

The Planning Act 2008

FIVE ESTUARIES OFFSHORE WIND FARM

Examining Authority's Report
of Findings and Conclusions
and

Recommendation to the Secretary of State for
Energy and Net Zero

Examining Authority

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17 June 2025

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OVERVIEW

File Ref: EN010115

The application, dated 21 March 2024, was made under section 37 of the Planning Act 2008 and was received by The Planning Inspectorate on 25 March 2024.

The applicant is Five Estuaries Offshore Wind Farm Limited.

The application was accepted for examination on 22 April 2024.

The examination of the application began on 17 September 2024 and was completed on 17 March 2025.

The proposed development comprises: the construction, operation, maintenance and decommissioning of an offshore wind farm in the southern North Sea of the coast of Essex and Suffolk, including up to 79 wind turbine generators and associated infrastructure making landfall at Holland Haven between Frinton-on-Sea and Clacton-on-Sea; the installation of underground cables; and the construction of an electrical substation and associated infrastructure near to the existing Lawford substation to the west of Little Bromley in order to connect the development to National Grid's proposed East Anglia Connection Node substation.

Summary of Recommendation:

The Examining Authority recommends that the Secretary of State should make the Order in the form attached, subject to the Secretary of State obtaining from the applicant amended versions of: Part 3 of Schedule 13 of the recommended Development Consent Order; and the outline Guillemot and Razorbill Implementation and Monitoring Plan, to include making provision for compensatory measures for Guillemot as a qualifying feature of the Farne Islands Special Protection Area.

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**ERRATA SHEET – FIVE ESTUARIES OFFSHORE WIND FARM Ref.
EN010115**

**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 17 December 2025**

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

Vol	PDF Page No.	Para	Error	Correction
	58	4.7.3	"... However, AONB is still the statutory term used in the legislation including 245(6) in the Levelling Up and Regeneration Act 2023 (LURA2023), and the applicant ..." Font and size of the text are incorrect.	"... However, AONB is still the statutory term used in the legislation including 245(6) in the Levelling Up and Regeneration Act 2023 (LURA2023), and the applicant ..."
	65	4.7.29	Design	Design
	78	5.2.2	"... However, AONB is still the statutory term used in the legislation including 245(6) in the Levelling Up and Regeneration Act 2023 (LURA2023), and the applicant ..." Font and size of text are incorrect.	"... However, AONB is still the statutory term used in the legislation including 245(6) in the Levelling Up and Regeneration Act 2023 (LURA2023), and the applicant ..."
	94	5.3.17	"...Of that land, the proposed OnSS Zone (the OnSS site proposed for both of the wind farm projects) would account for 39.82ha of Grade 1 land being lost as illustrated (pink) in figure 5.?? of section	"...Of that land, the proposed OnSS Zone (the OnSS site proposed for both of the wind farm projects) would account for 39.82ha of Grade 1 land being lost, coloured blue on sheet 4 of 4 of Figure 3 in [page 47 in APP-087. ..."

			5.1. ..."	
	119	5.6.41	"... we have considered that matter in section 5.6 of our recommendation."	"... we have considered that matter in section 5.7 of our recommendation."
	121	5.6.59	"... up to12 ..."	"... up to 12 ..."
	162	7.4.11	"... transmission system potentially no being available before .. ."	"...transmission system potentially not being available before ..."
	179	9.4.15	...by the close of the examination the had agreed with NT...	...by the close of the examination the Applicant had agreed with NT...
	179	9.5.1	"The has submitted in paragraph 28 ..."	"The Applicant has submitted in paragraph 28 ..."
	205	9.7.32	Paragraph 9.7.32 is a partial repeat of 9.7.31	Delete paragraph 9.7.32.
	235	10.4.41	"No objections have raised to the terms of the PPs ..."	"No objections have been raised to the terms of the PPs ..."
	244	10.4.83	"... to numerous for us to summarise here."	"... too numerous for us to summarise here."

1. INTRODUCTION

1.1. BACKGROUND TO THE EXAMINATION

- 1.1.1. An application by Five Estuaries Offshore Wind Farm Limited (the applicant) for an offshore wind farm comprising: up to 79 wind turbine generators (WTGs) within two array areas; up to two offshore substation platforms (OffSS); two subsea electrical cables; two onshore buried circuits with cable ducts; construction of one onshore substation (OnSS) and enabling works for the provision of a second substation; works to facilitate a connection to a new National Grid Electricity Transmission PLC (NGET) substation; and works to provide compensatory habitat for lesser black backed gulls (LBBGs) (the proposed development).
- 1.1.2. The proposed onshore works further include the ability for buried cable ducting for two additional circuits to be constructed. Those additional circuits and the proposed enabling works for a second OnSS are intended to be utilised by the proposed North Falls Offshore Wind Farm (NFOWF), enabling it to transmit its generated electricity onshore to a proposed new NGET substation. The proposed NFOWF being the subject of its own application for development consent (EN010119) and the examination for that application commenced on 28 January 2025.
- 1.1.3. The application for the Five Estuaries Offshore Wind Farm project (the proposed development) (Planning Inspectorate (the Inspectorate) reference EN010115) was submitted by Five Estuaries Offshore Wind Farm Limited (the applicant) to the Inspectorate on 25 March 2024 under section (s) 37 of the Planning Act 2008 (PA2008) and accepted for Examination under s55 of PA2008 on 22 April 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).
- 1.1.4. The legislative tests for whether the proposed development is a Nationally Significant Infrastructure Project (NSIP) were considered by the then Secretary of State for Levelling Up, Housing and Communities in deciding to accept the application for examination in accordance with s55 of the PA2008 [\[PD-001\]](#). The proposed development, because it would be offshore generating station with a generating capacity exceeding 100 megawatts, meets the definition for being an NSIP under s14(1)(a) and s15(3) of PA2008. As such, the proposed development requires development consent in accordance with s31 of PA2008.
- 1.1.5. 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 eg [APP-001] or [REP1-002]. The reference numbers are used throughout this report and hyperlinks are included to allow the reader to access them directly.
- 1.1.6. This report does not contain extensive summaries of the documents and representations received. Readers are referred to relevant material using linked EL references. The ExA has had regard to the application documents and the examination submissions made by the applicant, other interested parties (IP) and affected persons (AP) during the examination in reaching its conclusions and making its recommendations, as stated in this report.

