) National Highways may by notice in writing require the undertaker, at the undertaker's own expense, to comply promptly with the requirements of this Part of this Schedule or remedy any damage notified to the undertaker under this Part of this Schedule, to the reasonable satisfaction of National Highways.

(6) If during the carrying out of the authorised development the undertaker or its appointed contractors or agents causes damage to the strategic road network then National Highways may by notice in writing require the undertaker, at its own expense, to remedy the damage.

(7) In constructing the cable works and SRN works, the undertaker must at its own expense divert or protect all utilities and all agreed alterations and reinstatement of highway over existing utilities must be constructed to the reasonable satisfaction of National Highways.

(8) The undertaker must notify National Highways if it fails to complete the SRN works in accordance with the agreed programme pursuant to paragraph 71(1)(b) of this Part or suspends the carrying out of any SRN work beyond 14 days and National Highways reserves the right to withdraw any road space booking granted to the undertaker to ensure compliance with its network occupancy requirements.

Payments

73.—(1) The undertaker must pay to National Highways a sum equal to the whole of any reasonable costs and expenses which National Highways reasonably incurs (including costs and

expenses for using internal or external staff) in relation to the cable works and SRN works and in relation to any approvals sought under this Order, or otherwise incurred under this Part, including—

- (a) the checking and approval of the information required under paragraphs 71(1) and 71(2);
- (b) the supervision of the cable works and SRN works;
- (c) the checking and approval of the information required to determine approvals under this Order;
- (d) costs in relation to the transfer of any land required for the SRN works and cable works;
- (e) all legal and administrative costs and disbursements reasonably incurred by National Highways in connection with paragraphs (a)-(d) of this sub-paragraph; and
- (f) any value added tax which is payable by National Highways only in respect of such costs and expenses arising under this paragraph and for which it cannot obtain reinstatement from HM Revenue and Customs,

together comprising “the NH costs”.

(2) National Highways must provide the undertaker with a schedule showing its estimate of the NH costs prior to the commencement of the cable works and SRN works. Where the undertaker accepts that the estimate of costs is reasonable, the undertaker must pay to National Highways the estimate of the NH costs prior to commencing the SRN works or cable works. Where the undertaker does not accept that the estimate of costs is reasonable, escalation under sub-paragraph (6) will apply.

(3) If at any time after the payment referred to in this sub-paragraph has become payable, National Highways reasonably believes that the NH costs will exceed the estimated NH costs it may give notice to the undertaker of the amount that it believes the NH costs will exceed the estimate of the NH costs (the excess). Where the undertaker accepts that the estimate of the excess is reasonable, the undertaker must pay to National Highways the estimate of the excess within 30 days of the date of receipt of a properly issued VAT invoice from National Highways addressed to the undertaker for the excess. Where the undertaker does not accept that the estimate of the excess is reasonable, escalation under sub-paragraph (6) will apply.

(4) National Highways must give the undertaker a final account of the NH costs referred to in sub-paragraph (1) above within 30 days of the issue of the provisional certificate issued pursuant to paragraphs 74(4) or 75(3).

(5) Within 30 days of the issue of the final account—

- (a) if the final account shows a further sum as due to National Highways the undertaker must pay to National Highways the sum shown due to it; and
- (b) if the account shows that the payment or payments previously made by the undertaker have exceeded the costs incurred by National Highways, National Highways must refund the difference to the undertaker.

(6) Where the undertaker does not agree that an estimate provided by National Highways under this paragraph is reasonable, the undertaker must notify National Highways of that within 15 days of receiving the estimate. The undertaker and National Highways will escalate the estimate internally and will each nominate a senior officer to attend a discussion on the estimate. Where the parties fail to reach agreement following such discussion, any difference or dispute over reasonableness of any excess sum shall be determined by expert determination in accordance with paragraph 86.

Provisional Certificate for SRN works

74.—(1) Following any closure or partial closure of any of the strategic road network for the purposes of carrying out the SRN works, National Highways will carry out a site inspection to satisfy itself that the strategic road network is, in its opinion, safe for traffic and the undertaker must comply with any requirements of National Highways prior to reopening the strategic road network.

(2) As soon as the undertaker considers that the provisional certificate may be properly issued it must apply to National Highways for the provisional certificate.

(3) Following an application for a provisional certificate, National Highways must as soon as reasonably practicable—

- (a) inspect the SRN works; and
- (b) provide the undertaker with a written list of works that are required for the provisional certificate to be issued or confirmation that no further works are required for this purpose.

(4) When—

- (a) a stage 3 road safety audit for the SRN works has been carried out and all recommendations raised including remedial works have (subject to any exceptions agreed) been approved by National Highways;
- (b) the SRN works incorporating the approved remedial works under sub-paragraph (a) and any further works notified to the undertaker pursuant to sub-paragraph (3)(b) have been completed to the reasonable satisfaction of National Highways;
- (c) the as built information has been provided to National Highways; and
- (d) the undertaker has paid the commuted sum to National Highways,

National Highways must issue the provisional certificate.

(5) On the issue of the provisional certificate the bond sum shall be reduced to 20% of the total bond sum save insofar as any claim or claims have been made against the bond before that date in which case National Highways will retain a sufficient sum to ensure it does not have to meet any costs for or arising from the SRN works.

(6) The undertaker must submit a stage 4 road safety audits as required by and in line with the timescales stipulated in the road safety audit standard. The undertaker must comply with the findings of the stage 4 road safety audit and must pay all costs of and incidental to such and provide updated as-built information to National Highways.

(7) In this paragraph, ‘reasonable satisfaction’ means fair, proper and moderate under the circumstances, having regard to the details approved under paragraph 71.

Provisional Certificate for cable works

75.—(1) As soon as the undertaker considers that the provisional certificate for the cable works may be properly issued it must apply to National Highways for the provisional certificate.

(2) Following an application for a provisional certificate, National Highways must as soon as reasonably practicable—

- (a) inspect the area of the highway within the strategic road network over the route of the cable works; and
- (b) provide the undertaker with a written list of works that are required for the provisional certificate to be issued or confirmation that no further works are required for this purpose.

(3) When the cable works incorporating any further works notified to the undertaker pursuant to sub-paragraph (2)(b) have been completed to the reasonable satisfaction of National Highways, National Highways must issue the provisional certificate.

Opening

76. The undertaker must notify National Highways not less than 14 days in advance of the intended date of opening to the public of the strategic road network and the undertaker must notify National Highways of the actual date the strategic road network will be opened to the public within 14 days of that date.

Final condition survey

77.—(1) The undertaker must, as soon as reasonably practicable after making its application for a provisional certificate pursuant to paragraph 74(2) or 75(1), arrange for any highways structures and assets that were the subject of the condition survey to be re-surveyed and must submit the re-survey to National Highways for its approval. The re-survey will include a renewed geotechnical assessment required by DMRB CD622 for the SRN works, cable works and any other works beneath the strategic road network.

(2) If the re-surveys carried out pursuant to sub-paragraph (1) indicates that any damage has been caused to a structure or asset, the undertaker must submit a scheme for remedial works in writing to National Highways for its approval in writing (acting reasonably) and the undertaker must carry out the remedial works at its own cost and in accordance with the scheme submitted.

(3) If the undertaker fails to carry out the remedial work in accordance with the approved scheme, National Highways may carry out the steps required of the undertaker and may recover any expenditure it reasonably incurs in so doing.

(4) National Highways may, at its discretion, at the same time as giving its approval to the re-surveys pursuant to sub-paragraph (1) give notice in writing that National Highways will remedy any damage identified in the re-surveys and National Highways may recover any expenditure it reasonably incurs in so doing.

(5) The undertaker must make available to National Highways upon request copies of any survey or inspection reports produced pursuant to any inspection or survey of any cable work or SRN work following its completion that the undertaker may from time to time carry out.

Defects Period

78.—(1) The undertaker must at its own expense remedy any defects in the strategic road network resulting from the carrying out of the SRN works as are reasonably required by National Highways to be remedied during the defects period. All identified defects must be remedied in accordance with the following timescales—

- (a) in respect of matters of urgency, within 24 hours of receiving notification for the same (urgency to be determined at the absolute discretion of National Highways);
- (b) in respect of matters which National Highways considers to be serious defects or faults, within 14 days of receiving notification of the same; and
- (c) in respect of all other defects notified to the undertaker, within 4 weeks of receiving notification of the same.

(2) Following the expiry of the defects period National Highways has responsibility for routine maintenance of the strategic road network save for any soft landscaping works which must be established and which must thereafter be maintained for a period of 3 years by and at the expense of the undertaker.

Final Certificate

79.—(1) The undertaker must apply to National Highways for the final certificate no sooner than 12 months from the date of the provisional certificate for the SRN works pursuant to paragraph 74(2) and provisional certificate for cable works pursuant to paragraph 75(1).

(2) Following receipt of the application for the final certificate, National Highways must as soon as reasonably practicable—

- (a) inspect the strategic road network; and
- (b) provide the undertaker with a written list of any further works required to remedy or make good any defect or damage in the strategic road network or confirmation that no such works are required for this purpose.

(3) The undertaker must carry out such works notified to it pursuant to sub-paragraph (2).

(4) When National Highways is satisfied that—

- (a) any defects or damage arising from defects during the defects period and any defects notified to the undertaker pursuant to sub-paragraph (2) and any remedial works required as a result of any relevant stage 4 road safety audit have been made good to the reasonable satisfaction of National Highways; and
- (b) the NH costs have been paid to National Highways in full;

National Highways must issue the final certificate after which the bond shall be released in full.

(5) The undertaker must pay to National Highways within 30 days of the date of receipt of a properly issued VAT invoice from National Highways addressed to the undertaker, the costs reasonably incurred by National Highways in identifying the defects and supervising and inspecting the undertaker's work to remedy the defects that it is required to remedy pursuant to these provisions.

Security

80. The SRN works may not commence until—

- (a) the undertaker procures that the SRN works are secured by a bond from a bondsman first approved by National Highways in the agreed form between the undertaker and National Highways to indemnify National Highways against all losses, damages, costs or expenses arising from any breach of any one or more of the obligations of the undertaker in respect of the SRN works provided that the maximum liability of the bond must not exceed the bond sum; or
- (b) the undertaker has provided the cash surety which may be utilised by National Highways in the event of the undertaker failing to meet its obligations to make payments under paragraph 73 or to carry out works the need for which arises from a breach of one or more of the obligations of the undertaker under the provisions of this Part; or
- (c) a combination of a bond and cash surety together totalling 200% of the projected costs of the SRN works.

Commuted sums

81. National Highways must provide to the undertaker an estimate of the commuted sum, calculated in accordance with FS Guidance S278 Commuted Lump Sum Calculation Method dated 18 January 2010 or any successor guidance, prior to the issue of the provisional certificate for the SRN works.

Insurance

82. Prior to the commencement of the cable works and SRN works the undertaker or its contractor must effect public liability insurance with an insurer in the minimum sum of £10,000,000.00 (ten million pounds) in respect of any one claim or series of claims arising from one event against any legal liability for damage loss or injury to any property or any person as a direct result of the execution of the cable works or SRN works or use of the strategic road network by the undertaker.

Indemnity

83.—(1) The undertaker indemnifies National Highways from and against all costs, claims, expenses, damages, losses and liabilities suffered by National Highways arising from the construction of the SRN works or maintenance of the SRN works undertaken (but always excluding any consequential loss or indirect loss suffered by National Highways) before the issue of the final certificate for the SRN works, or any construction, maintenance or decommissioning of the cable works, or exercise of or failure to exercise any power under this Order within 30 days of an itemised demand subject to sub-paragraphs (2) to (5).

(2) Nothing in sub-paragraph (1) shall impose any liability on the undertaker in respect of—

- (a) any damage to the extent that it is attributable to the neglect or default of National Highways, its officers, servants, contractors or agents;
- (b) any SRN works carried out by National Highways as an assignee, transferee or lessee of the undertaker with the benefit of the Order pursuant to section 156 of the Planning Act 2008 or article 5 (benefit of the Order).

(3) National Highways must give the undertaker reasonable notice of any such third party claim or demand and no settlement, admission of liability or compromise must, unless payment is required in connection with a statutory compensation scheme, be made without first consulting the undertaker and considering their representations.

(4) National Highways must, in respect of any matter covered by the indemnity given by the undertaker in this paragraph, at all times act reasonably and in the same manner as it would as if settling third party claims on its own behalf from its own funds.

(5) National Highways must use its reasonable endeavours to mitigate and to minimise any costs, claims, expenses, damages, losses and to which the indemnity under this paragraph applies where it is within National Highways' reasonable ability and control to do so and which expressly excludes any obligation to mitigate liability arising from third parties outside of National Highways' control and if reasonably requested to do so by the undertaker National Highways must provide an explanation of how the claim has been minimised, where relevant.

Maintenance of the authorised development

84.—(1) The undertaker must, prior to the commencement of any works of maintenance to the specified cable works, give National Highways 28 days' notice in writing of the date on which those works will start unless otherwise agreed by National Highways, acting reasonably.

(2) If, for the purposes of maintaining the cable works or the SRN works, the undertaker needs to occupy any road space, the undertaker must comply with National Highways' road space booking requirements and no maintenance of any works for which a road space booking is required may commence without a road space booking having first been secured.

(3) The undertaker must comply with any requirements that National Highways may notify to the undertaker, such requirements to be notified to the undertaker not less than 7 days in advance of the planned commencement date of the maintenance works.

(4) The provisions of paragraph 76 will apply to the opening of any part of the strategic road network following occupation of any road space under this paragraph.

Land

85.—(1) Following the issue of the final certificate pursuant to paragraph 79 National Highways may serve notice on the undertaker that it wishes to take a freehold transfer of land within the extent of strategic road network boundary which is not in the ownership of National Highways but has been acquired by the undertaker for the purposes of carrying out the SRN works.

(2) If the undertaker receives notice under sub-paragraph (1) then the undertaker must effect a freehold transfer of the land which is the subject of the notice and complete such transfer as soon as reasonably practicable at no cost to National Highways.

Expert Determination

86.—(1) Article 42 (arbitration) of the Order does not apply to this Part of this Schedule.

(2) Any difference under this Part of this Schedule may be referred to and settled by a single independent and suitable person who holds appropriate professional qualifications and is a member of a professional body relevant to the matter in dispute acting as an expert, such person to be agreed by the differing parties or, in the absence of agreement, identified by the President of the Institution of Civil Engineers.

(3) On notification by either party of a dispute, the parties must jointly instruct an expert within 14 days of notification of the dispute.

(4) All parties involved in settling any difference must use best endeavours to do so within 21 days from the date that an expert is appointed.

(5) The expert must—

- (a) invite the parties to make submission to the expert in writing and copied to the other party to be received by the expert within 7 days of the expert's appointment;
- (b) permit a party to comment on the submissions made by the other party within 7 days of receipt of the submission;
- (c) issue a decision within 7 days of receipt of the submissions under paragraph (b); and
- (d) give reasons for the decision.

(6) Any determination by the expert is final and binding, except in the case of manifest error in which case the difference that has been subject to expert determination may be referred to and settled by arbitration under article 42 (arbitration).

(7) The fees of the expert are payable by the parties in such proportions as the expert may determine or, in the absence of such determination, equally.

PART 7

FOR THE PROTECTION OF FIVE ESTUARIES OFFSHORE WIND FARM LIMITED

87. In this Part—

“apparatus” means any cables, ducts, electric lines or electrical plant as defined in the Electricity Act 1989, belonging to or maintained by Five Estuaries or any successor as developer or operator of any part of the Five Estuaries offshore wind farm development onshore grid connection together with any replacement apparatus, and includes any structure in which apparatus is or will be lodged or which gives or will give access to apparatus;

“Five Estuaries” means Five Estuaries Offshore Wind Farm Limited (and any successor in title, transferee and lessee, as the case may be) as the undertaker with the benefit of all or part of the Five Estuaries Offshore Wind Farm Order 202[];

Application

88. This Part applies for the protection of Five Estuaries and the following provisions, unless otherwise agreed in writing between the undertaker and Five Estuaries, have effect.

89. This Part ceases to have effect where in the event that Five Estuaries is granted a Development Consent Order by the Secretary of State, on the date upon which that order expires without the development authorised by it having been commenced.

Acquisition of land and protection of apparatus

90. Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to this Order, the undertaker must not acquire any interest in land or any apparatus or override any easement or other interest of Five Estuaries otherwise than by agreement, such agreement not to be unreasonably withheld or delayed.

91. If, in the exercise of the agreement reached in accordance with paragraph 88 or in any other authorised manner, the undertaker acquires any interest in any land in which any apparatus is placed, that apparatus must not be removed and any right of Five Estuaries to maintain that apparatus in that land must not be extinguished.

92.—(1) Not less than 56 days (or such lesser period agreed by Five Estuaries, acting reasonably) before commencing the execution of any works authorised by the Order that are near to, or will or may affect any apparatus, the undertaker must submit to Five Estuaries a plan of such works.

(2) In relation to works which will or may be situated on, over, under or within five metres measured in any direction of any apparatus, or involve embankment works within 5 metres of any apparatus, the plan to be submitted to Five Estuaries under sub-paragraph (1) must be detailed including details of the materials and products to be used in the works and describing—

- (a) the exact position of the works;
- (b) the level at which these are proposed to be constructed or renewed;
- (c) the manner of their construction, renewal, replacement or upgrade including details of excavation and positioning of plant;
- (d) the position of all apparatus; and
- (e) by way of detailed drawings, every alteration proposed to be made to or close to any such apparatus.

(3) The undertaker must not commence the construction, renewal, replacement or upgrade of any works to which sub-paragraphs (1) or (2) apply until Five Estuaries has given written approval of the plan so submitted.

(4) Any approval of Five Estuaries required under sub-paragraph (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5) or (7); and
- (b) must not be unreasonably withheld or delayed.

(5) In relation to a work to which sub-paragraph (1) or (2) applies, Five Estuaries may require such modifications to be made to the plans as may be reasonably necessary for the purpose of securing its apparatus against interference or risk of damage or for the purpose of providing or securing proper and convenient means of access to any apparatus provided that such modifications are requested within a period of 28 days beginning with the date on which the plan under sub-paragraph (1) is submitted to it (or such lesser period agreed by the statutory undertaker, acting reasonably). For the avoidance of doubt, provided that any further iterations of the plan submitted to Five Estuaries for approval as a result of modifications required under this paragraph are not materially different to the modifications previously requested by Five Estuaries, any further required modifications will be requested by Five Estuaries as soon as reasonably practicable thereafter and in any event within 21 days of receipt of any further plans.

(6) Works executed under this Order must be executed only in accordance with the plan, submitted under sub-paragraph (1) or as relevant sub-paragraph (2), as amended from time to time by agreement between the undertaker and Five Estuaries and in accordance with such reasonable requirements as may be made in accordance with sub-paragraph (5) or (7) by Five Estuaries for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and Five Estuaries is entitled to watch and inspect the execution of those works.

(7) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of any works (unless otherwise agreed by Five Estuaries, acting reasonably), a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph apply to and in respect of the new plan.

(8) The undertaker is not required to comply with sub-paragraph (1) where it needs to carry out emergency works as defined in the 1991 Act but in that case it must give to Five Estuaries notice as soon as is reasonably practicable and a plan of those works and must comply with sub-paragraphs (5) and (6) insofar as is reasonably practicable in the circumstances.

Access

93. If in consequence of the agreement reached in accordance with paragraph 88 or the powers granted under the Order the access to any apparatus is materially obstructed, the undertaker must provide such alternative means of access to such apparatus as enables Five Estuaries to maintain or use the apparatus no less effectively than was possible before such obstruction.

Build option 2A scenario

94.—(1) Where the undertaker determines to proceed with build option 2A and the parties intend for additional ducts to be installed as either or both of Work Nos. 6B and Work No. 12B to be transferred to Five Estuaries then—

(2) The undertaker will consult and agree with Five Estuaries on its detailed design and construction methodology, including means of access, before any application for discharge of requirements necessary to carry out either or both of Work Nos. 6B and 12B is made to the relevant planning authority.