1.2. APPOINTMENT OF THE EXAMINING AUTHORITY

- 1.2.1. On 7 June 2024, Grahame Gould, Mark Harrison, Matthew Heron, Rebecca Norman and Felicity Webber were appointed as the ExA for the application under s65 of PA2008 [\[PD-004\]](#). Grahame Gould was appointed as the lead member.

1.3. THE APPLICATION

LOCATION OF THE PROPOSED DEVELOPMENT

- 1.3.1. The proposed development comprises an offshore wind farm with a proposed export capacity of approximately 1GW which would be located in the southern North Sea. The proposed wind farm's offshore cables would make landfall on the Essex coastline. It is intended there would be a connection to NGET's transmission system via the proposed onshore export cable corridor (OnECC) and OnSS. To facilitate a connection between the proposed development and NGET's transmission system NGET is proposing to construct a new substation forming part of its EACN proposals. The application also includes provision of compensatory habitat for LBBGs at Orford Ness in Suffolk.
- 1.3.2. The locations for offshore generating and transmission elements and the onshore transmission parts for the proposed development are respectively shown in [\[AS-018\]](#) and [\[Figure 3.7 in APP-067\]](#) (see figures below). The WTG arrays would be located in the southern North Sea and would, at their closest, be approximately 37 kilometres (km) from the coast of Suffolk. The landfall for the offshore transmission elements would be at Holland Haven, between Clacton-on-Sea and Frinton-on-Sea. The onshore transmission elements of the proposed development would run between Holland Haven and the hamlet of Little Bromley and would all be within administrative area of Tendring District Council.

Figure 1.1: Offshore Location Plan [AS-018]

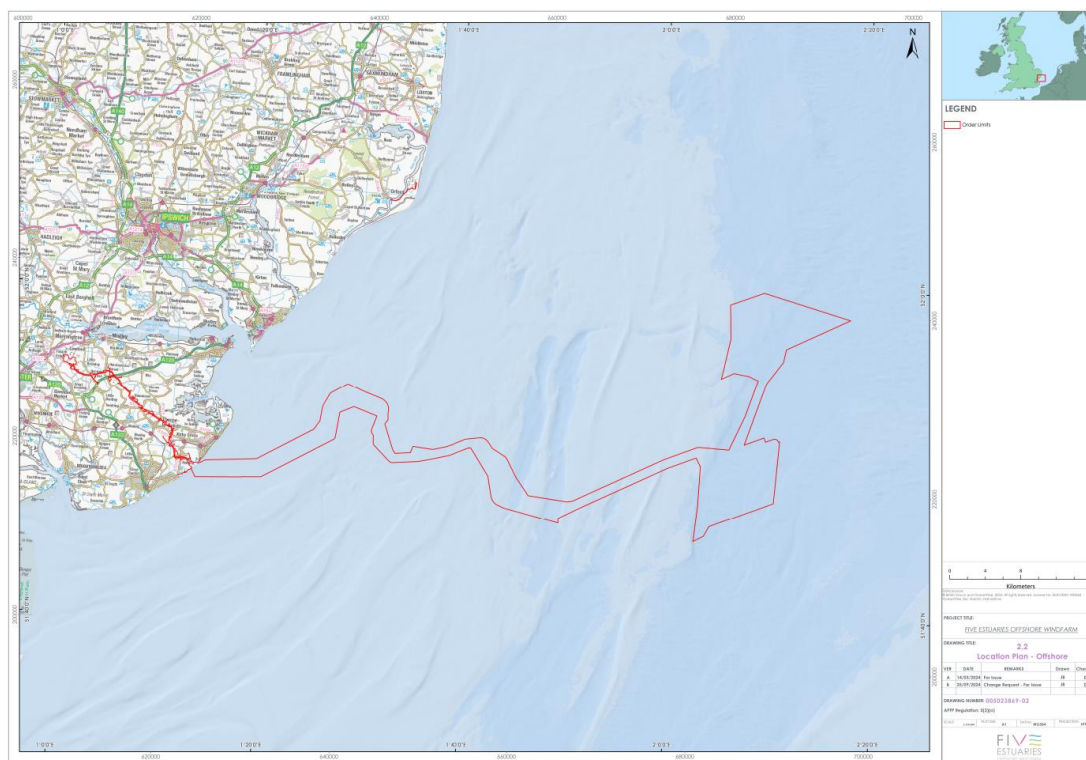
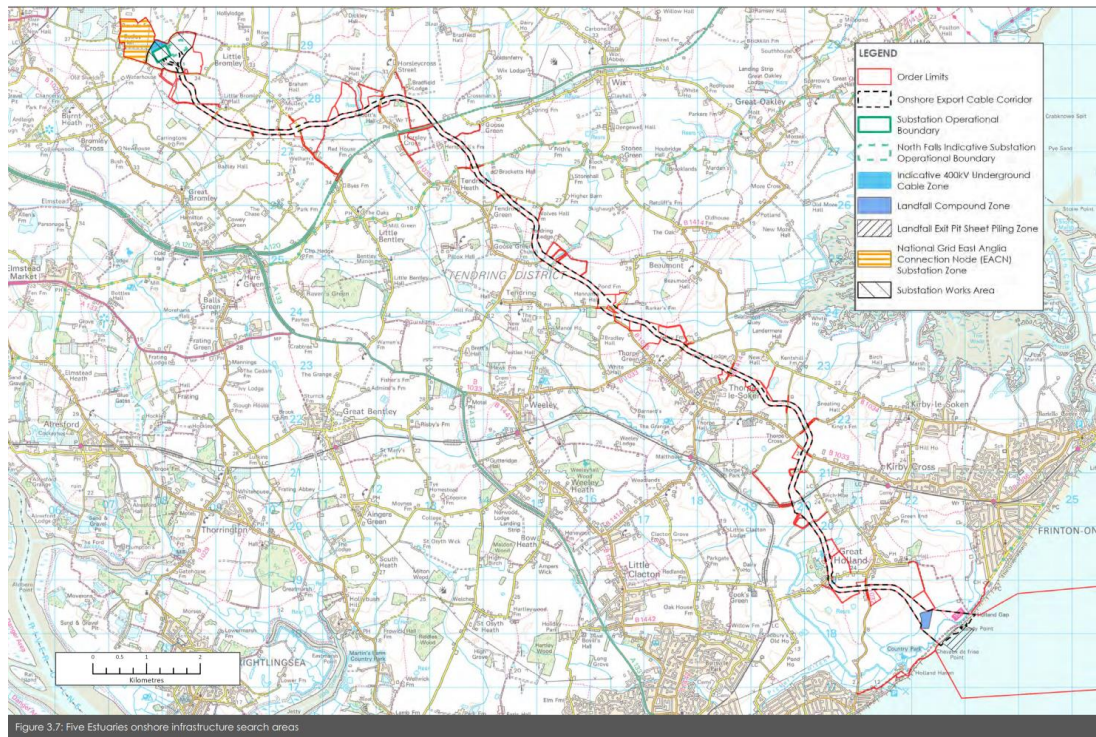


Figure 1.2: Onshore Location Plan [Figure 3.7 in APP-067]



1.3.3.

The submitted application's Order Limits also include land for the establishment of compensatory habitat for LBBG at Orford Ness, south of Aldeburgh, on the Suffolk coast, as shown in the figure below.

Figure 1.3: Location of Lesser Black Backed Gull compensatory habitat site at Orford Ness [Drawing 1 in REP8A-009]



- 1.3.4. The character of the area through which the proposed 24.5km long, east/west OnECC would pass, in summary, can be characterised as follows:
- generally flat, open, arable higher grade farmland, used for growing cereal and root crops
 - fields sporadically enclosed by hedges and hedges with interspersed trees
 - west of Clacton-on-Sea and Frinton-on-Sea the area is rural in character, with some built development in villages and hamlets or associated with farms or other rural businesses
- 1.3.5. The site for the proposed compensatory habitat for LBBG is essentially flat and is an area of coastal marshland forming part of a cold war radar station, bounded by a shingle spit and the sea to the east and the river Alde to the west.

DESCRIPTION OF THE PROPOSED DEVELOPMENT

- 1.3.6. The main elements of the proposed development would comprise:
- An electricity generating station comprising up to 79 WTGs, laid out in two arrays, with up to two OffSS.
 - Up to two offshore export cable circuits transmitting the generated electricity between the array areas and the landfall site.
 - An OnECC accommodating infrastructure for transmitting the generated electricity between the landfall site to a location west of Little Bromley and east of Ardleigh where a proposed OnSS would be sited. That OnSS being required to enable the proposed development to connect with the NGET system, via a new NGET substation.
- 1.3.7. The full description for each of the Work Nos. can be found in Part 1 of Schedule 1 of the recommended Development Consent Order (rDCO) in Appendix E. It should be noted that Work Nos. 5A, 6A, 7A, 8A, 9A, 10A, 11A, 12A, 14A and 15E would enable the installation of cable ducting for the proposed NFOWF, as part of the proposed coordination with that project. The previously mentioned works would not be required to expressly facilitate the transmission of electricity generated by the proposed development and instead would facilitate with the transmission of electricity generated by the proposed NFOWF.
- 1.3.8. Many aspects of the proposed development had not been finalised when the application was submitted. Accordingly, the applicant has sought flexibility in submitting its application and employed a maximum design scenario (MDS)/worst case (Rochdale Envelope) approach in assessing each of the proposed development's impacts in the submitted ES, for example the largest footprint, longest exposure or largest dimensions. The use of the MDS is explained in the Environmental Impact Assessment methodology section of the ES [\[APP-063\]](#). Requirements 2 and 5 in Schedule 2 of the draft Development Consent Order (dDCO) [\[REP8A-004\]](#) respectively identify the MDS parameters for the proposed offshore works and the OnSS and those parameters have been relied upon by the applicant in the ES when reporting on the impacts of those elements of the proposed development.
- 1.3.9. A number of the application documents, for example section 3 in the Coordination Document [\[REP8-029\]](#), identify three delivery scenarios for the onshore works for the proposed development and NFOWF. Scenario 1 would exhibit the most coordination between the two projects, while Scenario 3 would involve the least

coordination. Assuming both projects are consented, the scenario followed would be determined by when each project reached its respective decision as to whether it would or would not proceed (that is the making of a financial investment decision). The three delivery scenarios are as follows:

- **Delivery Scenario 1:** The undertaker for the proposed development would install onshore cable ducting for four electrical circuits, two for its own use and two for use by the NFOWF, with each project undertaking their own cable pulling works. Under Scenario 1 the undertaker for the proposed development might also undertake some groundworks (vegetation clearance, levelling and grading) in the proposed OnSS zone, which would facilitate the provision of a substation for the NFOWF. The two projects would share accesses, haul roads and TCCs associated with cable installation and substation construction [section 3.1 in [REP8-029](#)].
- **Delivery Scenario 2:** The proposed development and NFOWF would proceed to construction on different, but overlapping timescales, between one and three years apart. Under this scenario civil works would be undertaken independently of one another, but with opportunities to reuse enabling infrastructure such as haul roads, TCCs and site accesses.
- **Delivery Scenario 3:** Either NFOWF would not proceed to construction or both projects proceed but with construction programmes that are over three years apart. Under this scenario the project that proceeded first would at the completion of its works reinstate haul roads and TCCs prior to the second project's commencement. Under Scenario 3 the onshore construction period would potentially be in excess of six years.

1.3.10. For the purposes of the dDCO [[REP8A-004](#)], Delivery Scenario 1 represents Build Option 1, while Delivery Scenarios 2 and 3 constitute Build Option 2, as explained further explained in section 3.1 in [[REP8-029](#)]. Given the potential for the undertaker of the proposed development to undertake works that would be required to facilitate the operation of the proposed NFOWF compulsory acquisition powers for those works have been sought in the dDCO.

RELEVANT PLANNING HISTORY

1.3.11. The proposed development would be an extension to the operational Galloper Offshore Wind Farm (GOWF). The GOWF benefits from a DCO made on 24 May 2023, under file reference EN010003, for a generating station comprising up to 140 WTGs with a gross electrical output capacity of up to 504MW and a grid connection at Sizewell in Suffolk.

1.3.12. GOWF was promoted as an extension of the Greater Gabbard Offshore Wind Farm (GGOWF). The GGOWF was granted consent in 2007 (prior to the introduction of the NSIP regime) and became operational 2012 as explained in the applicant's Offshore Wind Farm Leasing Processing Note [[REP6-047](#)]. The extant application (EN010119) for the proposed NFOWF is being promoted as an extension to GGOWF.