(3) The undertaker will agree the route and specification of any permanent access to be used by both the undertaker and Five Estuaries prior to discharging any requirement for the detailed design of such accesses necessary to construct such access.

(4) Any agreement required under this paragraph must not be unreasonably withheld or delayed and any requests for amendment must have regard to the scope of the assessment set out in the Environmental Statement.

Collaboration

95. The undertaker and Five Estuaries must each act in good faith and use reasonable endeavours to co-operate with, and provide assistance to, each other as may be required to give effect to the provisions of this Part.

Arbitration

96. Any difference or dispute arising between the undertaker and Five Estuaries must, unless otherwise agreed in writing between the undertaker and Five Estuaries, be determined by arbitration in accordance with article 42 (arbitration) of the Order.

PART 8

FOR THE PROTECTION OF ESSEX COUNTY COUNCIL AS LOCAL HIGHWAY AUTHORITY

Application

97. The provisions of this Part of this Schedule have effect in relation to the works (as defined under paragraph 98 unless otherwise agreed in writing between the undertaker and Essex County Council in its capacity as the local highway authority.

Definitions

98. In this Part of this Schedule—

“as built drawings” means—

- (a) drawings showing the as constructed local highways in an appropriate format (including digital storage media);
- (b) drawings showing the location for utilities installed in the local highway; and
- (c) specifications for materials used for the constructed local highway;

“construction period” means for each work, from commencement of the relevant work forming part of authorised development under this Order until the issue of the final certificate for that work.

“detailed design” means drawings and other information comprising the detailed design for the alteration and improvement of local highways comprised in the authorised development;

“detailed information” means drawings, specifications and other information relating to the local highway, as relevant to the works in question (insofar as both parties agree (acting reasonably) are relevant and not already provided for in any document that the undertaker is required to produce under Schedule 2 to the Order) which must be in accordance with the detailed design and include—

- (a) information and assessment required to demonstrate compliance of any trenchless crossing works with DMRB Volume 4 section 1 CD 622 (Managing geotechnical risk);
- (b) long and cross sectional drawings;
- (c) traffic signs and road markings;
- (d) landscaping, planting and any boundary features which will form part of the local highway;
- (e) a schedule of timings for the works, including dates and durations for any temporary closures of any part of the local highway;
- (f) traffic management proposals including any diversionary routes; and
- (g) a schedule of the existing local highway condition prior to commencement of construction related activities;
- (h) folio drawings in line with the Essex Standard Drawings, or such replacement or modification of the design standards applied to the construction of new roads and alternations to existing roads across the County of Essex.

“DMRB” means the Design Manual for Roads and Bridges published by National Highways. Or any replacement or modification of that standard for the time being in force;

“DCM” means the Development Construction Manual published by Essex County Council, or any replacement or modification of that manual for the time being in force.

“final certificate” means the final certificate issued by the local highway authority under paragraph 109 of this Part;

“HPN039” means Highways Practice Note 039 Procedure for Road Safety Audit as published by Essex County Council. Or any replacement or modification of that standard for the time being in force.

“local highway” means any public highway including any public right of way which is maintainable, or is intended at the completion of the works in relation thereto to be maintainable, by a local highway authority;

“local highway authority” means Essex County Council;

“maintenance period” means 12 months from the date of the provisional certificate being served under paragraph 106 of this Part unless otherwise agreed in writing between the parties;

“provisional certificate” means the certificate served under paragraph 106 of this Part;

“senior representatives” means the nominated senior representative on behalf of the undertaker and persons notified to the undertaker by the relevant local highway authority as being their senior representatives; and

“works” means any works authorised by the Order undertaken on, to or under any part of the local highway.

Design input and commencement

99.—(1) The undertaker must allow and facilitate an appropriately qualified person or persons duly appointed by the local highway authority (each being a “nominated officer”) to participate in the design process for the detailed design for the works. The undertaker agrees to incorporate reasonable representations of the nominated officer in finalising its detailed design proposal (subject to the undertaker being able to refuse implementation of any representation which would cause a breach of this Order, or would entail materially new or materially different environmental effects from those reported in the environmental statement).

(2) Participation under sub-paragraph (1) will be in the form of invitations (given at least 20 business days in advance and sent by email and marked 'urgent') to attend design meetings relating to relevant works and the provision to the nominated officer of such drawings, cross/long sections, design proposals and other information as is reasonably required to allow the nominated officer to provide an informed response on the detailed design proposals to the undertaker.

(3) The nominated officer will have no less than 20 business days from the date on which the undertaker supplies information pursuant to sub-paragraph (2) to provide the undertaker with any comments upon any information provided to that officer pursuant to sub-paragraph (2).

(4) No part of the works may commence until the undertaker has provided to the local highway authority the detailed information relating to that part of the works (without prejudice to the undertaker providing parts of the detailed information insofar as it relates to the operation of the local highway at a later date, provided the provision of that information is subject to this sub-paragraph and sub-paragraphs (5) to (7)).

(5) The undertaker will give the local highway authority at least 20 business days to comment and provide representations by email on the detailed information provided to it under sub-paragraph (4).

(6) The undertaker will incorporate any reasonable comments, representations and recommendations made by the local highway authority (acting reasonably) under sub-paragraph (5) (and, without limitation, the undertaker is able to refuse implementation of any representation or recommendation which would cause a breach of this Order, conflict with a permit issued under a permit scheme operated by the local highway authority or would entail materially new or materially different environmental effects from those reported in the environmental statement) and will provide the local highway authority with reasons for non-acceptance of any representation or recommendation as soon as reasonably practicable upon receipt of a request from the local highway authority in writing within 10 business days of its decision.

(7) The works must not be carried out except in accordance with the detailed information (but subject to the process in sub-paragraphs (4) and (5) or as otherwise may be agreed prior to the date of commencement of the relevant works between the undertaker and the local highway authority.

(8) This paragraph does not apply to the works to the extent that would cause an inconsistency with any provision of this Order.

100.—(1) Before commencing the construction of, or the carrying out of any work authorised by this Order which involves works to a local highway the undertaker must use reasonable endeavours to agree with the local highway authority (acting reasonably) a local operating agreement covering the following as relevant to the works in question—

- (a) communications and customer care arrangements for communication with stakeholders and the local community including—
 - (i) the identity of the party responsible for each activity;
 - (ii) the identity of the representative of the undertaker or the undertaker's contractor responsible for stakeholder engagement and communication;
 - (iii) defined timescales for contractor responses to responses to communications;
 - (iv) the form of documentation required under paragraph 99 immediately above;
 - (v) the relevant email details from time to time under paragraph 99 immediately above;
 - (vi) road safety audit invitation process under paragraph 103 below; and
 - (vii) the senior representation process under paragraph 110 below.
- (b) definition of the extents for the works areas between the highway boundary, the traffic management lead in tapers, the longitudinal coning and the end of the lead out tapers, zone of influence (being the area which is reasonably affected by those work areas), traffic management and diversion requirements and free recovery areas (as appropriate);
- (c) arrangements for the submission to the local highway authority of digital copies (including digital storage media) of all as-built drawings for the relevant work area

including identification of any new limits of highway maintainable by the local highway authority in accordance with paragraph 106 of this Schedule;

- (d) where applicable, winter maintenance including anticipated winter treatments and severe weather arrangements to apply during the construction period and the maintenance period;
- (e) repair arrangements in relation to local highways directly affected by the construction of the authorised development;
- (f) where applicable, continuity of technology arrangements to apply during the construction period and the maintenance period;
- (g) arrangements for dealing with and recording incidents during the construction period and the maintenance period including appropriate provision of recovery vehicles; and
- (h) traffic management: during relevant works.

(2) Any agreement completed under sub-paragraph (1) must be complied with by the undertaker and continue in force until such time as a final certificate has been issued in respect of the relevant works.

Survey reinstatement

101. The undertaker must reinstate to the reasonable satisfaction of the local highway authority any part of the local highway which has been temporarily used for survey or investigation by the undertaker pursuant to article 20 (protective work to buildings), article 31 (temporary use of land for carrying out the authorised development) of this Order or any other power in this Order to the condition it was in on the date on which the survey or investigation began or such other condition as may be agreed in writing by the local highway authority.

Inspections and testing of materials

102.—(1) The undertaker must allow and facilitate any person acting on behalf of the local highway authority to access and inspect at all reasonable times any part of the works during their construction and before a final certificate has been issued in respect of the relevant works as is reasonably necessary to ensure that the works have been or are being carried out in accordance with the detailed design and to the appropriate standard.

(2) The undertaker must allow any person duly appointed by the local highway authority to enter upon and inspect any part of the works which are in, over, under, or adjacent to any local highway or may affect any highway or any property of the local highway authority, during the carrying out of the works, and the undertaker must give to such officer reasonable facilities for such inspection.

(3) Any testing reasonably requested by the local highway authority of materials used in any works must be carried out at the undertaker's expense and in accordance with the latest version of the Manual of Contract Documents for Highway Works (or any other testing specification agreed by the undertaker and the local highway authority acting reasonably).

(4) The local highway authority (and its contractor or its agent) may test (at the cost of the undertaker) all or any materials used or proposed to be used in any works and the undertaker must provide such information access and materials as is reasonably necessary to facilitate such testing.

(5) The undertaker must, as soon as is reasonably practicable and in any event within 10 business days, provide the local highway authority with a copy of all available test certificates and results relevant to the works that the local highway authority has requested in writing under sub-paragraph (3).

(6) The local highway authority must as soon as is reasonably practicable and in any event within 20 business days, provide the undertaker with a copy of all available test results and certificates relevant to the works carried out under sub-paragraph (4) that the undertaker has requested in writing.

Road Safety Audits

103.—(1) The undertaker must procure that an appropriately qualified RSA team (as defined in HPN039 or DMRB Volume 5 Section 2 Part 2 (GG 119) as advised by the local highway authority (acting reasonably) or any replacement or modification of that standard) undertakes road safety audit in accordance with the standard asset out in HPN039 or DMRB standard GG 119 as advised by the local highway authority (acting reasonably) for works which involve creation, alteration, expansion or other modifications of the local highway but not for works which consist only of trenchless installation beneath highways, and must provide copies of the reports of such audits to the local highway authority within 10 business days of their receipt by the undertaker.

(2) The local highway authority must be invited to participate in the road safety audit conducted under sub-paragraph (1).

(3) No works on a local highway must be commenced until a satisfactory Stage 1 and Stage 2 Road Safety Audit has been carried out and all reasonable recommendations raised by them or any exceptions are approved by the local highway authority (acting reasonably);

(4) Where the report of the stage 3 and 4 road safety audit identifies any recommended measures in respect of the local highway, the undertaker must carry out, at its own expense and to the reasonable satisfaction of the local highway authority, those measures identified as part of stage 3 and 4 audit which the undertaker considers necessary (acting reasonably) and for the avoidance of doubt any matters related to the health and safety will be considered as reasonable, and which do not give rise to any new or materially different environmental effects in comparison with those identified in the environmental statement.

Defects in local highways constructed by the undertaker

104.—(1) Until such time as a final certificate has been issued in respect of any works, the undertaker must make good any defects in the works constructed by the undertaker to the reasonable satisfaction of the local highway authority.

(2) The undertaker must submit to the local highway authority such details and information relating to making good any defects under sub-paragraph (1) as the local highway authority and the undertaker agree is reasonable in the circumstances.

Provisional Certificate

105.—(1) Subject to sub-paragraph (2), when the undertaker considers that the works have reached completion so that they are available and safe for use by the public it must serve a provisional certificate on the local highway authority and must allow the local highway authority the opportunity to inspect the works to identify any defects or incomplete works (and the undertaker must give proper consideration to any representations and recommendations made by the local highway authority and make good such defects pursuant to paragraph 103 or complete incomplete works).

(2) The undertaker must not serve a provisional certificate on the local highway authority under sub-paragraph (1) until either—

- (a) a stage 3 road safety audit has been carried out in respect of the works in question in accordance with HNP039 or GG19 of DMRB as advised by the local highway authority (acting reasonably), and in the opinion of the local highway authority any reasonable recommended measures identified in the audit and which the local highway authority considers to be necessary, have been completed; or
- (b) the local highway authority has been provided an opportunity to inspect the works and the undertaker has, in its opinion, completed any further works or measures required to address any safety deficiencies or defects identified as a result of the inspection.

(3) The local highway authority must issue to the undertaker, on request from the undertaker a counter-signed provisional certificate in relation to any part of the works, after completion of that part of the works once a stage 3 safety audit has been carried out in accordance with sub-paragraph (2).

(4) The undertaker will agree with the local highway authority (such agreement not to be unreasonably withheld or delayed) the date of opening of the works to the public and take appropriate steps to officially record the same.

Maintenance

106.—(1) Subject to sub-paragraph (2), the undertaker must maintain the works throughout the maintenance period to a standard appropriate to their use by the public in accordance with the DMRB.

(2) Nothing in sub-paragraph (1) makes the undertaker responsible for the maintenance of any street works or maintenance works undertaken by any person other than the undertaker or which does not form part of the authorised development during the maintenance period.

Final Certificate

107.—(1) The local highway authority must as soon as reasonably practicable and in any event within 25 business days of the last of sub-paragraph (a) to (f) of this sub-paragraph being satisfied issue a final certificate in respect of the works where—

- (a) the maintenance period has passed;
- (b) all incomplete works and identified defects requiring remediation under sub-paragraph 103(1) have been remedied to the local highway authority's reasonable satisfaction;
- (c) the undertaker has given the local highway authority a reasonable opportunity to inspect the relevant works in readiness for the issue of a final certificate and has given due consideration and acted accordingly in respect of any representations and recommendations made by the local highway authority in respect of the works;
- (d) the undertaker has provided the local highway authority with a health and safety file in respect of the relevant works conforming in all respects to the Construction (Design and Management) Regulations 2015 to the local highway authority's reasonable satisfaction;
- (e) the undertaker has provided the local highway authority with traffic signal information (in so far as is relevant);
- (f) the undertaker has provided the local highway authority with street lighting information (in so far as is relevant);
- (g) in relation to any permanent works only (which for the avoidance of doubt will exclude any maintenance of the street works or maintenance works)—
 - (i) the undertaker has provided the local highway authority with records of earthworks including source and description of fill material description of sub grades in cut areas and test results;
 - (ii) the undertaker has provided the local highway authority with the structural maintenance manual to include soil reports records of materials tested and revised forms TA1 and design certificates;
 - (iii) the undertaker has provided the local highway authority with the appropriate maintenance manual or manuals;
 - (iv) the undertaker has provided the local highway authority with as built drawings and such detailed information as the local highway authority has requested (acting reasonably) in relation to the relevant works as built;
 - (v) where there are structures required as part of the works the undertaker has provided the local highway authority with the appropriate construction compliance certificate or certificates;
 - (vi) the undertaker has provided the local highway authority with a complete set of hard copies and a digital copy containing a complete set of as-built drawings for the whole of the Works showing (inter alia) undertakers' plant and equipment such drawings to be to such scale or scales as the local highway authority may reasonably require for the purpose of subsequent maintenance and further works;

- (vii) the undertaker has provided the local highway authority with a plan showing edged red the land added to the local highway as public highway; and
- (viii) any drains which the local highway authority consider should be constructed to dispose of soil and surface water drainage in connection with the relevant works and in order to make them appropriate for public use have been constructed.

(2) The issue of a final certificate by the local highway authority amounts to an acknowledgment by the relevant local highway authority that the construction, alteration or diversion of a highway has been completed to its reasonable satisfaction for the purposes of article 10 (construction and maintenance of new or altered highway) of this Order.

Emergency Work

108. Nothing in this Part of this Schedule prevents the local highway authority from carrying out any work or taking such action as deemed appropriate forthwith without prior notice to the undertaker in the event of an emergency or danger to the public.

Land interests

109. Following the issuing of the final certificate under paragraph 107 in respect of any part of the local highway, the undertaker must, if requested by the local highway authority, in respect of a local highway which is to be maintainable by the local highway authority following, and as a result of, the completion of those works execute and complete a transfer to the local highway authority at nil consideration and at the cost of the undertaker of any land and rights which have been compulsorily acquired or voluntarily acquired (following a written request by the local highway authority) under this Order and which are necessary for the maintenance and operation of a local highway.

Disputes

110.—(1) In the event of any disagreement between the undertaker and the local highway authority arising out of or in connection with this Part of this Schedule which requires the agreement of the undertaker and the local highway authority jointly or the approval of the local highway authority and which cannot be resolved within 10 business days of the disagreement arising under clauses 3, 4, 5, 6 and 8, either party may request a review of the issue in disagreement by the parties giving notice in writing to their senior representatives.

(2) The senior representatives will consider any such request and use all reasonable endeavours in good faith to reach agreement to resolve any disagreement.

(3) Where agreement is not reached by the senior representatives within 20 business days of a request being made under sub-paragraph (1), the disagreement may be determined by arbitration in accordance with article 42 (arbitration) of this Order.

PART 9

FOR THE PROTECTION OF ANGLIAN WATER

Application

111. For the protection of Anglian Water the following provisions have effect, unless otherwise agreed in writing between the undertaker and Anglian Water.

Interpretation

112. In this Part of this Schedule—

“1991 Act” means the New Roads and Street Works Act 1991;

“alternative apparatus” means alternative apparatus adequate to enable Anglian Water to fulfil its statutory functions in a manner no less efficient than previously;

“Anglian Water” means Anglian Water Services Limited (company number 02366656) whose registered office is at Lancaster House, Lancaster Way, Ermine Business Park, Huntington, Cambridgeshire PE29 6XU;

“apparatus” means:

- (a) works, mains, pipes or other apparatus belonging to or maintained by Anglian Water for the purposes of water supply and sewerage;
- (b) any drain or works vested in Anglian Water under the Water Industry Act 1991;
- (c) any sewer which is so vested or is the subject of a notice of intention to adopt given under section 102(4) of that Act or an agreement to adopt made under section 104 of that Act;
- (d) any drainage system constructed for the purpose of reducing the volume of surface water entering any public sewer belonging to Anglian Water; and
- (e) includes a sludge main, disposal main or sewer outfall and any manholes, ventilating shafts, pumps or other accessories forming part of any such sewer, drain or works, and includes any structure in which apparatus is or is to be lodged or which gives or will give access to apparatus;

and for the purpose of this definition, where words are defined by section 219 of that Act, they must be taken to have the same meaning;

“functions” includes powers and duties;

“in”, in a context referring to apparatus or alternative apparatus in land, includes a reference to apparatus or alternative apparatus under, over or upon land; and

“plan” includes all sections, drawings, specifications and method statements.

Access

113.—(1) Access for Anglian Water or any person acting under its instruction, including access for vehicles and plant, to any apparatus utilities and services will not be extinguished or prevented and must not be unreasonably restricted or delayed by the undertaker during the construction, operation, maintenance or decommissioning of the authorised development in accordance with this sub-paragraph (1).

(2) Unreasonable delay or restriction in sub-paragraph (1) will not prevent the temporary restriction of access for other users (including access by the public) or the control or marshalling of access to facilitate the safe movement of large vehicles or plant or the carrying out of works to the access route by the undertaker, subject to the provisions of this sub-paragraph (2).

On street apparatus

114. This Part of this Schedule does not apply to apparatus in respect of which the relations between the undertaker and Anglian Water are regulated by the provisions of Part 3 of the 1991 Act.

Apparatus in stopped up streets

115. Regardless of the temporary stopping up or diversion of any highway under the powers conferred by article 12 (temporary restriction of use of streets), Anglian Water is at liberty at all times to take all necessary access across any such stopped up highway and to execute and do all such works and things in, upon or under any such highway as may be reasonably necessary or desirable to enable it to maintain any apparatus which at the time of the stopping up or diversion was in that highway.

Protective works to buildings

116. The undertaker, in the case of the powers conferred by article 18 (protective work to buildings), must exercise those powers so as not to obstruct or render less convenient the access to any apparatus without the written consent of Anglian Water (such agreement not to be unreasonably withheld).

Acquisition of land

117. Regardless of any provision in this Order or anything shown on the land plans, the undertaker must not acquire any apparatus otherwise than by agreement.