1.3.13. The proposed WTG arrays would be sited to the south of the East Anglia offshore wind farm zone (EAZ). That zone comprises the following seven consented wind farms and their locations are shown in [Appendix 1 in [REP6-047](#)]:

- East Anglia One (operational)
- East Anglia One North

- East Anglia Two
- East Anglia Three
- Norfolk Boreas
- Norfolk Vanguard (East and West)

1.3.14. The East Anglia Two Offshore Wind Farm is the nearest of the EAZ's wind farms to the proposed development.

1.3.15. Other operational offshore wind farms in the vicinity of the proposed development are:

- Gunfleet Sands One, Two and Demonstration site
- London Array
- Thanet
- Kentish Flats and Kentish Flats Extension
- Scoby Sands

1.3.16. Additionally, the Sizewell C nuclear power station in Suffolk, has been consented.

1.3.17. An application for the proposed South East Anglia Link (Sea Link) was accepted for examination on 27 March 2025. Sea Link is being promoted by NGET and it would, if consented, provide an offshore transmission reinforcement between Suffolk and Kent. The submission of the Sea Link application has some relevance to the issue as to whether there would be any alternative to the onshore elements of the proposed development, considered in other chapters of our recommendation.

1.4. THE EXAMINATION

START OF THE EXAMINATION

1.4.1. The preliminary meeting (PM) took place on 17 September 2024 [\[EV1-002\]](#) and [\[EV1-004\]](#). The ExA's procedural decisions (PD) and the Examination Timetable took full account of matters raised at the PM. The main PDs were provided in the Rule 8 Letter of 25 September 2024 [\[PD-009\]](#), issued under the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR).

1.4.2. The examination began on 17 September 2024 and concluded on 17 March 2025. The principal components of and events around the examination can be seen in the Examination Timetable [\[PD-009\]](#), as varied in [\[PD-021\]](#) and [\[PD-025\]](#) and are summarised below.

PROCEDURAL DECISIONS

1.4.3. The PDs relating to the conduct of the examination made by the ExA are recorded in the EL referenced [\[PD-005\]](#), [\[PD-007\]](#), [\[PD-009\]](#), [\[PD-012\]](#), [\[PD-021\]](#) and [\[PD-025\]](#). Those PDs 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. Those PDs were broadly discharged as intended and no further reference is made to them in this report.

STATEMENTS OF COMMON GROUND AND PRINCIPLE AREAS OF DIFFERENCE (PADS)

1.4.4. By the end of the examination, the following bodies had concluded and signed statements of common ground (SoCG) with the applicant:

- Commercial Fisheries Working Group [\[REP7-072\]](#)

- Corporation of Trinity House of Deptford Strond [[REP5-051](#)]
- East of England Ambulance Service National Health Service Trust [[REP1-053](#)]
- East Suffolk Council [[REP5-052](#)]
- Environment Agency [[REP8A-025](#)]
- Essex County Council and Tendring District Council [[REP8A-027](#)]
- Essex County Fire and Rescue [[REP5-055](#)]
- Essex Police [[REP4-031](#)]
- Essex Wildlife Trust [[REP6-034](#)]
- Harwich Haven Authority [[REP5-057](#)]
- Historic England [[REP8A-029](#)]
- London Gateway Port Limited [[REP5-059](#)]
- Marine Management Organisation [[REP8A-031](#)]
- Maritime and Coastguard Agency [[REP7-068](#)]
- National Federation of Fishermen's Organisations [[REP5-062](#)]
- National Highways [[REP8A-033](#)]
- Port of London Authority [[REP7-074](#)]
- Port of Tilbury London Limited [[REP7-077](#)]
- Royal Society for the Protection of Birds [[REP5-067](#)]
- Suffolk County Council [[REP5-064](#)]
- Suffolk and Essex Coast and Heaths National Landscape Partnership [[AS-071](#)]
- United Kingdom Chamber of Shipping [[REP7-066](#)]

1.4.5. In addition to the SoCGs listed above, in [[PD-005](#)] the ExA requested that SoCGs be entered into between the applicant and the following parties:

- Affinity Water Limited
- Anglian Water
- Cadent Gas
- German Federal Maritime and Hydrographic Agency
- Ministry of Defence
- NGET
- Network Rail Infrastructure Limited
- Port of Felixstowe

1.4.6. In the applicant's SoCG Position Statement [[PD2-001](#)] and Statement of Commonality [[REP7-064](#)] the applicant has advised that SoCGs were not progressed with the above listed parties (other than NGET) either because those parties did not wish to enter into a SoCG or the matters of concern could be addressed through the agreeing of protective provisions. In the case of NGET in the Statement of Commonality it is explained that matters of common interest to NGET, NFOWF and the applicant were being progressed through an agreed tripartite position statement [paragraph 1.3.3 in [REP7-064](#)]. That tripartite position is included as Annex A in the applicant's project Coordination Document [[REP8-029](#)].

1.4.7. Natural England in submitting what was in effect a 'hybridised' relevant/written representation [[RR-081](#)] elected to identify a series of PADs it had with the applicant. Accordingly, the ExA made the PD in [[PD-005](#)] that Natural England should continue with the PADs approach and that it and the applicant should not enter into a SoCG, with the onus on Natural England to provide regular PADs updates in the second half of the examination.

WRITTEN QUESTIONS

1.4.8. The ExA asked three rounds of written questions:

- Draft First Written Questions were issued on 20 August 2024 [[PD-008](#)], with the final version of First Written Questions (ExQ1) issued on 8 October 2024
- Second Written Questions (ExQ2) were issued on 8 November 2024 [[PD-014](#)]
- Third Written Questions (ExQ3) were issued on 3 February 2025 [[PD-026](#)]

1.4.9. The ExA made multiple requests for further information and comments under Rule 17 of the EPR. Those requests for further information are listed in the PDs section of the EL.

SITE INSPECTIONS

1.4.10. The ExA carried out the following unaccompanied site inspections (USI) and access required site inspections (ARSIs):

- USI1 [[EV5-001](#)]
- USI2 [[EV5-002](#)]
- USI3 [[EV5-003](#)]
- USI4 [[EV5-004](#)]
- ARSI1 [[EV5-003](#)]
- ARSI2 [[EV5-005](#)]

HEARINGS

1.4.11. Hearings were held under s91 of PA2008 into specific issues (ISHs) and under s92 of PA2008 into the compulsory acquisition of land and rights (CAHs). No requests to be heard at an open floor hearing (OFH) under s93 of PA2008 were received, accordingly no OFH was held.