Removal of apparatus

118.—(1) If, in the exercise of the powers conferred by this Order, the undertaker acquires any interest in any land in which any apparatus is placed or requires that Anglian Water's apparatus is relocated or diverted, that apparatus must not be removed under this Part of this Schedule, and any right of Anglian Water to maintain that apparatus in that land must not be extinguished, until:

- (a) alternative apparatus has been constructed and is in operation to the reasonable satisfaction of Anglian Water in accordance with sub-paragraphs (2) to (8); and
- (b) facilities and rights have been secured for that alternative apparatus in accordance with paragraph 119.

(2) If, for the purpose of executing any works in, on or under any land purchased, held, appropriated or used under this Order, the undertaker requires the removal of any apparatus placed in that land, the undertaker must give to Anglian Water written notice of that requirement, together with a plan of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed and in that case (or if in consequence of the exercise of any of the powers conferred by this Order an undertaker reasonably needs to remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), afford to Anglian Water the necessary facilities and rights for the construction of alternative apparatus in other land of the undertaker and subsequently for the maintenance of that apparatus.

(3) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of or land secured by the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2) in the land in which the alternative apparatus or part of such apparatus is to be constructed Anglian Water must, on receipt of a written notice to that effect from the undertaker, as soon as reasonably possible use its best endeavours to obtain the necessary facilities and rights in the land in which the alternative apparatus is to be constructed.

(4) Any alternative apparatus to be constructed in land of or land secured by the undertaker under this Part of this Schedule must be constructed in such manner and in such line or situation as may be agreed between Anglian Water and the undertaker or in default of agreement settled by arbitration in accordance with article 42 (arbitration).

(5) Anglian Water must, after the alternative apparatus to be provided or constructed has been agreed or settled by arbitration in accordance with article 42 (arbitration), and after the grant to Anglian Water of any such facilities and rights as are referred to in sub-paragraphs (2) or (3), proceed without unnecessary delay to construct and bring into operation the alternative apparatus and subsequently to remove any apparatus required by the undertaker to be removed under the provisions of this Part of this Schedule.

(6) Regardless of anything in sub-paragraph (5), if Anglian Water gives notice in writing to the undertaker that it desires the undertaker to execute any work, or part of any work in connection with the construction or removal of apparatus in any land of the undertaker or to the extent that Anglian Water fails to proceed with that work in accordance with sub-paragraph (5) or the undertaker and Anglian Water otherwise agree, that work, instead of being executed by Anglian Water, must be executed by the undertaker without unnecessary delay and to the reasonable satisfaction of Anglian Water.

(7) If Anglian Water fails either reasonably to approve, or to provide reasons for its failure to approve along with an indication of what would be required to make acceptable, any proposed details relating to required removal works under sub-paragraph (2) within 28 days of receiving a notice of the required works from the undertaker, then such details are deemed to have been approved. For the avoidance of doubt, any such “deemed consent” does not extend to the actual undertaking of the removal works, which must remain the sole responsibility of Anglian Water or its contractors, unless these works are to be carried out by the undertaker in accordance with sub-paragraph (6).

(8) Whenever alternative apparatus is to be or is being substituted for existing apparatus, the undertaker must, before taking or requiring any further step in such substitution works, use best endeavours to comply with Anglian Water’s reasonable requests for a reasonable period of time to enable Anglian Water to:

- (a) make network contingency arrangements; or
- (b) bring such matters as it may consider reasonably necessary to the attention of end users of the utility in question.

Facilities and rights for alternative apparatus

119.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to Anglian Water facilities and rights for the construction and maintenance in land of the undertaker of alternative apparatus in substitution for apparatus to be removed, those facilities and rights are to be granted upon such terms and conditions as may be agreed between the undertaker and Anglian Water or in default of agreement settled by arbitration in accordance with article 42 (arbitration).

(2) If the facilities and rights to be afforded by the undertaker in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are in the opinion of the arbitrator less favourable on the whole to Anglian Water than the facilities and rights enjoyed by it in respect of the apparatus to be removed and the terms and conditions to which those facilities and rights are subject, the arbitrator must make such provision for the payment of compensation by the undertaker to Anglian Water as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case.

(3) Such facilities and rights as are set out in this paragraph are deemed to include any statutory permits granted to Anglian Water in respect of the apparatus in question, whether under the Environmental Permitting (England and Wales) Regulations 2010 or other legislation.

Retained apparatus

120.—(1) Not less than 28 days before starting the execution of any works in, on or under any land purchased, held, appropriated or used under this Order that are near to, or will or may affect, any apparatus (or any means of access to it) the removal of which has not been required by the undertaker under sub-paragraph (2), the undertaker must submit to Anglian Water a plan, section and description of the works to be executed.

(2) Those works must be executed only in accordance with the plan, section and description submitted under sub-paragraph (1) and in accordance with such reasonable requirements as may be made in accordance with sub-paragraph (3) by Anglian Water for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and Anglian Water is entitled to watch and inspect the execution of those works.

(3) Any requirements made by Anglian Water under sub-paragraph (2) must be made within a period of 21 days beginning with the date on which a plan, section and description under sub-paragraph (1) is submitted to it.

(4) If Anglian Water in accordance with sub-paragraph (2) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, paragraphs 110 to 112 and 115 to 117 apply as if the removal of the apparatus had been required by the undertaker under paragraph 118(2).

(5) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 28 days before commencing the execution of any works, a new plan, section and description instead of the plan, section and description previously submitted, and having done so the provisions of this paragraph apply to and in respect of the new plan, section and description.

(6) The undertaker is not required to comply with sub-paragraph (1) in a case of emergency but in that case must give to Anglian Water notice as soon as is reasonably practicable and a plan of those works as soon as reasonably practicable subsequently and must comply with sub-paragraph (3) in so far as is reasonably practicable in the circumstances, using its reasonable endeavours to keep the impact of those emergency works on Anglian Water's apparatus, on the operation of its water and sewerage network and on end-users of the services Anglian Water provides to a minimum.

(7) For the purposes of sub-paragraph (1) and without prejudice to the generality of the principles set out in that sub-paragraph, works are deemed to be in land near Anglian Water's apparatus (where it is a pipe) if those works fall within the following distances measured from the medial line of such apparatus:

- (a) 4 metres where the diameter of the pipe is less than 250 millimetres;
- (b) 5 metres where the diameter of the pipe is between 250 and 400 millimetres, and
- (c) a distance to be agreed on a case-by-case basis where the diameter of the pipe exceeds 400 millimetres.

Expenses and costs

121.—(1) Subject to the following provisions of this paragraph, the undertaker must repay to Anglian Water all expenses reasonably incurred by Anglian Water in, or in connection with, the inspection, removal, alteration or protection of any apparatus or the construction of any new apparatus which may be required in consequence of the execution of any such works as are referred to in this Part of this Schedule but always excluding any consequential loss or indirect loss suffered by Anglian Water.

(2) There must be deducted from any sum payable under sub-paragraph (1) the value of any apparatus removed under the provisions of this Part of this Schedule that value being calculated after removal.

(3) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was situated, and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement, is not determined by arbitration in accordance with article 42 (arbitration) to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to Anglian Water by virtue of sub-paragraph (1) must be reduced by the amount of that excess.

(4) For the purposes of sub-paragraph (3)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus is not to be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and

- (b) where the provision of a joint in a pipe or cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole is to be treated as if it also had been agreed or had been so determined.

(5) An amount which apart from this sub-paragraph would be payable to Anglian Water in respect of works by virtue of sub-paragraph (1) must, if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on Anglian Water any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, be reduced by the amount which represents that benefit.

122.—(1) Subject to the following provisions of this paragraph, if by reason or in consequence of the construction of any such works referred to in sub-paragraphs 118(1) or 118(2), or by reason of any subsidence resulting from such development or works, any damage is caused to any apparatus or alternative apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of those works) or property of Anglian Water, or there is any interruption in any service provided, or in the supply of any goods, by Anglian Water, the undertaker must—

- (a) bear and pay the cost reasonably incurred by Anglian Water, accompanied by an invoice or claim from Anglian Water, in making good such damage or restoring the supply; and
- (b) make reasonable compensation to Anglian Water for any other expenses, loss, damages, penalty or costs incurred by Anglian Water,

by reason or in consequence of any such damage or interruption but always excluding any consequential loss or indirect loss arising from such damage or interruption.

(2) The fact that any act or thing may have been done by Anglian Water on behalf of the undertaker or in accordance with a plan approved by Anglian Water or in accordance with any requirement of Anglian Water or under its supervision does not, subject to sub-paragraph (3), excuse the undertaker from liability under the provisions of sub-paragraph (1) unless Anglian Water fails to carry out and execute the works properly with due care and attention and in a skilful and professional like manner or in a manner that does not accord with the approved plan.

(3) Nothing in sub-paragraph (1) imposes any liability on the undertaker with respect to any damage or interruption to the extent that it is attributable to the unlawful or unreasonable act, neglect or default of Anglian Water, its officers, servants, contractors or agents.

(4) Anglian Water must give the undertaker reasonable notice of any such claim or demand and no settlement or compromise is to be made, without the consent of the undertaker (such consent not to be unreasonably withheld or delayed) who, if withholding such consent, has the sole conduct of any settlement or compromise or of any proceedings necessary to resist the claim or demand.

(5) Anglian Water must use reasonable endeavours to mitigate in whole or in part and to minimise any costs, expenses, loss, demands and penalties to which the undertaker must bear and pay the costs for.

Cooperation

123. For the avoidance of doubt whenever Anglian Water's consent, agreement or approval is required in relation to plans, documents or other information submitted by the undertaker or the taking of action by the undertaker, it must not be unreasonably withheld or delayed.

124. Where in consequence of the proposed construction of any of the authorised development, the undertaker or Anglian Water requires the removal of apparatus under paragraph 118(2) or Anglian Water makes requirements for the protection or alteration of apparatus under paragraph 120, the undertaker must use all reasonable endeavours to co-ordinate the execution of the works in the interests of safety and the efficient and economic execution of the authorised development and taking into account the need to ensure the safe and efficient operation of Anglian Water's undertaking, using existing processes where requested by Anglian Water, provided it is appropriate to do so, and Anglian Water must use all reasonable endeavours to co-operate with the undertaker for that purpose.

125. Where the undertaker identifies any apparatus which may belong to or be maintainable by Anglian Water but which does not appear on any statutory map kept for the purpose by Anglian Water, it must inform Anglian Water of the existence and location of the apparatus as soon as reasonably practicable.

126. Nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and Anglian Water in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

127. The undertaker and Anglian Water may by written agreement substitute any period of time for those periods set out in this Part of this Schedule.

PART 10

FOR THE PROTECTION OF AFFINITY WATER

Application

128. The following provisions have effect for the protection of Affinity Water, unless otherwise agreed in writing between the undertaker and Affinity Water.

Interpretation

129. In this Part of this Schedule—

“Affinity Water” means Affinity Water Limited (Company Registration No. 02546950) whose registered office address is at Tamblin Way, Hatfield, Hertfordshire. AL10 9EZ or any wholly- owned subsidiary (as defined in section 1159 of the Companies Act 2006^(a));

“alternative apparatus” means alternative apparatus adequate to enable Affinity Water to fulfil its statutory functions in a manner no less efficient than previously;

“Affinity Water’s apparatus” means:

- (a) mains, pipes, connections, reservoirs, or any other apparatus belonging to or maintained by Affinity Water for the purposes of water supply; and
- (b) mains, pipes, connections or any other apparatus that is the subject of an agreement to adopt by Affinity Water made under section 51A (agreements to adopt water main or service pipe at future date) of the Water Industry Act 1991^(b);

“authorised works” means “authorised development” and “ancillary works” as both are defined in article 2 of the Order together with the use and maintenance of such authorised development or ancillary works, which for the avoidance of doubt includes the construction, use and maintenance of any works pursuant to this Schedule;

“commence” and “commencement” includes the first carrying out of any below ground surveys, monitoring, work operations, remedial work in respect of any contamination or other adverse ground condition, the receipt and erection of construction plant and equipment, intrusive investigations for the purpose of assessing ground conditions, and the first implementation of environmental mitigation, including planting;

“functions” includes powers and duties;

“HAUC Advice Note” means HAUC Advice Note No. 2010/01 (available at https://static.hauc-uk.org.uk/downloads/Advice_Note_No_2010-01.pdf), including the Diversionary Works Calculator HAUC(UK) ([hauc-uk.org.uk](https://www.hauc-uk.org.uk/resources/diversionary-works-calculator)) (<https://www.hauc-uk.org.uk/resources/diversionary-works-calculator>) referred to at paragraph 29.4 of that advice note;

^(a) 2006 c. 46.

^(b) 1991 c. 56. Section 51A was amended by sections 10(2)(a) – (c) of the Water Act 2014 (c. 21) and sections 92(1) and 105(3) of the Water Act 2003 (c. 37).

“in”, in a context referring to Affinity Water’s apparatus or alternative apparatus in land, includes a reference to Affinity Water’s apparatus or alternative apparatus under, over or upon land;

“plan” includes all descriptions, designs, sections, drawings, specifications, method statements, soil reports, programmes, calculations, risk assessments and other documents that are reasonably necessary properly and sufficiently to describe the works to be executed;

“protective works” means the underpinning, strengthening and any other reasonable works the purpose of which is to prevent damage that may be caused to Affinity Water’s apparatus by the carrying out, maintenance, construction or use of the authorised works;

“specified works” means any authorised works under the Order (including any works of maintenance) that—

- (a) may in any way adversely affect Affinity Water’s apparatus;
- (b) are within the following distances of Affinity Water’s apparatus measured from the outer surface of such apparatus, the removal of which has not been required by the undertaker under paragraph 134(2) or otherwise—
 - (i) where the apparatus is a pipe, 2 metres where the diameter of the pipe is less than 150 millimetres;
 - (ii) where the apparatus is a pipe, 3 metres where the diameter of the pipe is between 150 and 450 millimetres;
 - (iii) where the apparatus is a pipe, 4 metres where the diameter of the pipe exceeds 450 millimetres; and
 - (iv) 4 metres of any other apparatus,

unless otherwise agreed in writing with Affinity Water (acting reasonably);

- (c) outside the distances referred to in (b) will or may have electromagnetic or high voltage effects on any of Affinity Water’s apparatus, the removal of which has not been required by the undertaker under paragraph 134(2) or otherwise; and

“water main” has the meaning given in the Water Industry Act 1991.

On street apparatus

130. Except for paragraphs 131 (apparatus in stopped up streets), 136 (specified works), 137 (expenses) and 138 (indemnity) of this Schedule which will apply in respect of the exercise of all or any powers under the Order affecting the rights of Affinity Water or of Affinity Water’s apparatus, the other provisions of this Part of this Schedule do not apply to apparatus in respect of which the relations between the undertaker and Affinity Water are regulated by the provisions of Part 3 (street works in England and Wales) of the 1991 Act.

Apparatus in stopped up streets

131. Regardless of the temporary stopping up, alteration, diversion or restriction of use of any street under the powers conferred by article 12 (temporary restriction of use of streets), Affinity Water is at liberty at all times to take all necessary access across any such stopped up street and to execute and do all such works and things in, upon or under any such street as may be reasonably necessary or desirable to enable it to maintain any of Affinity Water’s apparatus which at the time of the stopping up or diversion was in that street.

Protective works to buildings

132. The undertaker, in the case of the exercise of the powers conferred by article 18 (protective work to buildings), must exercise those powers so as not to obstruct or render less convenient the access (including access required for maintenance) to, or maintenance of, any of Affinity Water’s apparatus unless otherwise agreed in writing with Affinity Water, such agreement not to be unreasonably withheld.

Acquisition of land

133.—(1) Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to the Order, the undertaker must not:

- (a) appropriate or acquire any interest in land held by Affinity Water or take temporary possession of any of Affinity Water's apparatus; or
- (b) appropriate, acquire, extinguish, interfere with or override any easement or other interest or right of which Affinity Water or Affinity Water's apparatus has the benefit otherwise than with prior written consent of Affinity Water. Such consent may be subject to such conditions as Affinity Water may reasonably require and such conditions may include (but not be limited to):
 - (i) provisions to ensure the creation, grant or transfer of such alternative easements, interests or rights for the benefit of Affinity Water's apparatus (including any alternative apparatus) as Affinity Water may reasonably require; and
 - (ii) where Affinity Water's apparatus is to remain in, on, under or over any authorised works or property of the undertaker that are to be present as a result of any appropriation, acquisition, extinguishment, interference or overriding within paragraph (b), reasonable provisions in respect of the necessary consent by the undertaker that might otherwise be required from the undertaker under Schedule 13 to the Water Industry Act 1991 in respect of any interference to such authorised works or property of the undertaker resulting from the carrying out of any works or the exercise of any other powers by Affinity Water in respect of such of Affinity Water's apparatus.

(2) The reasonable provisions in sub-paragraph (1)(b)(ii) may include requirements for the undertaker and Affinity Water to determine no later than the date of completion of the authorised works, works or exercise of powers or categories of works or exercise of powers the carrying out or exercise of which by Affinity Water is capable of being consented to in advance by the undertaker. In respect of such works or powers that are capable of being consented to in advance by the undertaker, that advance consent under Schedule 13 of the Water Industry Act 1991 will be given by the undertaker on completion of the authorised works. In respect of those works or powers the carrying out or exercise of which by Affinity Water is not capable of being consented to in advance, the reasonable provisions will set out a process for the giving of the consent under Schedule 13 within specified expedited timescales (such timescales to be agreed between the undertaker and Affinity Water acting reasonably) following any request for such consent by Affinity Water.

Removal of apparatus

134.—(1) If in the exercise of the powers conferred by this Order, the undertaker acquires any interest in or possesses temporarily any land in which any of Affinity Water's apparatus is placed or over which any access to any of Affinity Water's apparatus is enjoyed and requires that Affinity Water's apparatus is relocated or diverted, that apparatus must not be removed under this Part of this Schedule, and any right of Affinity Water to maintain that apparatus in that land and to gain access to it must not be extinguished, until:

- (a) alternative apparatus has been constructed and is in operation, and access to it has been granted to the reasonable satisfaction of Affinity Water in accordance with sub-paragraphs (2) to (9); and
- (b) facilities and rights have been secured for that alternative apparatus in accordance with paragraph 135 (facilities and rights for alternative apparatus).

(2) If, for the purpose of executing any works in, on or under any land purchased, held, appropriated or used under this Order, the undertaker requires the removal of any of Affinity Water's apparatus placed in that land, the undertaker must give to Affinity Water 56 days' written notice of that requirement, together with a plan of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed. In that case (or where, in consequence of the exercise of any of the powers conferred by this Order, Affinity Water reasonably needs to

remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), afford to Affinity Water, in so far as the undertaker has the ability to reasonably grant or transfer them, the necessary facilities and rights and consents, and the benefit of any statutory permits granted to the undertaker in respect of the apparatus in question (whether under the Environmental Permitting Regulations 2010 or other legislation), for the construction of alternative apparatus in other land of the undertaker and subsequently for the maintenance of that apparatus. Such rights and consents will include reasonable provisions in respect of the necessary consent by the undertaker that might otherwise be required from the undertaker under Schedule 13 to the Water Industry Act 1991 in respect of any interference to the undertaker's authorised works or property resulting from the carrying out of any works or the exercise of any other powers by Affinity Water in respect of the alternative apparatus.

(3) The reasonable provisions in sub-paragraph (2) may include requirements for the undertaker and Affinity Water to determine no later than the date of completion of the authorised works, works or exercise of powers or categories of works or exercise of powers the carrying out or exercise of which by Affinity Water is capable of being consented to in advance by the undertaker. In respect of such works or powers that are capable of being consented to in advance by the undertaker, that advance consent under Schedule 13 of the Water Industry Act 1991 will be given by the undertaker on completion of the authorised works. In respect of those works or powers the carrying out or exercise of which by Affinity Water is not capable of being consented to in advance, the reasonable provisions will set out a process for the giving of the consent under Schedule 13 within specified expedited timescales (such timescales to be agreed between the undertaker and Affinity Water acting reasonably) following any request for such consent by Affinity Water.