1.4.12. The following ISHs were held:

- ISH1 [[EV3-002](#), [EV3-004](#), [EV3-006](#), [EV3-008](#), [EV3-010](#) and [EV3-012](#)]
- ISH2 [[EV4-002](#)]
- ISH3 [[EV6-002](#), [EV6-004](#), [EV6-006](#), [EV6-008](#), [EV6-010](#), [EV6-012](#) and [EV6-014](#)]
- ISH4 [[EV8-002](#)]
- ISH5 [[EV9-002](#)]
- ISH6 [[EV10-002](#), [EV10-004](#), [EV10-006](#), [EV10-008](#) and [EV10-010](#)]
- ISH7 [[EV12-002](#) and [EV12-004](#)]

1.4.13. The following CAHs were held:

- CAH1 [[EV2-002](#) and [EV2-004](#)]
- CAH2 [[EV7-002](#) and [EV7-004](#)]
- CAH3 [[EV11-002](#) and [EV11-004](#)]

1.5. CHANGES TO THE APPLICATION

1.5.1. Changes to a number of the application documents, including the wording of the dDCO, were submitted and updated at various stages of the examination. Those changes sought to address points raised by IPs and the ExA and to update or provide additional information resulting from changes and discussions arising during the examination.

1.5.2. At examination Deadline 1, the applicant amended the maximum design parameters for the WTGs, by reducing their maximum height from 399 metres to 370 metres above the lowest astronomical tide level and removing gravity based structures as one of possible foundation types. Those changes were made following discussions between the applicant and the Ministry of Defence and the Marine Management

Organisation respectively to avoid an adverse effect on the operation of radar and minimise environmental impacts on the seabed. Those changes were incorporated in the version of the dDCO [\[REP1-008\]](#) submitted at Deadline 1 and retained thereafter in the dDCO, including the final version [\[REP8A-004\]](#).

- 1.5.3. The applicant submitted a formal change request on 10 October 2024. Ten changes were proposed for the application and a summary of those changes are included section 2 of the applicant's Report on Proposed Changes [\[AS-057\]](#). The ExA agreed with the applicant that none of the proposed changes were so material that they constituted a materially different project. The proposed changes were not considered, individually or cumulatively, to lead to the project being different in nature or substance to that which was originally applied for.
- 1.5.4. The ExA made the PD to accept all of the changes to the submitted application on 22 October 2024 [\[PD-012\]](#) into the examination, subject to the subsequent fulfilment of notification and publicity duties under Regulations 7 and 8 of the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (CA Regulations). Existing and/or potentially new interested parties and affected persons were advised of the ExA's acceptance of the matters included in the change request and had the opportunity to submit representations relating to those matters between 6 November and 16 December 2024 [\[REP5-087\]](#).
- 1.5.5. In connection with the acceptance of the applicant's change request, two new relevant representations were submitted from two entirely new parties, a local resident and the Alde and Ore Association joining the examination. Two existing IPs also submitted relevant representations relating to the change request.

1.6. UNDERTAKINGS, OBLIGATIONS AND AGREEMENTS

- 1.6.1. With the exception of agreements relating to land rights (which are covered in Chapter 9 below) the applicant had not entered into any undertakings, obligations or agreements with any other party by the examination's close.

1.7. OTHER CONSENTS

- 1.7.1. In addition to the consents required under PA2008, the applicant would require other consents to construct, operate and maintain the proposed development. The other consents that would or would possibly be required to construct and operate the proposed development have been identified by the applicant in [\[APP-060\]](#).

1.8. STRUCTURE OF THIS REPORT

- 1.8.1. The structure of the remainder of this report is as follows:
- **Chapter 2** identifies how the application is to be determined and summaries the key legislation and policy context that applies to the decision.
 - **Chapter 3** sets out the findings and conclusions in relation to the overarching matters of need and alternatives to the proposed development.
 - **Chapter 4** sets out offshore findings and conclusions in relation to the individual planning issues that arose from the application and during the examination.
 - **Chapter 5** sets out onshore findings and conclusions in relation to the individual planning issues that arose from the application and during the examination.
 - **Chapter 6** sets out findings and conclusions in relation to the individual planning issues that arose from the application and during the examination which concern both onshore and offshore matters.

- **Chapter 7** provides a summary of conclusions in relation to Habitats Regulations Assessment.
- **Chapter 8** sets out conclusions on the case for the DCO.
- **Chapter 9** sets out the ExA's examination of land rights and related matters.
- **Chapter 10** considers the DCO and related matters.
- **Chapter 11** summarises the ExA's findings and conclusions.

1.8.2.

This report is supported by the following appendices:

- **Appendix A** – Reference Tables
- **Appendix B** – List of Abbreviations
- **Appendix C** – Habitats Regulations Assessment
- **Appendix D** – Land Rights Tracker
- **Appendix E** – 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 (LIRs) that the Examining Authority's (ExA) recommendations have taken into account.

2.2. LEGISLATION AND POLICY

- 2.2.1. This section identifies the key legislation and policy that the ExA considers to be important and relevant to its findings and recommendations to the Secretary of State for Energy Security and Net Zero (SoSESNZ). More detail is provided in Annex A to this report.

PLANNING ACT 2008

- 2.2.2. The Planning Act 2008 (PA2008) provides for a different basis for decision-making for Nationally Significant Infrastructure Project (NSIP) applications in cases where a relevant National Policy Statement (NPS) has effect and in those cases when no NPS has effect. The [Overarching National Policy Statement for Energy \(EN-1\)](#), [National Policy Statement for Renewable Energy Infrastructure \(EN-3\)](#) and [National Policy Statement for Electricity Networks Infrastructure \(EN-5\)](#), hereafter referred to as NPS EN-1, NPS EN-3 and NPS EN-5, were all published as designated NPS in January 2024 and have effect in relation to the consideration of the proposed development. As NPS EN-1, NPS EN-3 and NPS EN-5 have effect, the ExA considers that the proposed development should be assessed under section (s) 104 of PA2008.
- 2.2.3. Section 104(2) of PA2008 sets out the matters the SoSESNZ must have regard to when making its decision. Those matters include any relevant NPS that has effect, any LIRs, any matters prescribed in relation to the development and any other matters the SoSESNZ considers are both important and relevant. As the proposed development concerns the construction of an offshore wind farm, under s104(2)(aa) of PA2008 the SoSESNZ must also have regard to *"the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009"*. As explained later in this Chapter there are several marine policy documents to which regard must be paid.
- 2.2.4. Section 104(3) of PA2008 requires the SoSESNZ to decide the application in accordance with any relevant NPS that has effect in relation to this application, subject to the exceptions in s104(4) to (8) as follows:
- Deciding the application in accordance with any relevant NPS would lead to the United Kingdom being in breach of any of its international obligations.
 - Deciding the application in accordance with any relevant NPS would lead to the SoSESNZ 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.
 - Any condition prescribed for deciding an application otherwise than in accordance with a NPS is met.