(4) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of the undertaker or land secured by the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2) in the land in which the alternative apparatus or part of such apparatus is to be constructed, or the benefit of any statutory permits granted to the undertaker, Affinity Water will, on receipt of a written notice to that effect from the undertaker, as soon as reasonably practicable use its reasonable endeavours obtain the necessary facilities and rights and consents in the land in which the alternative apparatus is to be constructed, and any required statutory permits.

(5) Affinity Water will have an absolute discretion whether or not to use or seek any powers of compulsory acquisition that may be available to Affinity Water for the purposes of sub-paragraph (4).

(6) Any alternative apparatus to be constructed in land of, or land secured by, the undertaker under this Part of this Schedule must be constructed in such manner and in accordance with such plans as may be agreed between Affinity Water and the undertaker or in default of agreement settled by arbitration in accordance with article 42 (arbitration).

(7) Affinity Water must, after the alternative apparatus to be provided or constructed has been agreed or settled by arbitration in accordance with article 42 (arbitration), and subject to any written diversion agreement having been entered into between the parties and after the grant to Affinity Water of any such facilities and rights or statutory permits as are referred to in sub-paragraphs (2) or (4), proceed in accordance with a programme that has been agreed or settled by arbitration in accordance with article 42 (arbitration) to construct and bring into operation the alternative apparatus and subsequently to remove any of Affinity Water's apparatus required by the undertaker to be removed under the provisions of this Part of this Schedule.

(8) Regardless of anything in sub-paragraph (7) if the undertaker gives notice in writing to Affinity Water that the undertaker desires itself to execute any work, or part of any work, in connection with the construction or removal of Affinity Water's apparatus in any land of the undertaker, that work, instead of being executed by Affinity Water, may be executed by the undertaker, with the prior written consent of Affinity Water (which must not be unreasonably withheld or delayed and is to be subject to any conditions as are reasonable and proper to protect Affinity Water's apparatus) in accordance with plans and in a position agreed between Affinity Water and the undertaker, or in default of agreement determined by arbitration in accordance with

article 42 (arbitration), without unnecessary delay under the superintendence, if given, and to the reasonable approval of Affinity Water.

(9) Following such approval given in writing by Affinity Water, any alternative apparatus will be deemed to be adopted by Affinity Water as though it had been adopted under s.51A (agreements to adopt water main or service pipe at future date) of the Water Industry Act 1991 on the date 28 days after the giving of such approval or such later date as is agreed in writing between Affinity Water and the undertaker.

(10) If Affinity Water fails either reasonably to approve, or to provide reasons for its failure to approve along with an indication of what would be required to make acceptable, any proposed details relating to required removal works under sub-paragraph (2) within 28 days of receiving a notice of the required works from the undertaker, then the undertaker shall have recourse to arbitration in accordance with article 42 (arbitration).

(11) In carrying out any work under sub-paragraph (8), the undertaker must comply with all statutory obligations which would have been applicable to the apparatus.

(12) Nothing in sub-paragraph (8) authorises the undertaker to:

- (a) execute any work of connection to, or disconnection from, Affinity Water's operational network;
- (b) execute the placing, installation, bedding, packing, removal, connection or disconnection of any of Affinity Water's apparatus, or execute any excavation and filling around any of Affinity Water's apparatus (where the apparatus is laid in a trench) within 600 millimetres of any apparatus to be retained in situ; or
- (c) carry out any works in relation to any water mains.

(13) Whenever alternative apparatus is to be or is being substituted for existing Affinity Water's apparatus, the undertaker must, before taking any steps which will trigger the need for those substitution works, use all reasonable endeavours to comply with Affinity Water's reasonable requests for a reasonable period of time to enable Affinity Water to:

- (a) make network contingency arrangements; or
- (b) bring such matters as it may consider reasonably necessary to the attention of end users of the utility in question.

Facilities and rights for alternative apparatus

135.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to Affinity Water facilities and rights for the construction, use, maintenance and protection of alternative apparatus in substitution for Affinity Water's apparatus to be removed, those facilities and rights must be granted upon such terms and conditions as may be agreed between the undertaker and Affinity Water and must be no less favourable on the whole to Affinity Water than the facilities and rights enjoyed by it in respect of Affinity Water's apparatus to be removed unless otherwise agreed by Affinity Water or in default of agreement settled by expert determination in accordance with paragraph 140 (expert determination) unless otherwise agreed in writing by the parties.

(2) In settling those terms and conditions in respect of alternative apparatus to be constructed in the land of the undertaker, any expert will—

- (a) give effect to all reasonable requirements of the undertaker for ensuring the safety and efficient operation of the authorised works and for securing any subsequent alterations or adaptations of the alternative apparatus which may be required to prevent interference with the proposed works of the undertaker; and
- (b) so far as it may be reasonable and practicable to do so in the circumstances of the particular case, give effect to the terms and conditions, if any, applicable to Affinity Water's apparatus for which the alternative apparatus is to be substituted.

(3) If the facilities and rights to be afforded by the undertaker in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are in the opinion of the expert less favourable on the whole to Affinity Water than the

facilities and rights enjoyed by it in respect of Affinity Water's apparatus to be removed and the terms and conditions to which those facilities and rights are subject, the expert must make such provision for the payment of compensation by the undertaker to Affinity Water as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case.

Specified works

136.—(1) Not less than 56 days before commencement of any specified works, the undertaker must submit to Affinity Water a plan in respect of the specified works to be executed.

(2) The plan must provide details of—

- (a) the exact position, including level, of the specified works and of all of Affinity Water's apparatus;
- (b) a method statement describing the manner of their construction or renewal including details of excavation and positioning of plant;
- (c) detailed drawings showing every alteration proposed to be made to or close to any such apparatus;
- (d) all expected physical impacts (including but not limited to electromagnetic or high voltage effects) that the construction, maintenance or operation of the specified works may have on any of Affinity Water's apparatus, the removal of which has not been required by the undertaker under paragraph 134(2) or otherwise; and
- (e) any intended maintenance regimes.

(3) The undertaker must not commence any specified works until the plan has been approved by Affinity Water.

(4) Any approval of Affinity Water given under sub-paragraph (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5)(a); and
- (b) must not be unreasonably withheld or delayed.

(5) Affinity Water may require—

- (a) such modifications to be made to the plan as may be reasonably necessary for the purpose of securing Affinity Water's apparatus against interference or risk of damage or for the provision of protective works or for the purpose of providing or securing reasonable means of access to Affinity Water's apparatus; and
- (b) the undertaker to re-submit the plan as modified, for approval to Affinity Water, and Affinity Water must advise the undertaker within 14 days of submission of the revised plan whether it is approved.

(6) Affinity Water may as part of giving its approval under sub-paragraph (3) require that any part of specified works comprising of the matters listed below is carried out by Affinity Water, not the undertaker, and in which case Affinity Water must proceed with such part of the specified works in accordance with a programme that has been agreed or settled by arbitration in accordance with article 42 (arbitration)—

- (a) the placing, installation, bedding, packing, removal, connection or disconnection of any of Affinity Water's apparatus, or execute any excavation and filling around any of Affinity Water's apparatus (where the apparatus is laid in a trench) within 600 millimetres of any apparatus to be retained in situ; or
- (b) any works in relation to any water mains.

(7) If the revised plan is not approved within 14 days, the undertaker may require a meeting to be held between the chief engineers of the undertaker and Affinity Water to agree the plan.

(8) If the undertaker and Affinity Water fail to reach an agreement on the plan, the dispute shall be settled by arbitration in accordance with article 42 (arbitration).

(9) Specified works must only be executed in accordance with—

- (a) the plan submitted under sub-paragraph (1), as approved or as amended from time to time by agreement between the undertaker and Affinity Water or as otherwise settled by arbitration under sub-paragraph (8); and
- (b) all conditions imposed under sub-paragraph (4)(a),

and Affinity Water will be entitled to supervise and inspect the execution of those works where reasonably practicable to do so and in accordance with any relevant health and safety legislation.

(10) Where Affinity Water requires (acting reasonably) any protective works to be carried out by itself or by the undertaker to ensure the safety of Affinity Water's apparatus (whether of a temporary or permanent nature), Affinity Water must specify what these protective works are, inclusive of any measures or schemes required and approved as part of the plan approved pursuant to this paragraph. The protective works must be carried out to Affinity Water's reasonable satisfaction prior to the commencement of any specified works for which protective works are required and Affinity Water must give notice of its requirement (in writing) for such works within 42 days of the date of submission of a plan pursuant to this paragraph (except in an emergency) and in that written notice Affinity Water must specify what the protective works are and how these ensure the safety of Affinity Water's apparatus (Affinity Water acting reasonably).

(11) If Affinity Water in accordance with this sub-paragraph (11) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any of Affinity Water's apparatus and gives written notice to the undertaker of that requirement, sub-paragraphs (1) to 136(3) and (7) to 136(8) apply as if the removal of the apparatus had been required by the undertaker under paragraph 134(2).

(12) Nothing in this paragraph precludes the undertaker from submitting a new plan instead of the plan previously submitted, and the provisions of this paragraph apply to and in respect of the new plan provided that:

- (a) where the new plan is materially different from the plan previously submitted, this new plan shall be submitted at least 56 days before commencing the execution of any works; and
- (b) where the new plan is not materially different from the plan previously submitted, this new plan shall be submitted at least 28 days before commencing the execution of any works,

unless otherwise agreed with Affinity Water acting reasonably.

(13) The undertaker is not required to comply with sub-paragraph (1) in a case of emergency works, but in that case must give to Affinity Water notice as soon as is reasonably practicable and a plan of those works as soon as reasonably practicable subsequently and must comply with reasonable requirements of Affinity Water in so far as is reasonably practicable in the circumstances.

(14) In this paragraph, "emergency works" means works which, at the time when they are executed are required in order to put an end to, or to prevent the occurrence of, existing or imminent circumstances (or which the person responsible for the works believes on reasonable grounds to be existing or imminent) which are likely to cause danger to persons or property.

(15) Nothing in sub-paragraph (12) authorises the undertaker to carry out the works comprising of the matters listed in sub-paragraph (6) and should any such works need to be undertaken they will be undertaken by Affinity Water, not the undertaker and in which case Affinity Water must proceed with such part of the specified works in accordance with a programme that has been agreed or settled by arbitration in accordance with article 42 (arbitration).

(16) As soon as reasonably practicable after any ground subsidence event attributable to the authorised works the undertaker shall implement an appropriate ground mitigation scheme save that Affinity Water retains the right to carry out any further necessary protective works for the safeguarding of Affinity Water's apparatus and can recover any such costs in line with paragraph 137 (expenses and costs).

Expenses and costs

137.—(1) Subject to the following provisions of this paragraph, the undertaker must pay to Affinity Water within 30 days of receipt of an itemised invoice or claim from Affinity Water all charges, costs and expenses reasonably anticipated within the following three months or reasonably and properly incurred by Affinity Water but excluding any consequential loss or indirect loss, in, or in connection with—

- (a) the supervision, inspection, removal, relaying, replacing, alteration or protection of any of Affinity Water's apparatus or the supervision, inspection, adoption and construction of any new apparatus or alternative apparatus which may be required in connection with the authorised works; and
- (b) the consideration and approval of any plan as required by this Part of this Schedule.

(2) The costs as referred to in sub-paragraphs (1)(a) and (1)(b) are to include but not be limited to—

- (a) any costs reasonably incurred by or compensation properly paid by Affinity Water in connection with the acquisition of rights or the exercise of statutory powers for such apparatus including without limitation all costs incurred by Affinity Water as a consequence of Affinity Water;
 - (i) using its own compulsory purchase powers to acquire any necessary rights under paragraph 134(4); or
 - (ii) exercising any compulsory purchase powers in the Order transferred to or benefitting Affinity Water;
- (b) in connection with the cost of the carrying out of any diversion work or the provision of any alternative apparatus, where no written diversion agreement is otherwise in place;
- (c) the cutting off of any of Affinity Water's apparatus from any other of Affinity Water's apparatus or the making safe of redundant apparatus;
- (d) the approval of plans;
- (e) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works;
- (f) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary works as referred to in this Part of this Schedule;
- (g) any costs reasonably necessary in consequence of the execution of any such works as are referred to in this Part of this Schedule; and
- (h) any costs incurred as a result of any penalties or fines imposed on Affinity Water by any regulator directly resulting from the execution of or failure to execute in accordance with this Part of this Schedule any such works as are referred to in this Part of this Schedule.

(3) The value of any of Affinity Water's apparatus that is removed and re-used by Affinity Water, or any value recovered by Affinity Water from the scrapping of any apparatus removed and not re-used, under the provisions of this Part of this Schedule must be deducted from any sum payable under sub-paragraph (1), that value being calculated after removal.

(4) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed by Affinity Water in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed by Affinity Water at a depth greater than the depth at which the existing apparatus was situated,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement, is not determined by arbitration in accordance with article 42 (arbitration) to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the

existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to Affinity Water by virtue of sub-paragraph (1) must be reduced by the amount of that excess.

(5) For the purposes of sub-paragraph (4)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus is not to be treated as a placing of apparatus of greater dimensions than those of the existing apparatus;
- (b) where it is not possible in the circumstances to obtain the existing type of apparatus at the same capacity and dimensions or to place it at the existing depth, the capacity, dimensions and depth of the apparatus is to be treated as if it has been agreed or so determined; and
- (c) where the provision of a joint in a pipe or cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of an inspection chamber is to be treated as if it also had been agreed or had been so determined.

(6) An amount which apart from this sub-paragraph would be payable to Affinity Water in respect of works by virtue of sub-paragraph (1) must, if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on Affinity Water any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, be reduced by the amount which represents that benefit.

(7) The amount of the reduction under sub-paragraph (6) must be calculated using the methodology set out in paragraph 29 of HAUC Advice Note and—

- (a) the 1991 Act and any regulations made under that Act (including the cost-sharing regulations made under section 85 (Sharing of cost of necessary measures) of that Act), and
- (b) any other codes of practice or guidance issued under the 1991 Act or regulations made under that Act,

do not apply in respect of any such calculation under sub-paragraph (6).

(8) In relation to any anticipated costs to be payable by the undertaker to Affinity Water pursuant to sub-paragraph 137(1) Affinity Water must provide the undertaker, on receipt of a request from the undertaker, with a schedule showing its estimate and with such information as may reasonably enable the undertaker to assess the reasonableness of any such estimate or claim made or to be made pursuant to this paragraph 137.

(9) Affinity Water must give the undertaker a final account of the costs in relation to which a schedule has been provided under sub-paragraph 137(8) and within 30 days of the issue of the final account—

- (a) if the final account shows a further sum as due to Affinity Water the undertaker must pay to Affinity Water the sum shown due to it; and
- (b) if the account shows that the payment or payments previously made by the undertaker have exceeded the costs incurred by Affinity Water, Affinity Water must refund the difference to the undertaker.

(10) Where the undertaker does not agree that an estimate provided by Affinity Water under sub-paragraph 137(8) is reasonable, the undertaker must notify Affinity Water of that within 15 days of receiving the schedule of estimate. The undertaker and Affinity Water will escalate the estimate internally and will each nominate a senior officer to attend a discussion on the estimate. Where the parties fail to reach agreement following such discussion, any difference or dispute over reasonableness of any excess sum shall be determined by expert determination in accordance with paragraph 140.

Indemnity

138.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction, operation or maintenance of any of the authorised works or any such works referred to in paragraphs 135(1) or 135(2), or by reason of any subsidence resulting from the authorised

works or such works, any damage is caused to any of Affinity Water's apparatus or alternative apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal pursuant to paragraph 134) or property of Affinity Water, or there is any interruption in any service provided, or in the supply of any goods, by Affinity Water, or, Affinity Water becomes liable to pay any amount to any third party incurred in accordance with the provisions of this paragraph, the undertaker must—

- (a) bear and pay the cost reasonably incurred by Affinity Water, accompanied by an invoice, in making good such damage, restoring the supply or ensuring continuity of supply; and
- (b) indemnify Affinity Water against all liabilities, claims, demands, losses (excluding any loss of profit), damages, proceedings, penalties, fines, levies, surcharges, or costs which may be made or taken against or recovered from or incurred by Affinity Water,

by reason or in consequence of any such damage or interruption.

(2) The fact that any act or thing may have been done by Affinity Water on behalf of the undertaker or in accordance with a plan approved by Affinity Water under paragraph 136 or in accordance with any requirement of Affinity Water or under its supervision does not, subject to sub-paragraph (3), excuse the undertaker from liability under the provisions of sub-paragraph (1) unless Affinity Water fails to carry out and execute the works properly with due care and attention and in a skilful and professional like manner or in a manner that does not accord with the approved plan.

(3) Nothing in sub-paragraph (1) imposes any liability on the undertaker in respect of any damage or interruption to the extent that it is attributable to the unlawful act, neglect or default of Affinity Water, its officers, servants, contractors or agents.

(4) Affinity Water must give the undertaker reasonable notice of any such claim or demand and, unless payment is required in connection with a statutory compensation scheme, no settlement or compromise is to be made without first consulting the undertaker and considering their representations.

(5) Affinity Water must, in respect of any matter covered by the indemnity given by the undertaker in this paragraph, at all times act reasonably and in the same manner as it would as if settling third party claims on its own behalf from its own funds.

(6) Affinity Water must use reasonable endeavours to mitigate in whole or in part and to minimise any costs, expenses, loss, demands and penalties to which the indemnity under this paragraph applies where it is within Affinity Water's reasonable ability and control to do so but those endeavours expressly exclude any obligation to mitigate liability arising from third parties which is outside of Affinity Water's control. If reasonably requested to do so by the undertaker Affinity Water must provide an explanation of how the claim has been mitigated, where relevant.

Cooperation

139.—(1) Where in consequence of the proposed construction of any of the authorised works, the undertaker or Affinity Water requires the removal of Affinity Water's apparatus under paragraph 134(2) or Affinity Water makes requirements for the protection or alteration of Affinity Water's apparatus under paragraph 135, the undertaker must use all reasonable endeavours to co-ordinate the execution of the works in the interests of safety and the efficient and economic execution of the authorised works and taking into account the need to ensure the safe and efficient operation of Affinity Water's undertaking, using existing processes where requested by Affinity Water, provided it is appropriate to do so, and Affinity Water must use all reasonable endeavours to co-operate with the undertaker for that purpose.

(2) For the avoidance of doubt whenever Affinity Water's consent, agreement or approval is required in relation to plans, documents or other information submitted by the undertaker or the taking of action by the undertaker, it must not be unreasonably withheld or delayed.

(3) Where the undertaker identifies any apparatus which may belong to or be maintainable by Affinity Water but which has not previously been indicated by Affinity Water as being apparatus belonging to it, the undertaker shall inform Affinity Water of the existence and location of the apparatus as soon as reasonably practicable. If Affinity Water confirms that it owns or maintains

the apparatus, that apparatus shall then be afforded the same protection under this Part of this Schedule as other apparatus belonging to Affinity Water.

(4) Nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and Affinity Water in respect of any of Affinity Water's apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

(5) The undertaker and Affinity Water may by written agreement substitute any periods of time set out in this Part of this Schedule for any other period of time.

Expert Determination

140.—(1) Article 42 (arbitration) of the Order does not apply to paragraph 135 (facilities and rights for alternative apparatus) of this Part of this Schedule.

(2) Any difference under this Part of this Schedule may be referred to and settled by a single independent and suitable person who holds appropriate professional qualifications and is a member of a professional body relevant to the matter in dispute acting as an expert, such person to be agreed by the differing parties or, in the absence of agreement, identified by the President of the Institution of Civil Engineers.

(3) On notification by either party of a dispute, the parties must jointly instruct an expert within 14 days of notification of the dispute.

(4) All parties involved in settling any difference must use best endeavours to do so within 21 days from the date that an expert is appointed.

(5) The expert must—

- (a) invite the parties to make submission to the expert in writing and copied to the other party to be received by the expert within 7 days of the expert's appointment;
- (b) permit a party to comment on the submissions made by the other party within 7 days of receipt of the submission;
- (c) issue a decision within 7 days of receipt of the submissions under sub-paragraph (b); and
- (d) give reasons for the decision.