2.2.5. On 24 April 2025 a consultation was commenced concerning the making of proposed revisions to NPS EN-1, NPS EN-3 and NPS EN-5. The publication of the consultation drafts for those NPSs post dates the examination's close. Accordingly, we were unable to seek comments from either the applicant or any of the other parties who participated in the examination about any implications the proposed revisions to NPS EN-1, NPS EN-3 and NPS EN-5 might have for their cases. In the interests of procedural fairness we have therefore not taken into account any of the proposed revisions included in NPS EN-1, NPS EN-3 and NPS EN-5 in making our recommendations to the SoSESNZ.

2.2.6. This recommendation sets out the ExA's findings, conclusions and recommendations taking these matters into account and applying s104 of PA2008.

2.2.7. Relevant secondary legislation to PA2008 which we have had regard to includes:

- Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (CA Regulations)
- Infrastructure Planning (Examination Procedure) Regulations 2010
- Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

MARINE AND COASTAL ACCESS ACT 2009

2.2.8. The Marine and Coastal Access Act 2009 (MCAA2009) provides a framework for the marine planning system in the United Kingdom (UK). It provides for the preparation of a UK Marine Policy Statement and marine plans for UK marine areas.

2.2.9. Under s104(2)(aa) the SoSESNZ must have regard to any appropriate marine policy documents, which in this case are the adopted [Marine Policy Statement 2011](#), [East Inshore and East Offshore Marine Plans 2014](#) and [South East Inshore Marine Plan 2021](#). Several marine policy documents adopted under the provisions of the MCAA2009 relate to the area affected by the proposed offshore works and we have had regard to that marine policy in making our recommendations.

2.2.10. The MCAA2009 also provides for the system of marine licensing (ML). An order granting development consent may include provision deeming a ML to have been issued, which is the case for this application. The proposed deemed MLs are considered further in Chapters 4 and 10.

OTHER LEGISLATION

2.2.11. A full list of relevant primary and secondary legislation, including but not limited to duties arising under the Equality Act 2010, Human Rights Act 1998 and the Climate Change Act 2008 (as amended), can be found in Appendix A of this recommendation. 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 SoSESNZ to discharge applicable statutory considerations or duties.

2.3. NATIONAL POLICY STATEMENTS

2.3.1. NPSs set out government policy on different types of national infrastructure development. Having regard to the purposes of s104(2)(a) of PA2008, as indicated above, and the description of the proposed development the ExA considers that amongst the suite of energy NPS the following designated NPSs relate to the application:

- NPS EN-1

- NPS EN-3
- NPS EN-5

2.3.2. As the proposed development would be a generating station within the scope of s15 (generating stations) of PA2008, the above listed NPS form the primary policy context for the consideration of the proposed development. This report sets out the ExA's findings, conclusions and recommendations taking these matters into account and applying the approach set out in s104 of PA2008. The purpose and broad content of those NPSs is summarised below.

2.3.3. The ExA also considers the [National Policy Statement for Ports \(2012\)](#) (NPSfP) is a matter that is important and relevant for the purposes of the determination of this application under s104(2)(d) of PA2008. That is because offshore elements of the proposed development would be located within or adjoining waters used by commercial shipping travelling to and from various ports in Essex, Kent, London and Suffolk. Where important and relevant the provisions of the NPSfP are referred to in our recommendation.

NPS EN-1

2.3.4. NPS EN-1 sets out the Government's policy for the delivery of major energy infrastructure. NPS EN-1 is part of a suite of NPSs for the energy sector with the technology specific NPSs, such as NPS EN-3 and NPS EN-5, to be read in conjunction with NPS EN-1, as relevant.

2.3.5. With respect to the need for nationally significant electricity infrastructure paragraphs 3.2.6 to 3.2.8 of NPS EN-1 respectively state:

"The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part.

In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.

The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS."

2.3.6. Paragraphs 3.3.62 and 3.3.63 go onto respectively state:

"Government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. Section 4.2 states which energy generating technologies are low carbon and are therefore CNP infrastructure.

Subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible."

2.3.7. Paragraph 4.1.3 advises that because of the level of and urgency of the infrastructure types covered by the energy NPSs "... *the Secretary of the State 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”.

NPS EN-3

- 2.3.8. NPS EN-3 sets out additional policy specific to a number of renewable energy generating technologies. Section 2.8 sets out the policy specific to offshore wind generating stations with a generating capacity exceeding 100 megawatts (MW). Paragraph 2.8.1 explains that it is the government’s ambition to deploy up to 50 gigawatts (GW) by 2030, with an expectation that substantially more installed offshore capacity will be needed beyond 2030. Paragraph 2.8.4 explains that for the purposes of NPS EN-3 offshore wind farm infrastructure includes WTGs, onshore and offshore substations and cabling for offshore transmission.

NPS EN-5

- 2.3.9. NPS EN-5 sets out policy in relation to electricity transmission and distribution systems. It is therefore relevant to the provision of the proposed onshore substation and both onshore and offshore cables and related infrastructure connecting the proposed development to the transmission system operated by National Grid Electricity Transmission PLC.

NPSfP

- 2.3.10. The NPSfP highlights the importance of ports to the functioning of the UK’s economy, with shipping being the only effective way to move the vast majority of freight in and out of the UK and the provision of sufficient sea port capacity remaining essential to ensuring sustainable growth in the UK economy (paragraph 3.1.4). Section 3.3 of the NPSfP goes on to explain the Government’s policy for ports, amongst other things, is to encourage sustainable port development to accommodate forecasted growth in imports and exports by sea, so that the port sector is competitive and efficient for importers and exporters.

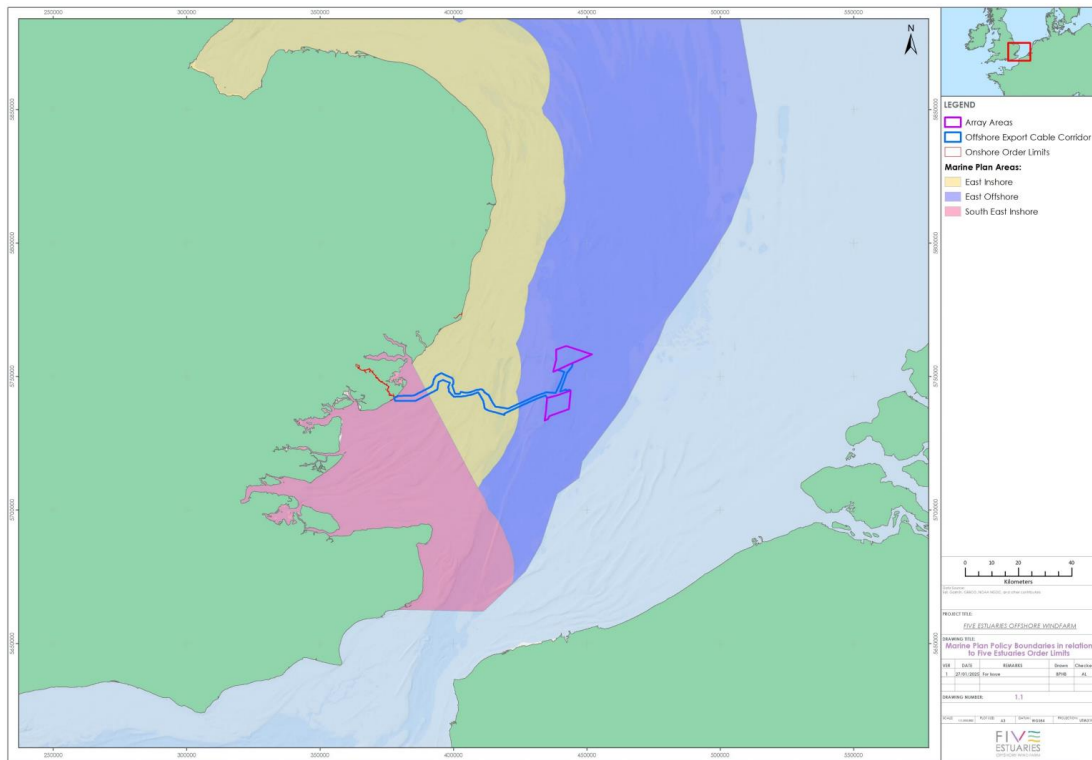
2.4. OTHER NATIONAL POLICY AND GUIDANCE

- 2.4.1. Other important and relevant government policy has been taken into account by the ExA, including the following:

- [UK Marine Policy Statement](#) (March 2011)
- [East Inshore and East Offshore Marine Plans](#) (April 2014) (EIEOMPs)
- [South East Inshore Marine Plan](#) (June 2021) (SEIMP)
- [National Planning Policy Framework](#) (December 2024, as corrected in February 2024)
- [Guidance for relevant authorities on seeking to further the purposes of Protected Landscapes](#) (December 2024)
- [Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance](#) (January 2025)

- 2.4.2. The above listed policies and guidance are also discussed in more detail in later chapters in this recommendation. It is to be noted that the offshore elements of the proposed development would variously fall within the boundaries for the EIEOMPs and SEIMP as shown in the figure below.

Figure 2.1 Marine Plan Policy area boundaries in relation to the proposed development [Figure 1.1 in REP6-035]



2.5. LOCAL IMPACT REPORTS (LIR)

2.5.1. Four LIRs were submitted at Deadline 2 by the following local authorities:

- Babergh District Council [[REP2-040](#)]
- East Suffolk Council [[REP2-041](#)]
- Essex County Council and Tendring District Council [[REP2-043](#)] and accompanying appendices [[REP2-042](#)]
- Suffolk County Council [[REP2-046](#)]

2.5.2. The contents of the LIRs have been considered through the examination and in this report. It must be considered as part of the SoS's decision pursuant to s104(2)(b) of the PA2008.

2.5.3. The issues raised are considered in further detail in relation to relevant planning issues reported in later chapters of this recommendation.

2.5.4. Amongst other matters, LIRs identify local policies (including those from the relevant Development Plans) which are capable of being important and relevant considerations under s104(2)(d) of PA2008.

2.6. ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

2.6.1. The applicant provided a notification under Regulation 8(1)(b) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) of its intention to provide an Environmental Statement (ES). Therefore, in

accordance with Regulation 6(2)(a) of the EIA Regulations, the ExA determined that the proposed development was EIA development.

- 2.6.2. On 30 September 2021, the applicant submitted a Scoping Report to the SoS for Levelling Up, Housing and Communities (SoSLUHC) under Regulation 10 of the EIA Regulations in order to request an opinion about the scope of the ES to be prepared (a Scoping Opinion) [[APP-068](#)].
- 2.6.3. On 12 November 2021 the Planning Inspectorate provided a Scoping Opinion on the SoSLUHC's behalf which is included in [APP-068].
- 2.6.4. Overall, the ExA considers that the ES, as supplemented with additional information during the Examination, is sufficient to enable the SoSES NZ to take a decision in compliance with the EIA Regulations.
- 2.6.5. The ExA considered that changes to the documentation, comprising the ES during the Examination, together with the change requests (see Chapter 1 of this recommendation) did not individually or cumulatively undermine the scope and assessment of the ES. Chapters 4, 5 and 6 of this report summarise the environmental effects under each topic section.

2.7. HABITATS REGULATIONS ASSESSMENT

- 2.7.1. The SoSES NZ is the competent authority for the purposes of the Conservation of Habitats and Species Regulations 2017 (as amended) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (Habitats Regulations).
- 2.7.2. The proposed development is one that has been identified as giving rise to the potential for likely significant effects (LSE) on European sites and hence is subject to a Habitats Regulations Assessment (HRA).
- 2.7.3. As is the convention and to inform the SoSES NZ's decision, a separate record of considerations relevant to HRA has been set out in Appendix D of this recommendation, a summary of which can be found in Chapter 7.