(6) Any determination by the expert is final and binding, except in the case of manifest error in which case the difference that has been subject to expert determination may be referred to and settled by arbitration under article 42 (arbitration).

(7) The fees of the expert are payable by the parties in such proportions as the expert may determine or, in the absence of such determination, equally.

Access

141. If in consequence of any agreement reached in accordance with paragraph 133 or of the exercise of the powers conferred by this Order, the access to any of Affinity Water's apparatus is materially obstructed, the undertaker must at all times provide such alternative rights and means of access to such apparatus as will enable Affinity Water to maintain or use Affinity Water's apparatus no less effectively than was possible before such obstruction.

PART 11

FOR THE PROTECTION OF NATIONAL GRID ELECTRICITY TRANSMISSION

Application

142. The provisions of this Part have effect unless otherwise agreed in writing between the undertaker and National Grid.

Interpretation

143. In this Part:

“apparatus” means electric lines or electrical plant (as defined in the Electricity Act 1989(a), belonging to or maintained by National Grid together with any replacement apparatus, and includes any structure in which apparatus is or will be lodged or which gives or will give access to apparatus;

“EACN Substation Area” means the land shown in the lands plans as plots 16-006, 16-007 and 16-008, within which National Grid intend to construct the New National Grid Substation

“Incentive Deduction” means any incentive deduction National Grid Electricity Transmission Plc receives under its electricity transmission licence which is caused by an event on its transmission system that causes electricity not to be supplied to a demand customer and which arises as a result of the authorised development;

“National Grid” means National Grid Electricity Transmission Plc, Company Number (02366977, and having its registered office at 1 - 3 Strand, London, WC2N 5EH), which company is promoter of the NTT project;

“New National Grid Substation” means the substation to be constructed by National Grid within the EACN Substation Area as part of the NTT project, and into which the undertaker will connect as part of the authorised development;

“New National Grid Substation Boundary” means the area forming the new National Grid substation located within the EACN Substation Area, which lies or will lie within the final fenceline of that substation site and within which the connection agreement between the undertaker and National Grid Electricity System Operator applies;

“NTT project” means the Norwich to Tilbury Grid reinforcement project, for which National Grid intend to submit a Development Consent Order application.

“Specified Works” means any of the onshore works or activities undertaken in association with the onshore works which:

- (a) will or may be situated over, or within 15 metres measured in any direction of any apparatus; and/or
- (b) may in any way adversely affect any apparatus; and/or
- (c) includes any of the activities that are referred to in development near overhead lines EN43-8 and HSE’s guidance note 6 “Avoidance of Danger from Overhead Lines”.

“STC” means the System Operator Transmission Owner Code prepared by the electricity Transmission Owners and NGESO as modified from time to time;

“STC Claims” means any claim made under the STC against National Grid Electricity Transmission Plc arising out of or in connection with the de-energisation (whereby no electricity can flow to or from the relevant system through the generator or interconnector’s equipment) of a generator or interconnector party solely as a result of the de-energisation of plant and apparatus forming part of National Grid Electricity Transmission Plc’s transmission system which arises as a result of the authorised works; and

“Transmission Owner” means as defined in the STC.

Compulsory acquisition of land and rights

144. Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to this Order, the undertaker must not acquire any interest in land or any apparatus or override any easement or other interest of National Grid otherwise than by agreement, such agreement not to be unreasonably withheld or delayed.

145. Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to this Order, the undertaker must not acquire any interest in the part or parts of plots 16-006, 16-007 and 16-008 which is or will be within the New National Grid Substation Boundary, provided that notification of the final location of that substation is received

from National Grid prior to the exercise of any power to compulsorily acquire rights over plots 16-006, 16-007 and 16-008 being exercised.

146. Where the undertaker acquires any right in land that is subsequently notified to the undertaker as being within the New National Grid Substation Boundary, the undertaker may not exercise, rely on such right within that boundary unless otherwise agreed.

147.—(1) Subject to sub-paragraph (2), the undertaker must not permanently acquire any interest in plots 16-006, 16-007 and 16-008 until the design of the New National Grid Substation has been finalised, and the final location of the undertaker's connection bay has been identified and notified to the undertaker, and the extent of land rights necessary for the connection (cable route location and extent of access rights and easement) has been agreed with National Grid.

(2) Where, before the design of the New National Grid Substation has been finalised and the final location of the undertaker's connection bay has been identified and notified to the undertaker;

- (a) it is reasonably necessary to maintain the undertaker's construction programme, or
- (b) the expiry of temporary possession powers in plots 16-006, 16-007 and 16-008 means that it is necessary for the Undertaker to acquire permanent land rights in plots 16-006, 16-007 and 16-008;

then the undertaker may exercise powers under this Order to compulsorily acquire the necessary rights for the cables and access thereto over all of plots 16-006, 16-007 and 16-008.

148. In so far as National Grid has acquired an interest in plots 16-006, 16-007 and 16-008 and/or is in occupation of any part of those plots, the undertaker may not exercise Temporary Possession Powers over plots 16-006, 16-007 and 16-008 without the prior agreement of National Grid to such exercise being obtained, which consent must not be unreasonably withheld or delayed.

Protection of National Grid apparatus

149.—(1) Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to this Order, the undertaker may not, under the powers of this Order, adjust, remove, alter, divert or interfere with any apparatus owned by National Grid (including any future electric transmission infrastructure in the vicinity of the Order Land which National Grid may require to discharge its statutory duties) otherwise than by agreement.

(2) The undertaker will not seek to acquire or exercise any rights to remove any National Grid apparatus under compulsory powers granted by this Order, including but not limited to the power to:

“install, alter, re-lay, maintain, protect, adjust or remove pipes, cables or conduits or apparatus including but not limited to electricity poles, electricity pylons, electricity masts, overhead electricity lines, telecommunications cables and any ancillary equipment and apparatus public and private drains, watercourses, sewers, ponds or culverts, service media (including the pipes, cables or conduits or apparatus of statutory undertakers)”;

without the prior written consent of National Grid to any such acquisition or exercise being obtained.

150. National Grid's rights, including without limitation rights to retain, access and maintain its apparatus and any future apparatus where that apparatus is located in the vicinity of the Order Land, which National Grid may require to discharge its statutory duties, will not be impeded throughout any period of temporary possession or survey works authorised by this Order. In exercising such rights within any area of which the undertaker is in temporary possession, National Grid will have reasonable regard to any request by the undertaker which the undertaker advises National Grid is necessary to comply with health and safety obligations and/or any requirement under the Construction (Design and Management) Regulations 2015 as to how National Grid exercises such rights and carries out any works.

Works in the EACN Substation Area

151. At all times after NGET has commenced construction and when the undertaker is:

- (a) working within plots 16-006, 16-007 and 16-008; and
- (b) within any area within the ownership or control of National Grid; and/or
- (c) are carrying out any Specified Works; but
- (d) (excepting any works which are works regulated by the connection agreement between the undertaker and National Grid Energy Systems Operator (or a successor thereto) and carried out within the New National Grid Substation Boundary which will be governed solely by that agreement and not this Part;

to comply with paragraphs 152 and 153 of this Part.

152.—(1) Not less than 56 days before the commencement of any works to which paragraph 151 applies, the undertaker must submit to National Grid a plan of the works to be executed and seek from National Grid details of the underground extent of their electricity assets.

(2) In relation to works to which paragraph 151 applies, the plan to be submitted to National Grid under sub-paragraph (1) must include a method statement and describe (in so far as is relevant to those works)—

- (a) the exact position of the works;
- (b) the level at which these are proposed to be constructed or renewed;
- (c) the manner of their construction or renewal including details of excavation, positioning of plant;
- (d) the position of all apparatus;
- (e) by way of detailed drawings, every alteration proposed to be made to or close to any such apparatus;
- (f) any intended maintenance regimes; and
- (g) an assessment of risks of rise of earth issues.
- (h) a ground monitoring scheme, where required.

(3) In relation to any works which will or may be situated on, over, under or within 10 metres of any part of the foundations of an electricity tower or between any two or more electricity towers, the plan to be submitted under sub-paragraph (1) must, in addition to the matters set out in sub-paragraph (2), include a method statement describing—

- (a) details of any cable trench design including route, dimensions, clearance to pylon foundations;
- (b) demonstration that pylon foundations will not be affected prior to, during and post construction;
- (c) details of load bearing capacities of trenches;
- (d) details of any cable installation methodology including access arrangements, jointing bays and backfill methodology;
- (e) a written management plan for high voltage hazard during construction and ongoing maintenance of any cable route;
- (f) written details of the operations and maintenance regime for any cable, including frequency and method of access;
- (g) assessment of earth rise potential if reasonably required by National Grid Electricity Transmission Plc's engineers; and
- (h) evidence that trench bearing capacity is to be designed to support overhead line construction traffic of up to and including 26 tonnes in weight.

(4) The undertaker must not commence any works to which sub-paragraphs (2) or (3) apply until National Grid has given written approval of the plan so submitted.

(5) Any approval of National Grid required under sub-paragraph (4):

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraphs (6) or (8); and,
- (b) must not be unreasonably withheld.

(6) In relation to any work to which sub-paragraphs (2) or (3) apply, National Grid may require such modifications to be made to the plans as may be reasonably necessary for the purpose of securing its apparatus against interference or risk of damage, for the provision of protective works or for the purpose of providing or securing proper and convenient means of access to any apparatus.

(7) Works executed under sub-paragraphs (2) or (3) must be executed in accordance with the plan, submitted under sub-paragraph (1) or as relevant sub-paragraph (6), as approved or as amended from time to time by agreement between the undertaker and National Grid and in accordance with such reasonable requirements as may be made in accordance with sub-paragraphs (6) or (8) by National Grid for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and National Grid will be entitled to watch and inspect the execution of those works.

(8) Where National Grid requires any protective works to be carried out by itself or by the undertaker (whether of a temporary or permanent nature) such protective works, inclusive of any measures or schemes required and approved as part of the plan approved pursuant to this paragraph, must be carried out to National Grid's reasonable satisfaction prior to the commencement of the work(s) for which protective works are required and National Grid shall give notice its requirement for such works within 42 days of the date of submission of a plan pursuant to this paragraph (except in an emergency).

(9) If National Grid Electricity in accordance with sub-paragraphs (6) or (8) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, sub-paragraphs (6) or (8) apply as if the removal of the apparatus had been required by the undertaker.

(10) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of the works to which paragraph 151 applies, a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph shall apply to and in respect of the new plan.

(11) The undertaker will not be required to comply with sub-paragraph (1) where it needs to carry out emergency works as either defined in the 1991 Act, but in that case it must give to National Grid notice as soon as is reasonably practicable and a plan of those works and must comply with sub-paragraphs (6), (7) and (8) insofar as is reasonably practicable in the circumstances and comply with sub-paragraph (12) at all times.

(12) At all times when carrying out any works to which paragraph 151 applies, the undertaker must comply with national Grid Electricity Transmission Plc's policies for development near overhead lines EN43-8 and HSE's guidance note 6 "Avoidance of Danger from Overhead Lines".

Indemnity

153.—(1) Where paragraph 151 applies, the undertaker must comply with the following indemnity provision:

Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction use or maintenance or failure of any works to which paragraph 151 applies by or on behalf of the undertaker or in consequence of any act or default of the undertaker (or any person employed or authorised by him) in the course of carrying out such works, including without limitation works carried out by the undertaker under this Part of this Schedule or any subsidence resulting from any of these works, any damage is caused to any apparatus or property of National Grid, or there is any interruption in any service provided, or in the supply of any goods, by National Grid, or National Grid becomes liable to pay any amount to any third party, the undertaker will—

- (a) bear and pay on demand accompanied by an invoice or claim from National Grid the cost reasonably and properly incurred by National Grid in making good such damage or restoring the supply; and
- (b) indemnify National Grid for any other expenses, loss, demands, proceedings, damages, claims, penalty or costs incurred by or recovered from National Grid, by reason or in consequence of any such damage or interruption or National Grid becoming liable to any third party and including STC Claims or an Incentive Deduction other than arising from any default of National Grid.

(2) The fact that any act or thing may have been done by National Grid on behalf of the undertaker or in accordance with a plan approved by National Grid or in accordance with any requirement of National Grid or under its supervision will not (unless sub-paragraph (3) applies), excuse the undertaker from liability under the provisions of this sub-paragraph (1) unless National Grid fails to carry out and execute the works properly with due care and attention and in a skilful and workman like manner or in a manner that does not accord with the approved plan.

(3) Nothing in sub-paragraph (1) shall impose any liability on the undertaker in respect of—

- (a) any damage or interruption to the extent that it is attributable to the neglect or default of National Grid, its officers, servants, contractors or agents;
- (b) any works to which paragraph 151 applies and/or any other works authorised by this Part of this Schedule carried out by National Grid as an assignee, transferee or lessee of the undertaker with the benefit of the Order pursuant to section 156 of the Planning Act 2008 or article 5 (benefit of the Order) subject to the proviso that once such works become apparatus (“new apparatus”), any works to which paragraph 151 applies yet to be executed and not falling within this sub-section 153(3)(b) will be subject to the full terms of this Part of this Schedule including this paragraph 153; and/or
- (c) any indirect or consequential loss of any third party (including but not limited to loss of use, revenue, profit, contract, production, increased cost of working or business interruption) arising from any such damage or interruption, which is not reasonably foreseeable.

(4) National Grid must give the undertaker reasonable notice of any such third party claim or demand and no settlement, admission of liability or compromise must, unless payment is required in connection with a statutory compensation scheme, be made without first consulting the undertaker and considering their representations.

(5) National Grid must, in respect of any matter covered by the indemnity given by the undertaker in this paragraph, at all times act reasonably and in the same manner as it would as if settling third party claims on its own behalf from its own funds.

(6) National Grid must use its reasonable endeavours to mitigate and to minimise any costs, expenses, loss, demands, and penalties to which the indemnity under this paragraph applies where it is within National Grid’s reasonable ability and control to do so and which expressly excludes any obligation to mitigate liability arising from third parties which is outside of National Grid’s control and if reasonably requested to do so by the undertaker National Grid must provide an explanation of how the claim has been minimised, where relevant.

154. Any dispute arising between the undertaker and National Grid under this Part of this Schedule, if the parties agree, is to be determined by arbitration under article 42 (arbitration).

PART 12

FOR THE PROTECTION OF CADENT GAS LIMITED

Application

155. For the protection of Cadent the following provisions will, unless otherwise agreed in writing between the undertaker and Cadent, have effect.

Interpretation

156. In this Part of this Schedule—

“1991 Act” means the New Roads and Street Works Act 1991;

“apparatus” means any gas mains, pipelines, pipes, pressure governors, ventilators, cathodic protection (including transformed rectifiers and any associated groundbeds or cables), cables, marker posts, block valves, hydrogen above ground installations or other apparatus belonging to, or maintained by, Cadent for the purposes of Cadent’s undertaking together with any replacement apparatus and such other apparatus constructed pursuant to this Order that becomes operational apparatus of Cadent for the purposes of Cadent’s undertaking and includes any structure in which apparatus is or will be lodged or which gives or will give access to apparatus;

“authorised works” has the same meaning as is given to the term “authorised development” in article 2 of the Order and includes any associated development authorised by the Order and for the purposes of this Part of this Schedule includes the use and maintenance of the authorised works and construction of any works authorised by this Schedule;

“Cadent” means Cadent Gas Limited and includes its successors in title or any successor as a gas transporter within the meaning of Part 1 of the Gas Act 1986;

“Cadent’s undertaking” means the rights, duties and obligations of Cadent Gas Limited as a public gas transporter within the meaning of Section 7 of the Gas Act 1986 (as amended by the Gas Act 1995);

“commence” and “commencement” include any below ground surveys, intrusive monitoring or work operations, remedial work in respect of any contamination or other adverse ground condition;

“facilities and rights” for construction and for maintenance include any appropriate working areas required to reasonably and safely undertake that construction or maintenance, and any necessary rights of access;

“functions” includes powers and duties;

“ground mitigation scheme” means a scheme approved by Cadent (such approval not to be unreasonably withheld or delayed) setting out the necessary measures (if any) for a ground subsidence event;

“ground monitoring scheme” means a scheme for monitoring ground subsidence which sets out the apparatus which is to be subject to such monitoring, the extent of land to be monitored, the manner in which ground levels are to be monitored, the timescales of any monitoring activities and the extent of ground subsidence which, if exceeded, will require the undertaker to submit for Cadent’s approval a ground mitigation scheme;

“ground subsidence event” means any ground subsidence identified by the monitoring activities set out in the ground monitoring scheme that has exceeded the level described in the ground monitoring scheme as requiring a ground mitigation scheme;

“in” in a context referring to apparatus or alternative apparatus in land includes a reference to apparatus or alternative apparatus under, over, across, along or upon such land;

“maintain” and “maintenance” will include the ability and right to do any of the following in relation to any apparatus or alternative apparatus of Cadent including retain, lay, construct, inspect, maintain, protect, use, access, enlarge, replace, renew, remove, decommission or render unusable or remove the apparatus;

“plan” or “plans” include all designs, drawings, specifications, method statements, soil reports, programmes, calculations, risk assessments and other documents that are reasonably necessary, proper and sufficient to describe and assess the works to be executed;

“rights” includes rights and restrictive covenants and, in relation to decommissioned apparatus, the surrender of rights, release of liabilities and transfer of decommissioned apparatus; and

“specified works” means any of the authorised works or activities (including maintenance) undertaken in association with the authorised works which—

- (a) will or may be situated over, or within 15 metres measured in any direction of any apparatus the removal of which has not been required by the undertaker under paragraph 161(2) or otherwise;
- (b) may in any way adversely affect any apparatus the removal of which has not been required by the undertaker under paragraph 161(2) or otherwise; or
- (c) include any of the activities that are referred to in CD/SP/SSW/22 Cadent’s policies for safe working in proximity to gas apparatus Specification for safe working in the vicinity of Cadent Assets; and

“undertaker” means the undertaker as defined in article 2 of this Order.

On Street apparatus

157.—(1) This Schedule does not apply to apparatus in respect of which the relations between the undertaker and Cadent are regulated by the provisions of Part 3 of the 1991 Act, except for—

- (a) paragraphs 158, 163, 164 and 165; and
- (b) where sub-paragraph 157(2) applies, paragraphs 161 and 162.

(2) This sub-paragraph applies where any apparatus is diverted from an alignment within the existing adopted public highway but not wholly replaced within the existing public highway, notwithstanding that any diversion may be carried out under the provisions of Part 3 of the 1991 Act.

(3) Notwithstanding article 9 (application of the 1991 Act) or any other powers in the Order generally, s85 of the 1991 Act in relation to cost sharing and the regulations made thereunder will not apply in relation to any diversion of apparatus of Cadent under the 1991 Act.

Access to apparatus

158. Notwithstanding the temporary restriction of use of any street under the powers of article 12 (temporary restriction of use of streets), Cadent will be at liberty at all times to take all necessary access across any such street and to execute and do all such works and things in, upon or under any such street as it would have been entitled to do immediately before such temporary alteration, diversion or restriction in respect of any apparatus which at the time of the stopping up or diversion was in that street.

Protective works to buildings

159.—(1) The undertaker, in the case of the powers conferred by article 18 (protective work to buildings), must exercise those powers so as not to obstruct or render less convenient the access to any apparatus without the written consent of Cadent (which must not be unreasonably withheld) and, if by reason of the exercise of those powers any damage to any apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal or abandonment) or property of Cadent or any interruption in the supply of gas by Cadent, as the case may be, is caused, the undertaker must bear and pay on demand the cost reasonably incurred by Cadent in making good such damage or restoring the supply; and, subject to sub-paragraph (2), will pay compensation to Cadent for any loss sustained by it.

(2) Nothing in this paragraph imposes any liability on the undertaker with respect to any damage or interruption to the extent that such damage or interruption is attributable to the act, neglect or default of Cadent or its contractors or workmen; and Cadent will give to the undertaker reasonable notice of any claim or demand as aforesaid and no settlement or compromise thereof must be made by Cadent, save in respect of any payment required under a statutory compensation scheme, without first consulting the undertaker and giving the undertaker an opportunity to make representations as to the claim or demand.

Acquisition of land

160.—(1) Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to the Order, the undertaker may not appropriate or acquire from Cadent any interest in land or appropriate, acquire, extinguish, interfere with or override any easement or other interest in land of Cadent otherwise than by agreement (such agreement not to be unreasonably withheld).

(2) As a condition of agreement between the parties in sub-paragraph (1), prior to the carrying out or maintenance of any part of the authorised works (or in such other timeframe as may be agreed between Cadent and the undertaker) that are subject to the requirements of this Part of this Schedule that will cause any conflict with or breach the terms of any easement and/or other legal or land interest of Cadent and/or affects the provisions of any enactment or agreement regulating the relations between Cadent and the undertaker in respect of any apparatus laid or erected in land belonging to or secured by the undertaker, the undertaker must as Cadent reasonably requires enter into such deeds of consent and variations upon such terms and conditions as may be agreed between Cadent and the undertaker acting reasonably and which must be no less favourable on the whole to Cadent unless otherwise agreed by Cadent, and it will be the responsibility of the undertaker to procure and/or secure the consent to and entering into of such deeds and variations by all other third parties with an interest in the land at that time who are affected by such authorised works.

(3) The undertaker and Cadent agree that where there is any inconsistency or duplication between the provisions set out in this Part of this Schedule relating to the relocation or removal of apparatus, including but not limited to the payment of costs and expenses relating to such relocation and/or removal of apparatus and the provisions of any existing easement, rights, agreements and licences granted, used, enjoyed or exercised by Cadent and other enactments relied upon by Cadent as of right or other use in relation to the apparatus, then the provisions in this Schedule will prevail.

(4) Any agreement or consent granted by Cadent under paragraph 162 or any other paragraph of this Part of this Schedule, will be taken to constitute agreement under sub-paragraph (1).

(5) As a condition of an agreement under sub-paragraph (1) that involves de-commissioned apparatus being left in situ the undertaker must accept a surrender of any existing easement and/or other interest of Cadent in such decommissioned apparatus and consequently acquire title to such decommissioned apparatus and release Cadent from all liabilities in respect of such de-commissioned apparatus from the date of such surrender.

(6) Where an undertaker acquires land which is subject to any Cadent right or interest (including, without limitation, easements and agreements relating to rights or other interests) and the provisions of paragraph 160 do not apply, the undertaker must, unless Cadent agrees otherwise—

- (a) retain any notice of Cadent's easement, right or other interest on the title to the relevant land when registering the undertaker's title to such acquired land; and
- (b) (where no such notice of Cadent's easement, right or other interest exists in relation to such acquired land or any such notice is registered only on the Land Charges Register) include (with its application to register title to the undertaker's interest in such acquired land at the Land Registry) a notice of Cadent's easement, right or other interest in relation to such acquired land.

Removal of apparatus

161.—(1) If, in the exercise of the powers conferred by this Order, including pursuant to any agreement reached in accordance with paragraph 160, the undertaker acquires any interest in any land in which any apparatus is placed, that apparatus must not be decommissioned or removed under this Part of this Schedule and any right of Cadent to maintain that apparatus in that land must not be extinguished or interfered with until alternative apparatus has been constructed, is in operation, and the facilities and rights referred to in sub-paragraph (2) have been provided, to the satisfaction of Cadent and in accordance with sub-paragraphs (2) to (5) inclusive.

(2) If, for the purpose of executing any works in, on, under or over any land purchased, held, appropriated or used under this Order, the undertaker requires the removal of any apparatus placed in that land, it must give to Cadent advance written notice of that requirement, together with a plan and section of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed and in that case (or if in consequence of the exercise of any of the powers conferred by this Order Cadent reasonably needs to move or remove any of its apparatus) the undertaker must afford to Cadent to its reasonable satisfaction (taking into account paragraph 162(1)) the necessary facilities and rights—

- (a) for the construction of alternative apparatus (including appropriate working areas required to reasonably and safely undertake necessary works by Cadent in respect of the apparatus);
- (b) subsequently for the maintenance of that apparatus (including appropriate working areas required to reasonably and safely undertake necessary works by Cadent in respect of the apparatus); and
- (c) to allow access to that apparatus (including appropriate working areas required to reasonably and safely undertake necessary works by Cadent in respect of the apparatus).

(3) If the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2), in the land in which the alternative apparatus or part of such apparatus is to be constructed, Cadent may, on receipt of a written notice to that effect from the undertaker, take such steps as are reasonable in the circumstances in an endeavour to assist the undertaker in obtaining the necessary facilities and rights in the land in which the alternative apparatus is to be constructed save that this obligation will not extend to the requirement for Cadent to use its compulsory purchase powers to this end unless it (in its absolute discretion) elects to so do.

(4) Any alternative apparatus to be constructed in land of or land secured by the undertaker under this Part of this Schedule must be constructed in such manner and in such line or situation as may be agreed between Cadent and the undertaker.

(5) Cadent must, after the alternative apparatus to be provided or constructed has been agreed or settled, and subject to the prior grant to Cadent of such facilities and rights as are referred to in sub-paragraph (2) or (3) have been afforded to Cadent to its satisfaction, then proceed without unnecessary delay to construct and bring into operation the alternative apparatus and subsequently to decommission or remove any apparatus required by the undertaker to be decommissioned or removed under the provisions of this Part of this Schedule.

Facilities and rights for alternative apparatus

162.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to or secures for Cadent facilities and rights in land for the access to, construction and maintenance of alternative apparatus in substitution for apparatus to be decommissioned or removed, those facilities and rights must be granted upon such terms and conditions as may be agreed between the undertaker and Cadent and must be no less favourable on the whole to Cadent than the facilities and rights enjoyed by it in respect of the apparatus to be decommissioned or removed unless otherwise agreed by Cadent.

(2) If the facilities and rights to be afforded by the undertaker and agreed with Cadent under sub-paragraph (1) in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are less favourable on the whole to Cadent (in Cadent's reasonable opinion) than the facilities and rights enjoyed by it in respect of the apparatus to be decommissioned or removed, then the terms and conditions to which those facilities and rights are subject in the matter will be referred to arbitration in accordance with paragraph 168 (arbitration) of this Part of this Schedule and the arbitrator must make such provision for the payment of compensation by the undertaker to Cadent as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case.

Retained apparatus: protection of Cadent

163.—(1) Not less than 56 days before the commencement of any specified works the undertaker must submit to Cadent a plan and, if reasonably required by Cadent, a ground monitoring scheme in respect of those works.

(2) The plan to be submitted to Cadent under sub-paragraph (1) must include a method statement and describe—

- (a) the exact position of the works;
- (b) the level at which these are proposed to be constructed or renewed;
- (c) the manner of their construction or renewal including details of excavation, positioning of plant etc.;
- (d) the position of all apparatus;
- (e) by way of detailed drawings, every alteration proposed to be made to or close to any such apparatus; and
- (f) any intended maintenance regimes.

(3) The undertaker must not commence any specified works until Cadent has given written approval of the plan so submitted (and the ground monitoring scheme if required).

(4) Any approval of Cadent given under sub-paragraph (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5); and
- (b) must not be unreasonably withheld or delayed.

(5) For the purposes of sub-paragraph (4)(b) it will be deemed to be reasonable for any approval to be refused if Cadent considers that the specified works would—

- (a) cause material risk of damage to its apparatus; or
- (b) prevent access to its apparatus unless alternative means of access to such apparatus is provided in accordance with paragraph 167.

(6) In relation to any work to which sub-paragraphs (1) and/or (2) apply Cadent may require such modifications to be made to the plan as may be reasonably necessary for the purpose of securing its apparatus against material risk of damage or for the purpose of providing or securing means of access to maintain or use the apparatus no less effectively than was possible before the specified works.

(7) Works to which this paragraph applies must only be executed in accordance with—

- (a) the plan submitted under sub-paragraph (1) and (2) (and where relevant sub-paragraph (4)) (and ground monitoring scheme if required), as approved or as amended from time to time by agreement between the undertaker and Cadent; and
- (b) all conditions imposed under sub-paragraph (4)(a), and Cadent will be entitled to watch and inspect the execution of those works where reasonably practicable to do so and in accordance with any relevant health and safety legislation.

(8) Where Cadent requires any protective works to be carried out by itself or by the undertaker (whether of a temporary or permanent nature) such protective works, inclusive of any measures or schemes required and approved as part of the plan approved pursuant to this paragraph, must be carried out to Cadent's satisfaction prior to the commencement of any specified works (or any relevant part thereof) for which protective works are required prior to commencement.

(9) If Cadent, in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, paragraphs 155 to 157 and 160 to 162 apply as if the removal of the apparatus had been required by the undertaker under paragraph 161(2).

(10) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of the specified works, a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph will apply to and in respect of the new plan.

(11) As soon as reasonably practicable after any ground subsidence event attributable to the specified works (including such an event attributable to its maintenance)—

- (a) the undertaker must implement an appropriate ground mitigation scheme; and
- (b) Cadent retains the right to carry out any further necessary protective works for the safeguarding of its apparatus and can recover any such costs in line with paragraph 164.

(12) The undertaker is not required to comply with sub-paragraph (1) where it needs to carry out emergency works as defined in the 1991 Act but in that case it must give to Cadent notice as soon as is reasonably practicable and a plan of those works and must comply with—

- (a) the conditions imposed under sub-paragraph (4)(a) insofar as is reasonably practicable in the circumstances; and
- (b) sub-paragraph (13) at all times.

(13) At all times when carrying out any works authorised under the Order the undertaker must comply with the Cadent's policies for safe working in proximity to gas apparatus "Specification for safe working in the vicinity of Cadent Assets CAD//SP/SSW/22" and HSE's "HS(~G)47 Avoiding Danger from underground services".

Expenses

164.—(1) Subject to the following provisions of this paragraph, the undertaker must pay to Cadent on demand all reasonable charges, costs and expenses anticipated or incurred by Cadent in, or in connection with, the inspection, removal, relaying or replacing, alteration or protection of any apparatus or the construction of any new or alternative apparatus which may be required in consequence of the execution of any authorised works as are referred to in this Part of this Schedule including without limitation—

- (a) any costs reasonably incurred by or compensation properly paid by Cadent in connection with the negotiation and/or acquisition of rights or the exercise of statutory powers for such apparatus including without limitation all costs (including professional fees) incurred by Cadent as a consequence of Cadent;
 - (i) using its own compulsory purchase powers to acquire any necessary rights under paragraph 161(3) if it elects to do so; and/or
 - (ii) exercising any compulsory purchase powers under this Order transferred to or benefitting Cadent;
- (b) in connection with the cost of the carrying out of any diversion work or the provision of any alternative apparatus;
- (c) the cutting off of any apparatus from any other apparatus or the making safe of redundant apparatus;
- (d) the approval of plans;
- (e) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works;
- (f) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary works reasonably necessary in consequence of the execution of any such works referred to in this Part of this Schedule;
- (g) any watching brief pursuant to paragraph 163(6).

(2) There will be deducted from any sum payable under sub-paragraph (1) the value of any apparatus removed under the provisions of this Part of this Schedule and which is not re-used as part of the alternative apparatus, that value being calculated after removal.

(3) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or

- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement, is not determined by arbitration in accordance with article 42 (arbitration) to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to the statutory undertaker in question by virtue of sub-paragraph (1) is to be reduced by the amount of that excess.

(4) For the purposes of sub-paragraph (3)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus will not be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and
- (b) where the provision of a joint in a pipe or cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole will be treated as if it also had been agreed or had been so determined.

(5) An amount which apart from this sub-paragraph would be payable to Cadent in respect of works by virtue of sub-paragraph (1) will, if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on Cadent any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, be reduced by the amount which represents that benefit.

Enactments and agreements

165. Except where this Part of this Schedule provides otherwise, nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and Cadent in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

Co-operation

166.—(1) Where in consequence of the proposed construction of any part of the authorised works, the undertaker or Cadent requires the removal of apparatus under paragraph 161(2) or Cadent makes requirements for the protection or alteration of apparatus under paragraph 163, the undertaker must use its best endeavours to co-ordinate the execution of the works in the interests of safety and the efficient and economic execution of the authorised works and taking into account the need to ensure the safe and efficient operation of Cadent's undertaking and Cadent must use its best endeavours to co-operate with the undertaker for that purpose.

(2) For the avoidance of doubt whenever Cadent's consent, agreement or approval is required in relation to plans, documents or other information submitted by the undertaker or the taking of action by the undertaker, Cadent's consent must not be unreasonably withheld or delayed.

Access

167. If in consequence of any agreement reached in accordance with paragraph 160(1) or the powers conferred by this Order the access to any apparatus is materially obstructed, the undertaker must provide such alternative rights and means of access to such apparatus as will enable Cadent to maintain or use the apparatus no less effectively than was possible before such obstruction.

Arbitration

168. Save for differences or disputes arising under paragraphs 161(2), 161(4), 162(1) and 163 any difference or dispute arising between the undertaker and Cadent under this Part of this

Schedule must, unless otherwise agreed in writing between the undertaker and Cadent, be determined by arbitration in accordance with article 42 (arbitration).

PART 13

FOR THE PROTECTION OF EASTERN POWER NETWORKS

Application

169. For the protection of EPN as referred to in this Part of this Schedule the following provisions have effect, unless otherwise agreed in writing between the undertaker and EPN.

Interpretation

170. In this Part of this Schedule—

“alternative apparatus” means alternative apparatus adequate to enable EPN to fulfil its statutory functions in a manner no less efficient than previously;

“apparatus” means electric lines and electrical plant (as defined in section 64(1) of the Electricity Act 1989(a)), belonging to or maintained by EPN;

“EPN” means Eastern Power Networks plc (company number 02366906) whose registered office is at Newington House, 237 Southwark Bridge Road, London SE1 6NP;

“functions” includes powers and duties;

“in” in a context referring to apparatus or alternative apparatus in land includes a reference to apparatus or alternative apparatus under, over or upon land;

“plan” or “plans” include all designs, drawings, specifications, method statements, soil reports, programmes, calculations, risk assessments and other documents that are reasonably necessary properly and sufficiently to describe the works to be executed; and

“specified works” means any of the authorised development which—

(a) will or may be situated within 15 metres measured in any direction of any apparatus the removal of which has not been required by the undertaker under paragraph 175(2) or otherwise; or

(b) may in any way adversely affect any apparatus the removal of which has not been required by the undertaker under paragraph 175(2) or otherwise.

On street apparatus

171. This Part of this Schedule does not apply to apparatus in respect of which the relations between the undertaker and EPN are regulated by the provisions of Part 3 of the 1991 Act.

Apparatus in restricted streets and public rights of way

172. Regardless of the temporary alteration, diversion or restriction of use of any street or public right of way under the powers of article 11 (temporary closure of public rights of way) and article 12 (temporary restrictions of use of streets), EPN is at liberty at all times to take all necessary access across any such restricted, altered or diverted street or public right of way and to execute and do all such works and things in, upon or under any such street or public right of way as may be reasonably necessary or desirable to enable it to maintain any apparatus which at the time of the restriction, alteration or diversion was in that street or public right of way.

(a) 1989 c. 29.

Protective works to buildings

173. The undertaker, in the case of the powers conferred by article 18 (protective works to buildings), must exercise those powers so as not to obstruct or render materially less convenient the access to any apparatus or the ability of EPN to perform its statutory duties (such agreement not to be unreasonably withheld or delayed).

Acquisition of land

174. Regardless of any provision in this Order or anything shown on the land plans, the undertaker must not acquire any apparatus otherwise than by agreement.

Removal of apparatus

175.—(1) If in the exercise of the powers conferred by this Order, the undertaker acquires any interest in any land in which any apparatus is placed or requires that apparatus is relocated or diverted, that apparatus must not be removed under this Part of this Schedule and any right of EPN to maintain that apparatus in that land must not be extinguished until alternative apparatus has been constructed and is in operation to the reasonable satisfaction of EPN in accordance with sub-paragraphs (2) to (6).

(2) If, for the purpose of executing any specified works in, on or under any land purchased, held, appropriated or used under this Order, the undertaker requires the removal of any apparatus placed in that land, the undertaker must give to EPN no less than 28 days' written notice of that requirement, together with a plan and section of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed and in that case (or if in consequence of the exercise of any of the powers conferred by this Order EPN reasonably needs to remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), afford to EPN the necessary facilities and rights for the construction of alternative apparatus in other land of the undertaker and subsequently for the maintenance and use of that apparatus.

(3) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2) in the land in which the alternative apparatus or part of such apparatus is to be constructed, EPN must, on receipt of a written notice to that effect from the undertaker, as soon as reasonably possible use reasonable endeavours to obtain the necessary facilities and rights in the land in which the alternative apparatus is to be constructed save that this obligation does not extend to the requirement for EPN to use its powers of compulsory acquisition unless it elects to do so.

(4) Any alternative apparatus to be constructed in land of the undertaker under this Part of this Schedule must be constructed in such manner and in such line or situation as may be agreed between EPN and the undertaker or in default of agreement settled by arbitration in accordance with paragraph 183 (arbitration).

(5) EPN must, after the alternative apparatus to be provided or constructed has been agreed or settled by arbitration in accordance with paragraph 183 (arbitration), and after the grant to EPN of any such facilities and rights as are referred to in sub-paragraph (2) or (3), proceed without unnecessary delay to construct and bring into operation the alternative apparatus and subsequently to remove any apparatus required by the undertaker to be removed under the provisions of this Part of this Schedule.

(6) Regardless of anything in sub-paragraph (5), if the undertaker gives notice in writing to EPN that the undertaker desires itself to execute any work, or part of any work in connection with the construction or removal of apparatus in any land of the undertaker, that work, instead of being executed by EPN, must be executed by the undertaker without unnecessary delay under the superintendence, if given, and to the reasonable satisfaction of EPN.

Facilities and rights for alternative apparatus

176.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to EPN necessary facilities and rights in land for the construction and maintenance of alternative apparatus in substitution for apparatus to be removed, those facilities and rights must be granted upon such terms as may be agreed between the undertaker and EPN and must be no less favourable on the whole to EPN than the facilities and rights enjoyed by it in respect of the apparatus to be removed, unless otherwise agreed by EPN, such agreement not to be unreasonably withheld or delayed.

(2) If the facilities and rights to be afforded by the undertaker and agreed with EPN under sub-paragraph (1) in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are less favourable on the whole to EPN than the facilities and rights enjoyed by it in respect of the apparatus to be removed and the terms and conditions to which those facilities and rights are subject, the matter may be referred to arbitration in accordance with paragraph 183 (arbitration) and the arbitrator must make such provision for the payment of compensation by the undertaker to EPN as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case.

Retained apparatus

177.—(1) Not less than 56 days before the commencement of any specified works, the undertaker must submit to EPN a plan of the works to be executed.

(2) The plan to be submitted to EPN under sub-paragraph (1) must include a method statement and describe—

- (a) the exact position of the works;
- (b) the level at which the works are proposed to be constructed or renewed;
- (c) the manner of the construction or renewal of the works;
- (d) the position of all apparatus; and
- (e) by way of detailed drawings, every alteration proposed to be made to such apparatus.

(3) The undertaker must not commence any specified works until EPN has given written approval of the plan and works so submitted.

(4) Any approval of EPN given under sub-paragraph (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5); and
- (b) must not be unreasonably withheld or delayed.

(5) EPN may require such modifications to be made to the plan as may be reasonably necessary for the purpose of securing its apparatus against interference or risk of damage or for the purpose of providing or securing proper and convenient means of access to any apparatus.

(6) Specified works must be executed in accordance with the plan submitted under sub-paragraph (1) and in accordance with such reasonable requirements as may be made in accordance with sub-paragraph (5) by EPN for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and EPN will be entitled to watch and inspect the execution of those works where reasonably practicable to do so and in accordance with any relevant health and safety legislation.

(7) Any requirements made by EPN under sub-paragraph (5) must be made within a period of 28 days beginning with the date on which the plan is submitted to it.

(8) If EPN in accordance with sub-paragraph (5) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, paragraphs 171 to 173 and 176 to 178 apply as if the removal of the apparatus had been required by the undertaker under paragraph 175(2).

(9) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of any specified works,

a new plan instead of the plan previously submitted, and having done so the provisions of this paragraph apply to and in respect of the new plan.

(10) The undertaker is not required to comply with sub-paragraph (1) in a case of emergency but in that case it must give to EPN notice as soon as is reasonably practicable and a plan of those works as soon as reasonably practicable subsequently and must comply with sub-paragraph (6) in so far as is reasonably practicable in the circumstances.

(11) In sub-paragraph (10), works that are carried out “in a case of emergency” means such works whose execution at the time when they are executed is required in order to put an end to, or to prevent the occurrence of, circumstances then existing or imminent (or which the person responsible for the works believes on reasonable grounds to be existing or imminent) which are likely to cause danger to persons or property.

Expenses and costs

178.—(1) Subject to the following provisions of this paragraph, the undertaker must repay to EPN all expenses reasonably and properly incurred or to be incurred by EPN in, or in connection with—

- (a) the inspection, removal, alteration, relaying, replacing or protection of any apparatus or the construction of any alternative apparatus which may be required in consequence of the execution of any specified works;
- (b) the acquisition of facilities and rights or exercise of statutory powers for any apparatus or alternative apparatus in consequence of the operation of any of these provisions;
- (c) the cutting off of any apparatus from any other apparatus, or the making safe of any redundant apparatus, in consequence of the exercise of any power conferred by this Order affecting EPN’s apparatus;
- (d) the survey of any land, apparatus or works, the superintendence and monitoring of works and the installation or removal of any temporary works reasonably necessary in consequence of the exercise of any power conferred by this Order affecting EPN’s apparatus; and
- (e) any other work or thing rendered reasonably necessary in consequence of the exercise of any power conferred by this Order affecting EPN’s apparatus.

(2) There must be deducted from any sum payable under sub-paragraph (1) the value of any apparatus removed under the provisions of this Part of this Schedule, that value being calculated after removal.

(3) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was situated,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement, is not determined by arbitration in accordance with paragraph 183 (arbitration) to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to EPN by virtue of sub-paragraph (1) must be reduced by the amount of that excess.

(4) For the purposes of sub-paragraph (3)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus must not be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and

- (b) where the provision of a joint in a pipe or cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole must be treated as if it also had been agreed or had been so determined.

(5) Any amount which apart from this sub-paragraph would be payable to EPN in respect of works by virtue of sub-paragraph (1), if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on EPN any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, is to be reduced by the amount which represents that benefit.

179.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any specified works, any damage is caused to any apparatus or alternative apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of those works) or property of EPN, or there is any interruption in any service provided, or in the supply of any goods, by EPN, the undertaker must—

- (a) bear and pay the cost reasonably and properly incurred by EPN in making good such damage or restoring the supply; and
- (b) indemnify EPN against any other losses, expenses, demands, proceedings, damages, claims, penalty or costs properly incurred by or recovered from EPN, by reason or in consequence of any such damage or interruption or EPN becoming liable to any third party as aforesaid other than arising from any default of EPN.

(2) The fact that any act or thing may have been done by EPN on behalf of the undertaker or in accordance with a plan approved by EPN or in accordance with any requirement of EPN or under its supervision will not, subject to sub-paragraph (3), excuse the undertaker from liability under the provisions of sub-paragraph (1), unless EPN fails to carry out and execute the works properly with due care and attention and in a skilful and workman like manner or in a manner that does not accord with the approved plan agreed by EPN in accordance with paragraph 175(4) and paragraph 177(3).

(3) Nothing in sub-paragraph (1) will impose any liability on the undertaker in respect of—

- (a) any damage or interruption to the extent that it is attributable to the neglect or default of EPN, its officers, servants, contractors or agents;
- (b) any part of the specified works carried out by EPN in the exercise of any functions conferred by this Order pursuant to a transfer or grant under article 5 (benefit of the Order); or
- (c) any indirect or consequential loss of any third party (including but not limited to loss of use, revenue, profit, contract, production, increased cost of working) arising from any such damage or interruption, which is not reasonably foreseeable.

(4) EPN must give the undertaker reasonable notice of any such third party claim or demand and no settlement, admission of liability or compromise must be made without the consent of the undertaker and, if such consent is withheld, the undertaker will have the sole conduct of any settlement or compromise or of any proceedings necessary to resist the claim or demand.

(5) EPN must, in respect of any matter covered by the indemnity given by the undertaker in this paragraph, at all times act reasonably and in the same manner as it would as if settling third party claims on its own behalf from its own funds.

(6) EPN must use its reasonable endeavours to mitigate in whole or in part and to minimise any costs, expenses, loss, demands, and penalties to which the indemnity under this paragraph applies and if reasonably requested to do so by the undertaker EPN must provide an explanation of how the claim has been minimised.

Enactments and agreements

180. Nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and EPN in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

Cooperation

181.—(1) Where in consequence of the proposed construction of any part of the authorised development, the undertaker or EPN requires the removal of apparatus under paragraph 175(2) or EPN makes requirements for the protection or alteration of apparatus under paragraph 177(4), the undertaker must use its best endeavours to co-ordinate the execution of the works in the interests of safety and the efficient and economic execution of the authorised development and taking into account the need to ensure the safe and efficient operation of EPN's undertaking and EPN must use its best endeavours to co-operate with the undertaker for that purpose.

(2) For the avoidance of doubt whenever EPN's consent, agreement or approval is required in relation to plans, documents or other information submitted by the undertaker or the taking of action by the undertaker, it must not be unreasonably withheld or delayed.

Access

182. If in consequence of the exercise of the powers conferred by this Order the access to any apparatus is materially obstructed the undertaker must provide such alternative means of access to that apparatus as will enable EPN to maintain or use the apparatus no less effectively than was possible before the obstruction.

Arbitration

183. Any difference or dispute arising between the undertaker and EPN under this Part of this Schedule must, unless otherwise agreed in writing between the undertaker and EPN, be determined by arbitration in accordance with article 42 (arbitration).

PART 14

FOR THE PROTECTION OF THE PORT OF LONDON AUTHORITY

184. In this part-

"Area of Interest" means the any part of those areas shown shaded in orange, pink, green and blue on the Deep Water Route Cable Installation Area (Future Dredging) Depths) Plan;

"cable specification and installation plan" means the cable specification and installation plan to be approved under condition 21(1)(h) of the deemed marine licence for the transmission assets in Schedule 9;

"construction" includes execution, placing, altering, replacing, relaying, removal, renewal works of maintenance and decommissioning, in its application to a specified work which includes or comprises any operation, means the carrying out of that operation, and "construct" and "constructed" are to be construed accordingly;

"commencement" for the purpose of this Part 14 of Schedule 14 means the carrying out of any authorised development and survey and monitoring activities;

"Deep Water Routes" mean the Sunk and Trinity deep water routes and the Sunk Pilotage Area;

"installation" has the same meaning as construction and 'installed' is to be construed accordingly;

"operation and maintenance plan" means the operation and maintenance plan to be approved under condition 12(4) of the deemed marine licence for the transmission assets in Schedule 9;

"maintain" has the same meaning as in Article 2 save that it includes monitoring within the Area of Interest and maintenance shall be construed accordingly;

"navigation and installation plan" means the navigation and installation plan to be approved under condition 22(1)(n) of the deemed marine licence for the transmission assets in Schedule 9;

“sediment disposal management plan” means the sediment disposal management plan to be approved under condition 22(1)(o) of the deemed marine licence for the transmission assets in Schedule 9;”

“specified work” means Work No. 3 and any other part of the offshore works forming part of the authorised development (including associated development and ancillary works and which for this purpose includes the maintenance and decommissioning of any part of the authorised development); and

“PLA” means the Port of London Authority.

Application

185. The following provisions, unless otherwise agreed in writing between the undertaker and the PLA, have effect, for the protection of the PLA in relation to the construction, operation and maintenance of any specified work.

Approvals and notice

186.— (1) The undertaker will obtain the approval in writing of the PLA on:

- (a) any cable specification and installation plan (in so far as that plan relates to any specified work within or which may affect the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition 22(1) of the deemed marine licence for the transmission assets in Schedule 9 and any revisions arising from such application; and
- (b) any navigation and installation plan (in so far as that plan relates to any specified work within or which may affect the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition 22(1) of the deemed marine licence for the transmission assets in Schedule 9 and any revisions arising from such application; and
- (c) any sediment disposal management plan (in so far as that plan relates to any specified work within or which may affect the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition 22(1) of the deemed marine licence for the transmission assets in Schedule 9 and any revisions arising from such application; and
- (d) any operation and maintenance plan (in so far as that plan relates to any specified work within or which may affect the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition 12(4) of the deemed marine licence for the transmission assets in Schedule 9 and any revisions arising from such application.

(2) The undertaker will consult the PLA on the proposed activities and programme for any pre-construction monitoring, construction monitoring, post construction monitoring and related reporting within the Area of Interest no less than 20 business days before such survey work is programmed to commence. The undertaker must have regard to any request made by the PLA for reasonable amendment to the proposed activities or programme, which request must be made to the undertaker within 5 business days of receipt of the details of the proposed activities and programme.

(3) The undertaker must notify the PLA of the final planned programme for any pre-construction monitoring, construction monitoring, post construction monitoring within the Area of Interest no less than 5 business days before such survey work is programmed to begin.

(4) The undertaker will consult the PLA on any application for marine licensing for the clearance of unexploded ordnance within or which may affect the Area of Interest before such applications are submitted to the MMO. The undertaker must have regard to any request made by the PLA for reasonable amendment to the proposed application, which request must be made to the undertaker within 10 business days of receipt of the details of the proposed application.

(5) The undertaker must notify the PLA of the final programme for any clearance of unexploded ordnance to be undertaken within or which may affect the Area of Interest no less than 20 business days before such disposal is programmed to begin.

(6) The undertaker will consult the PLA on the activities and programme for any specified work to be undertaken under this Order which is not covered by the cable specification and installation plan and which is within or may affect the Area of Interest no less than 20 business days before such specified work is programmed to commence. The undertaker must have regard to any request made by the PLA for reasonable amendment to the activities or programme.

(7) The undertaker must notify the PLA of the final method statement and programme for any for any specified work to be undertaken under this Order which is not covered by the cable specification and installation plan and which is within or may affect the Area of Interest no less than 5 business days before such work is programmed to begin.

Cable Specification and Installation Plan

187. The cable specification and installation plan referred to in paragraph 186 must be informed by a cable burial risk assessment, and set out for Work No.3, and in so far as it applies to the Deep Water Routes demonstrate compliance with requirement 2(3):

- (a) that any part of Work No.3, any associated development or ancillary works located within the Area of Interest as shown shaded yellow on the Deep Water Route Cable Installation Area (Future Dredging depths) plan must be installed at a level which would not preclude or impede the dredging of those parts of the Deep Water Routes:
 - (i) shown shaded in orange and labelled Sunk A – Sunk DW Buffer, to a level of 22 metres below Chart Datum;
 - (ii) shown shaded in pink and labelled Trinty – Trinity DW Buffer, to a level of 22 metres below Chart Datum;
 - (iii) shown shaded in green and labelled Sunk B – Sunk B – Sunk DW Buffer, to a level of 19 metres below Chart Datum; and
 - (iv) shown shaded in blue and labelled Sunk Pilotage Area – Sunk Pilot Diamond Buffer, to a level of 22 metres below Chart Datum;
- (b) The proposed cable installation methods and measures for management of construction risks;
- (c) Additional cable burial depths required or any other forms of cable protection proposed including type, volume and locations;
- (d) During construction of the cables and cable protection in the Area of Interest arrangements for the consultation of the PLA in a timely manner, on such matters regarding those works as the PLA may reasonably request including arrangements for providing the PLA with a point of contact for continuing liaison and co-ordination throughout the construction of these works;
- (e) The proposed programme of work for cable installation and arrangements for notification of any changes to the programme to the PLA;
- (f) The programme and methodologies for monitoring and the arrangements for the results of these surveys or other construction evidence being made available to the PLA within 10 business days of the undertaker receiving reports of the survey results; together with methods and timescales to rectify any issues which may compromise the level referred to requirement 2(3) or evidence to demonstrate compliance with the depths referred to in requirement 2(3);
- (g) Methods and timescales to rectify any issues which may compromise the depth referred to in requirement 2(3);
- (h) A requirement for a process (subject to Condition 38 Remediation, Schedule 9) and timescales (both the undertaker and PLA acting reasonably) for cable re-installation should the level of the cable is such that the under keel clearance specified in Outline CSIP cannot be achieved over the lifetime of the authorised development.

Monitoring

188. If following the results of any geophysical surveys carried out using multi-beam echo sounder survey (MBES), it is confirmed that cable exposure has occurred within the Area of Interest, the undertaker will notify the PLA as soon as reasonably practicable and in any event no later than 2 business days after the undertaker confirms any exposure has occurred.

Provision of as built details

189. As soon as reasonably practicable following the completion of the installation of cables forming Work No. 3 and after any maintenance of the same, the undertaker must provide (on a strictly confidential basis) to the PLA as built drawings of Work No. 3 in a form and scale to be agreed between the undertaker and the PLA to show the position, depth and any cable protection installed as part of Work No. 3 in relation to the Deep Water Routes provided that the PLA must not disclose (without the written consent of the undertaker) any information that has been provided by the undertaker to the PLA on a confidential basis or which is marked as commercially sensitive and must hold such information on a confidential basis only, except that the PLA may provide the information to contractors and agents acting on its behalf (including but not limited to contractors engaged to carry out dredging operations) provided that such agents and contractors are required by the PLA to treat such information as confidential.

Indemnity

190. —(1) The undertaker will pay to the PLA its proper and reasonable legal costs, professional fees and disbursements incurred in connection with reviewing the details submitted to the PLA pursuant to this Part 14 of Schedule 14.

(2) The undertaker is responsible for and must make good to the PLA all financial costs, charges, damages losses or expenses which may be incurred reasonably or suffered by the PLA by reason of—

- (a) the construction or operation of Work no. 3, any specified work or its failure or a failure to adhere to the requirements of this Part 14 of Schedule 14;
- (b) any act or omission of the undertaker, its employees, contractors or agents or others whilst engaged on the construction or operation of a specified work or Work no. 3 or with any failure, and the undertaker must indemnify the PLA from and against all claims and demands arising out of or in connection with a specified work, Work no. 3 or any such failure, act or omission or any failure to adhere to the requirements of this Part 14 of Schedule 14.

(3) The fact that any act or thing may have been done—

- (a) by the PLA on behalf of the undertaker; or
- (b) by the undertaker, its employees, contractors or agents in accordance with plans or particulars submitted to or modifications or conditions specified by the PLA, or in a manner approved by the PLA, or under its supervision or the supervision of its duly authorised representative, does not (if it was done or required without negligence on the part of the PLA or its duly authorised representative, employee, contractor or agent) excuse the undertaker from liability under the provisions of this paragraph.

(4) The PLA must give the undertaker reasonable notice of any such claim or demand as is referred to in sub-paragraphs (1) and (2) and no settlement or compromise of it is to be made without the prior consent of the undertaker.

Transfer of the benefit

191. The undertaker must within 7 days after the completion of any sale, agreement or other transaction under article 5 (Benefit of the Order) in relation to which any powers, rights and obligations of the undertaker are transferred to another party, notify the PLA in writing, and the notice must include particulars of the other party to the transaction under article 5, the general

nature of the transaction and details of the extent, nature and scope of the works or functions sold, transferred or otherwise dealt with.

Disputes

192. Any dispute arising between the undertaker and the PLA under this Schedule is to be escalated in the first instance to senior representatives from the PLA and the undertaker, and the PLA and undertaker must seek to resolve the dispute through a meeting between the parties promptly and in any event within 10 business days. Where following escalation the dispute is not resolved, it is to be determined by arbitration as provided in article 42 (arbitration) of this Order.

PART 15

FOR THE PROTECTION OF LONDON GATEWAY PORT LIMITED

Interpretation

193. In this part-

“the cable specification and installation plan” means the cable specification and installation plan to be approved under condition 21(1)(h) of the deemed marine licence for the transmission assets in Schedule 9 (deemed marine licence under the 2009 Act – transmission assets);

“London Gateway” means London Gateway Port Limited, Company No. 04341592 as harbour authority for the London Gateway Port, pursuant to the London Gateway HEO and includes any person to whom the right to operate the whole of the undertaking is disposed under article 46 of the London Gateway HEO;

“London Gateway HEO” means the London Gateway Port Harbour Empowerment Order 2008(a);

“the navigation and installation plan” means the sediment disposal management plan to be approved under condition 21(1)(n) of the deemed marine licence for the transmission assets in Schedule 9 (deemed marine licence under the 2009 Act – transmission assets);

“the relevant plans” means the cable specification and installation plan, the navigation and installation plan and the sediment disposal management plan; and

“the sediment disposal management plan” means the sediment disposal management plan to be approved under condition 21(1)(o) of the deemed marine licence for the transmission assets in Schedule 9 (deemed marine licence under the 2009 Act – transmission assets).

Application

194. The following provisions, unless otherwise agreed in writing between the undertaker and the London Gateway, have effect.

Approvals

195. —(1) The undertaker will obtain the approval in writing of London Gateway of each of the relevant plans (in so far as those plans relate to any area or areas of the authorised development which are within the limits of deviation for dredging of London Gateway as defined by the London Gateway HEO) before any application for approval of those plans is submitted by the undertaker in compliance with condition 22 of the deemed marine licence for the transmission assets in Schedule 9 (deemed marine licence under the 2009 Act – transmission assets).

(2) The draft cable specification and installation plan referred to in sub-paragraph (1) must be in accordance with requirement 2(3) and set out for Work No.3;

- (a) the proposed cable burial depth(s);
- (b) the proposed cable burial methods;
- (c) any cable protection proposed including type, volume and anticipated locations; and
- (d) the proposed programme of work for cable burial; and
- (e) details of how any impacts on shipping to and from London Gateway Port will be minimised so far as reasonably practicable during the carrying out of the works covered by the draft cable specification and installation plan.

Approvals and refusals

196. —(1) London Gateway must issue any approval or refusal of a draft plan submitted to it in accordance with paragraph 195 (1) within 28 days of the date of submission of that draft or of the date of the provision by the undertaker to London Gateway of any further information that London Gateway reasonably requests, unless any other period is agreed with the undertaker.

(2) All decisions of London Gateway under these provisions must be made acting reasonably.

(3) All decisions of London Gateway under these provisions must be issued in writing and the undertaker may provide a copy of any such decision to the Marine Management Organisation or any other regulatory body.

(4) Where London Gateway refuses to approve a draft plan it must provide reasons for refusal in writing to the undertaker at the same time as it issues the refusal.

(5) Where the draft plan is refused, the undertaker must consider the reasons for refusal and redraft the draft plan accordingly, before re-submitting it to London Gateway. The provisions of sub-paragraphs (1) to (4) will then apply to that re-submitted plan.

(6) Where no decision is issued within the 28 day period set out in sub-paragraph (1), the draft plan submitted will be deemed to be refused by London Gateway.

(7) Any difference or dispute arising between the undertaker and London Gateway must, unless otherwise agreed in writing between the undertaker and London Gateway, be determined by arbitration in accordance with article 42 (arbitration) of this Order. The undertaker may not refer any dispute in relation to the refusal of a draft plan to arbitration under article 42 until it has redrafted and resubmitted the draft plan in accordance with sub-paragraph (5) above at least once.

Notification of transfer of the benefit

197. The undertaker must within 28 days of any transfer or grant of any benefit under paragraph (2) or (3) of article 5 (benefit of the order) of this Order notify LGPL, and such notification must include particulars of the transferee or lessee (as applicable), the general nature of the agreement pursuant to which the transfer and grant has been made, and details of the extent, nature and scope of the works or functions sold or otherwise transferred or granted.

Provision of as built details

198. As soon as reasonably practicable following the completion of the installation of cables forming Work No. 3, and after any maintenance of the same pursuant to condition 13 of the deemed marine licence for transmission assets in Schedule 9 (deemed marine licence under the 2009 Act – transmission assets), the undertaker must provide (on a strictly confidential basis) to LGPL as built drawings of Work No. 3 in a form and scale to be agreed between the undertaker and LGPL to show the position, depth and any cable protection installed as part of Work No. 3 in relation to the Areas of Interest provided that LGPL must not disclose (without the written consent of the undertaker) any information that has been provided by the undertaker to LGPL on a confidential basis or which is marked as commercially sensitive and must hold such information on a confidential basis only, except that LGPL may provide the information to contractors and

agents acting on its behalf (including but not limited to contractors engaged to carry out dredging operations) provided that such agents and contractors are required by LGPL to treat such information as confidential.

Protection of London Gateway powers

199. Nothing in this Order affects or restricts the exercise by London Gateway of any powers under the London Gateway HEO nor imposes any liability on London Gateway in respect of any loss or damage that may be caused to any part of the authorised development by virtue of the exercise of any powers under the London Gateway HEO.

SCHEDULE 15

Article 51

COMPENSATION TO PROTECT THE COHERENCE OF THE NATIONAL SITE NETWORK

PART 1

LESSER BLACK BACKED GULL COMPENSATION

1. In this Part 1 of Schedule 15—

“AOE SPA” means the site designated as the Alde-Ore Estuary Special Protection Area;

“compensation measure” means breeding enhancement;

“LBBG” means lesser black backed gulls (*Larus fuscus*);

“LBBG CIMP” means the LBBG compensation implementation and monitoring plan for the delivery of measures to compensate for the predicted loss of adult LBBG from the AOE SPA as a result of the authorised development, to be developed in accordance with the Outline LBBG CIMP;

“LBCSG” means the Lesser Black-backed gull Compensation Steering Group;

“relevant planning authority” means the district local planning authority for the area in which the relevant compensatory measure is to be located;

“strategic compensation fund” means the Marine Recovery Fund to be established and operated by Defra pursuant to section 292 of the Energy Act 2023, or any equivalent fund established by Defra or a Government body for the purpose of implementing strategic compensation measures; and

“strategic compensation fund payment” means a contribution to the Marine Recovery Fund or other equivalent fund to compensate for the predicted loss of adult LBBG from the AOE SPA as a result of the authorised development, the sum of which will be calculated in accordance with any guidance issued by Defra or the relevant Government body, or otherwise to be agreed with the Secretary of State.

2.—(1) Unless the strategic compensation fund payment has been made wholly in substitution for the compensation measure, the undertaker will form and administer the LBCSG before carrying out any works to deliver the compensation measure under a LBBG CIMP to be approved under this Part 1 of Schedule 15. The undertaker will invite representatives from the following organisations to participate in the LBCSG—

- (a) Marine Management Organisation;
- (b) the relevant SNCB;
- (c) the relevant planning authority; and
- (d) the Royal Society for the Protection of Birds.

(2) The LBCSG will develop a plan for the work of the LBCSG, to be submitted to and approved by the Secretary of State, which is to include—

- (a) its terms of reference;
- (b) details of its membership;
- (c) details of the proposed schedule of meetings, reporting and review periods;
- (d) a schedule for the preparation of the LBBG CIMP; and
- (e) the dispute resolution mechanism and confidentiality provisions.

(3) The LBCSG must be convened and consulted on the proposed LBBG CIMP before any approval of the LBBG CIMP is sought by the undertaker under paragraph 3.

3.—(1) Unless the Secretary of State confirms in writing that the compensation measure has been delivered to their satisfaction or the strategic compensation fund payment has been made wholly in substitution for the compensation measure, then the following details contained within the LBBG CIMP, which must be in accordance with the Outline LBBG CIMP, must be submitted to the Secretary of State for approval in consultation with the relevant SNCB and the relevant planning authority for the compensation measure prior to the commencement of Work No. 1.

(2) The LBBG CIMP must include—

- (a) details of the location(s) where the compensation measure will be delivered;
- (b) details of how any necessary land access rights, licences and approvals have or will be obtained and any biosecurity measures will be or have been secured;
- (c) an implementation timetable for delivery of the compensation measure;
- (d) details of survey methodologies, monitoring and maintenance programmes,
- (e) success criteria;
- (f) survey and reporting programmes for LBBG and predators;
- (g) details of any adaptive management measures, with details of the factors used to trigger any such measures;
- (h) provision for reporting to the Secretary of State;
- (i) a plan for reporting to the LBCSG and consulting the LBCSG on the details of any proposed adaptive management measures and/or amendments to the LBBG CIMP;
- (j) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to pay a contribution to the strategic compensation fund wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The sum of the contribution to be agreed between the undertaker and Defra or other Government body responsible for the operation of the strategic compensation fund in consultation with the LBCSG;
- (k) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to pay a financial contribution towards the establishment of compensation measures by another party wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The sum of the contribution to be agreed between the undertaker and the other party in consultation with the LBCSG. The Secretary of State shall consult with the relevant SNCB prior to granting consent in terms of this paragraph; and
- (l) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to collaborate with another party in the delivery of compensation measures wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The Secretary of State shall consult with the relevant SNCB prior to granting consent in terms of this paragraph.

4. The undertaker must carry out the compensation measure in accordance with the LBBG CIMP as approved by the Secretary of State in consultation with the relevant SNCB and the relevant planning authority, unless otherwise provided for in this Part 1 of Schedule 15.

5. Where the undertaker has made the strategic compensation fund payment wholly in substitution for the compensation measure the undertaker will not be required to implement the compensation measure.

6. No wind turbine generator forming part of Work No. 1 may commence operation until—

- (a) the compensation measure has been implemented for at least three breeding seasons, unless commencement of operation at an earlier date is approved in writing by the Secretary of State or unless otherwise provided for in this Part 1 of Schedule 15. For the purposes of this paragraph each breeding season is 1 April to 31 August of each year inclusive, or

- (b) the strategic compensation fund payment has been quantified to be wholly in substitution for the compensation measure and such payment has been made, or where it has been agreed payment will be made in instalments the first instalment has been paid.

7. The undertaker must notify the Secretary of State of completion of implementation of the compensation measure, unless otherwise provided for in this Part 1 of Schedule 15. The compensation measures implemented in accordance with any final CIMP must not be decommissioned without written approval of the Secretary of State in consultation with the relevant SNCB.

8. The details approved under paragraph 3 include any amendments that may subsequently be approved in writing by the Secretary of State. The compensation measures implemented in accordance with any final CIMP must not be decommissioned without written approval of the Secretary of State in consultation with the relevant SNCB.

9. Where the compensation measure as approved in the LBBG CIMP includes the installation of predator control fencing, such fencing must be maintained by the undertaker (or at its expense) for the operational lifetime of the wind turbine generators erected under Work No. 1. The compensation measures implemented in accordance with any final CIMP must not be decommissioned without written approval of the Secretary of State in consultation with the relevant SNCB.

10. In the event of any conflict between the terms of this Order and the LBBG CIMP then the provisions of this Order shall prevail.

11. The undertaker shall not be required to implement the compensation measure to the extent that—

- (a) following consent of the Secretary of State, a contribution to the strategic compensation fund has been elected wholly in substitution for the compensation measure for the purposes of paragraph 3(2)(j);
- (b) following consent of the Secretary of State, a financial contribution towards the establishment of compensation measures by another party has been elected wholly in substitution for the compensation measure for the purposes of paragraph 3(2)(k); or
- (c) following consent of the Secretary of State, the undertaker has elected to collaborate with another party in the delivery of compensation measures wholly in substitution for the compensation measure for the purposes of paragraph 3(2)(l).

PART 2

GUILLEMOT AND RAZORBILL COMPENSATION

12. In this Part 2 of Schedule 15—

“compensation measure” means reduction of recreational disturbance on breeding colonies;

“Farne Islands SPA” means the site designated as the Farne Islands Special Protection Area;

“FFC SPA” means the site designated as the Flamborough and Filey Coast Special Protection Area;

“GRCSG” means the Guillemot and Razorbill Compensation Steering Group;

“Guillemot and Razorbill CIMP” means the Guillemot and Razorbill compensation implementation and monitoring plan for the delivery of measures to compensate for the predicted loss of adult Guillemot and adult Razorbill from the FFC SPA and adult Guillemot from the Farne Islands SPA as a result of the authorised development to be developed in accordance with the Outline Guillemot and Razorbill CIMP;

“relevant planning authority” means the district local planning authority for the area in which the relevant compensatory measure is to be located;

“strategic compensation fund” means the Marine Recovery Fund to be established and operated by Defra pursuant to section 292 of the Energy Act 2023, or any equivalent fund established by Defra or a Government body for the purpose of implementing strategic compensation measures; and

“strategic compensation fund payment” means a contribution to the Marine Recovery Fund or other equivalent fund to compensate for the predicted loss of adult Guillemot and Razorbill from the FFC SPA and the Farne Islands SPA as a result of the authorised development, the sum of which will be calculated in accordance with any guidance issued by Defra or the relevant Government body, or otherwise to be agreed with the Secretary of State.

13.—(1) Unless the strategic compensation fund payment has been made wholly in substitution for the compensation measure, the undertaker will form and administer the GRCSG before carrying out any works to deliver the compensation measure under a Guillemot and Razorbill CIMP to be approved under this Part 2 of Schedule 15. The undertaker will invite representatives from the following organisations to participate in the GRCSG—

- (a) Marine Management Organisation;
- (b) the relevant SNCB;
- (c) the relevant planning authority; and
- (d) the Royal Society for the Protection of Birds.

(2) The GRCSG will develop a plan for the work of the GRCSG, to be submitted to and approved by the Secretary of State, which is to include—

- (a) its terms of reference;
- (b) details of its membership;
- (c) details of the proposed schedule of meetings, reporting and review periods;
- (d) a schedule for the preparation of the Guillemot and Razorbill CIMP; and
- (e) the dispute resolution mechanism and confidentiality provisions.

(3) The GRCSG must be convened and consulted on the proposed Guillemot and Razorbill CIMP before any approval of the Guillemot and Razorbill CIMP is sought by the undertaker under paragraph 14.

14.—(1) Unless the Secretary of State confirms in writing that the compensation measure has been delivered to their satisfaction or the strategic compensation fund payment has been made wholly in substitution for the compensation measure, then the following details contained within the Guillemot and Razorbill CIMP, which must be in accordance with the Outline Guillemot and Razorbill CIMP, must be submitted to the Secretary of State for approval in consultation with the relevant SNCB and the relevant planning authority for the compensation measure prior to the commencement of Work No. 1.

(2) The Guillemot and Razorbill CIMP must include—

- (a) details of the location(s) where the compensation measure will be delivered;
- (b) details of how any necessary land access rights, licences and approvals have or will be obtained and any biosecurity measures will be or have been secured;
- (c) an implementation timetable for delivery of the compensation measure;
- (d) details of survey methodologies, monitoring and maintenance programmes,
- (e) success criteria;
- (f) survey and reporting programmes for Guillemot and Razorbill;
- (g) details of any adaptive management measures, with details of the factors used to trigger any such measures;
- (h) provision for reporting to the Secretary of State;
- (i) a plan for reporting to the GRCSG and consulting the GRCSG on the details of any proposed adaptive management measures and/or amendments to the Guillemot and Razorbill CIMP;

- (j) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to pay a contribution to the strategic compensation fund wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The sum of the contribution to be agreed between the undertaker and Defra or other Government body responsible for the operation of the strategic compensation fund in consultation with the GRCSG;
- (k) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to pay a financial contribution towards the establishment of compensation measures by another party wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The sum of the contribution to be agreed between the undertaker and the other party in consultation with the GRCSG. The Secretary of State shall consult with the relevant SNCB prior to granting consent in terms of this paragraph; and
- (l) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to collaborate with another party in the delivery of compensation measures wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The Secretary of State shall consult with the relevant SNCB prior to granting consent in terms of this paragraph.

15. The undertaker must carry out the compensation measure in accordance with the Guillemot and Razorbill CIMP as approved by the Secretary of State in consultation with the relevant SNCB and the relevant planning authority, unless otherwise provided for in this Part 2 of Schedule 15.

16. Where the undertaker has made the strategic compensation fund payment wholly in substitution for the compensation measure the undertaker will not be required to implement the compensation measure.

17.—(1) No wind turbine generator forming part of Work No. 1 may commence operation until—

- (a) the compensation measure has been implemented for at least three breeding seasons, unless commencement of operation at an earlier date is approved in writing by the Secretary of State or unless otherwise provided for in this Part 2 of Schedule 15. For the purposes of this paragraph each breeding season is 1 March to 31 July of each year inclusive, or
- (b) the strategic compensation fund payment has been quantified to be wholly in substitution for the compensation measure and such payment has been made, or where it has been agreed payment will be made in instalments the first instalment has been paid.

18. The undertaker must notify the Secretary of State of completion of implementation of the compensation measure, unless otherwise provided for in this Part 2 of Schedule 15.

19. The details approved under paragraph 14 include any amendments that may subsequently be approved in writing by the Secretary of State.

20. In the event of any conflict between the terms of this Order and the Guillemot and Razorbill CIMP then the provisions of this Order shall prevail.

21. The undertaker shall not be required to implement the compensation measure to the extent that—

- (a) following consent of the Secretary of State, a contribution to the strategic compensation fund has been elected wholly in substitution for the compensation measure for the purposes of paragraph 14(2)(j);
- (b) following consent of the Secretary of State, a financial contribution towards the establishment of compensation measures by another party has been elected wholly in substitution for the compensation measure for the purposes of paragraph 14(2)(k); or

- (c) following consent of the Secretary of State, the undertaker has elected to collaborate with another party in the delivery of compensation measures wholly in substitution for the compensation measure for the purposes of paragraph 14(2)(l).

PART 3

KITTIWAKE COMPENSATION

22. In this Part 3 of Schedule 15—

“compensation measure” means an artificial nesting structure to provide suitable nesting environment for Kittiwake;

“FFC SPA” means the site designated as the Flamborough and Filey Coast Special Protection Area;

“KCSG” means the Kittiwake Compensation Steering Group;

“Kittiwake CIMP” means the Kittiwake compensation implementation and monitoring plan for the delivery of measures to compensate for the predicted loss of adult Kittiwake from the FFC SPA as a result of the authorised development, to be developed in accordance with the Outline Kittiwake CIMP;

“relevant planning authority” means the district local planning authority for the area in which the relevant compensatory measure is to be located;

“strategic compensation fund” means the Marine Recovery Fund to be established and operated by Defra pursuant to section 292 of the Energy Act 2023, or any equivalent fund established by Defra or a Government body for the purpose of implementing strategic compensation measures; and

“strategic compensation fund payment” means a contribution to the Marine Recovery Fund or other equivalent fund to compensate for the predicted loss of adult Kittiwake from the FFC SPA as a result of the authorised development, the sum of which will be calculated in accordance with any guidance issued by Defra or the relevant Government body, or otherwise to be agreed with the Secretary of State.

23.—(1) Unless the strategic compensation fund payment has been made wholly in substitution for the compensation measure, the undertaker will form and administer the KCSG before carrying out any works to deliver the compensation measure under a Kittiwake CIMP to be approved under this Part 3 of Schedule 15. The undertaker will invite representatives from the following organisations to participate in the KCSG—

- (a) Marine Management Organisation;
- (b) the relevant SNCB;
- (c) the relevant planning authority; and
- (d) the Royal Society for the Protection of Birds.

(2) The KCSG will develop a plan for the work of the KCSG, to be submitted to and approved by the Secretary of State, which is to include—

- (a) its terms of reference;
- (b) details of its membership;
- (c) details of the proposed schedule of meetings, reporting and review periods;
- (d) a schedule for the preparation of the Kittiwake CIMP; and
- (e) the dispute resolution mechanism and confidentiality provisions.

(3) The KCSG must be convened and consulted on the proposed Kittiwake CIMP before any approval of the Kittiwake CIMP is sought by the undertaker under paragraph 24.

24.—(1) Unless the Secretary of State confirms in writing that the compensation measure has been delivered to their satisfaction or the strategic compensation fund payment has been made wholly in substitution for the compensation measure, then the following details contained within the Kittiwake CIMP, which must be in accordance with the Outline Kittiwake CIMP, must be submitted to the Secretary of State for approval in consultation with the relevant SNCB and the relevant planning authority for the compensation measure prior to the commencement of Work No. 1.

(2) The Kittiwake CIMP must include—

- (a) details of the location(s) where the compensation measure will be delivered;
- (b) details of how any necessary land access rights, licences and approvals have or will be obtained and any biosecurity measures will be or have been secured;
- (c) an implementation timetable for delivery of the compensation measure;
- (d) details of survey methodologies, monitoring and maintenance programmes,
- (e) success criteria;
- (f) survey and reporting programmes for Kittiwake;
- (g) details of any adaptive management measures, with details of the factors used to trigger any such measures;
- (h) provision for reporting to the Secretary of State;
- (i) a plan for reporting to the KCSG and consulting the KCSG on the details of any proposed adaptive management measures and/or amendments to the Kittiwake CIMP;
- (j) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to pay a contribution to the strategic compensation fund wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The sum of the contribution to be agreed between the undertaker and Defra or other Government body responsible for the operation of the strategic compensation fund in consultation with the KCSG;
- (k) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to pay a financial contribution towards the establishment of compensation measures by another party wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The sum of the contribution to be agreed between the undertaker and the other party in consultation with the KCSG. The Secretary of State shall consult with the relevant SNCB prior to granting consent in terms of this paragraph;
- (l) provision for the option to be exercised by the undertaker, following consent in writing of the Secretary of State, to collaborate with another party in the delivery of compensation measures wholly or partly in substitution for the compensation measure or as an adaptive management measure for the purposes of paragraph (g). The Secretary of State shall consult with the relevant SNCB prior to granting consent in terms of this paragraph; and
- (m) 48 kittiwake nesting spaces shall be secured unless otherwise agreed by the Kittiwake Consultative Steering Group.

25. The undertaker must carry out the compensation measure in accordance with the Kittiwake CIMP as approved by the Secretary of State in consultation with the relevant SNCB and the relevant planning authority, unless otherwise provided for in this Part 3 of Schedule 15.

26. Where the undertaker has made the strategic compensation fund payment wholly in substitution for the compensation measure the undertaker will not be required to implement the compensation measure.

27. No wind turbine generator forming part of Work No. 1 may commence operation until—

(1) the compensation measure has been implemented for at least three breeding seasons, unless commencement of operation at an earlier date is approved in writing by the Secretary of State or

unless otherwise provided for in this Part 3 of Schedule 15. For the purposes of this paragraph each breeding season is 1 March to 31 August of each year inclusive, or

(2) the strategic compensation fund payment has been quantified to be wholly in substitution for the compensation measure and such payment has been made, or where it has been agreed payment will be made in instalments the first instalment has been paid.

28. The undertaker must notify the Secretary of State of completion of implementation of the compensation measure, unless otherwise provided for in this Part 3 of Schedule 15.

29. The details approved under paragraph 24 include any amendments that may subsequently be approved in writing by the Secretary of State.

30. In the event of any conflict between the terms of this Order and the Kittiwake CIMP then the provisions of this Order shall prevail.

31. The undertaker shall not be required to implement the compensation measure to the extent that—

- (a) following consent of the Secretary of State, a contribution to the strategic compensation fund has been elected wholly in substitution for the compensation measure for the purposes of paragraph 24(2)(j);
- (b) following consent of the Secretary of State, a financial contribution towards the establishment of compensation measures by another party has been elected wholly in substitution for the compensation measure for the purposes of paragraph 24(2)(k); or
- (c) following consent of the Secretary of State, the undertaker has elected to collaborate with another party in the delivery of compensation measures wholly in substitution for the compensation measure for the purposes of paragraph 24(2)(l).

EXPLANATORY NOTE

(This note is not part of the Order)

This Order grants development consent for, and authorises the construction, operation and maintenance of an offshore wind farm generating station located approximately 40km from the coast of Essex, together with associated development. This Order imposes requirements in connection with the development and authorises the compulsory purchase of land (including rights in land) and the right to use land and to override easements and other rights.