2.8. TRANSBOUNDARY EFFECTS

- 2.8.1. A transboundary screening under Regulation 32 of the EIA Regulations was undertaken on behalf of the SoSES NZ initially on 31 May 2022 following the applicant's request for an EIA Scoping Opinion. Significant effects were identified on the environment in the European Economic Area (EEA) member states of Netherlands, Belgium, Germany, Denmark and France and those stated were notified of the applicant's proposals.
- 2.8.2. Following the application's acceptance for examination a second screening was published on 14 May 2024 [[OD-001](#)]. Based on the nature of the scheme subject to the originally submitted application, which differed from that subject to the original pre-application consultation, and the information accompanying the submitted application the proposed development was assessed as having:
- No LSE on the environment of Denmark; and
 - likely significant effects on the environment of the Netherlands, Belgium, Germany and France.
- 2.8.3. Accordingly, the governments of Netherlands, Belgium, Germany and France were notified of the application's submission. The German government made initial

representations prior to the examination's commencement in [\[OD-002\]](#), most notably in relation to potential effects for bats migrating between the United Kingdom and mainland Europe. The German government did not participate any further and we have reported on potential effects for migratory bats in section 5.5 in Chapter 5 below. The government of the Netherlands in [\[OD-003\]](#) advised that it would like to participate in EIA matters, however it did not subsequently engage with the examination.

- 2.8.4. The Regulation 32 duty is an ongoing duty, and on that basis, the ExA has considered whether any facts have emerged to change these screening conclusions, up to the point of closure of the examination. The ExA is content, on the basis of the information provided by the applicant and Natural England's consideration of the proposed development during the examination that the correct sites had been considered by the applicant in its Report to Inform Appropriate Assessment [\[REP7-016\]](#), that the proposed development would not have a LSE on European sites in any EEA member states.

3. OVERARCHING MATTERS RELATING TO NEED AND ALTERNATIVES TO THE PROPOSED DEVELOPMENT

3.1. INTRODUCTION

- 3.1.1. This section considers the overarching need for the proposed development, including consideration of alternatives. Site-specific alternatives related to compulsory acquisition, habitats sites or where the NPS imposes a policy requirement to consider alternatives have been considered where relevant in the individual topic sections of this report.
- 3.1.2. In its consideration of need and alternatives, the Examining Authority (ExA) has had regard to the following:
- The Climate Change Act 2008
 - The Energy Act 2013
 - Overarching National Policy Statement for Energy EN-1 (NPS EN-1) in particular Section 3 and Section 4
 - the National Policy Statement for Renewable Energy Infrastructure (NPS EN-3)
 - the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5)
 - the relevant policies of the UK Marine Policy Statement
 - Local Impact Reports (LIR)
 - any matters prescribed in relation to the development; and
 - any other important and relevant matters.

3.2. THE APPLICATION

NEED

- 3.2.1. The applicant set out its need case for the proposed development in section 5 of the Planning Statement [[APP-231](#)] drawing on the national, international and local policy support for low carbon energy and the role of offshore wind in achieving the United Kingdom (UK) renewable energy targets set for 2030 and 2050.
- 3.2.2. The applicant stated in paragraph 7.1.14 of its Planning Statement [[APP-231](#)] that the proposed development would make a significant contribution to the UK Government's national policy aims of decarbonisation:
- Net-zero and the importance of deploying zero-carbon generation assets at scale;
 - Security of supply; and
 - Affordability.
- 3.2.3. The applicant noted in paragraph 7.1.15 of its Planning Statement [[APP-231](#)] that wind generation is economically and technically preferential to the electricity consumer because:
- Decarbonisation is a UK legal requirement and is of global significance, with urgent action needed to keep decarbonisation on track to limit global warming.
 - Wind generation is a key element of the delivery plan for the urgent decarbonisation of the GB electricity sector.
 - As part of a diverse generation mix, large-scale offshore wind generation will play an important role in the resilience of the GB electricity system.

- Offshore wind generation projects are becoming bigger and cheaper, providing benefits to consumers.
- Offshore wind is already competitive against other forms of conventional and low-carbon generation.

3.2.4. The applicant then went on in paragraph 7.1.16 of its Planning Statement [\[APP-231\]](#) to highlight the following specific benefits of the proposed development:

- It would be a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity potentially from the late-2020s addressing the need for urgent action to increase the pace of decarbonisation in the GB electricity sector. However, the ExA notes from section 4 of the Tri-partite Position Statement submitted as Annex A in [\[REP8-029\]](#) that a connection to the proposed EACN may not be available until the 2030s.
- The connection to the National Energy Transmission System means that it would be required to play its part in helping the National Grid Electricity System Operator manage the nation's electricity system.

3.2.5. The applicant concludes its need case by stating that the proposed development would make a significant and timely contribution to decarbonisation and security of energy supply and that the case for it is urgent and important.

ALTERNATIVES

3.2.6. As required by NPS EN-1 paragraph 4.3.15, the applicant has included within its Environmental Statement (ES) a Site Selection and Alternatives chapter [\[APP-066\]](#), providing information about the reasonable alternatives it has studied. This sets out the nine stage process the applicant undertook, from identifying areas of search for the landfall zone, offshore export cable route and onshore infrastructure, through to refinement of options for site selection following consultation and engagement.

3.2.7. With respect to the onshore elements of the proposed development, alternatives and site selection are limited by the need to connect with the proposed East Anglia Connection Node (EACN) substation, part of the Norwich to Tilbury project being progressed by National Grid Electricity Transmission PLC (NGET). Once NGET had made the decision to site the EACN on land north of the existing Lawford substation, then the applicant's search area for its own substation was limited to around 3 kilometres (km) (maximum 5km) from the EACN substation site to minimise the length of the 400 kilovolt connection (section 4.10 in [\[APP-066\]](#)).

3.2.8. The applicant considered a range of potential options for the landfall zone along the Essex coast in section 4.8 of [\[APP-066\]](#), for the offshore export cable route in section 4.9 of [\[APP-066\]](#) and for the onshore infrastructure in section 4.12 of [\[APP-066\]](#).

3.2.9. The single main alternative option to the development as proposed would be to connect the Five Estuaries wind turbine generator (WTG) array areas to National Grid's proposed Sea Link project, a point-to-point offshore cable link between Suffolk and Kent to reinforce the nation's onshore transmission network. This alternative option would have the effect of removing the need for any of the proposed onshore development within Essex. The application for the Sea Link project (EN020026) was accepted for examination on 23 April 2025.

3.2.10. The applicant submitted a document entitled Offshore Connection Scenario [\[APP-262\]](#) as part of its application. Whilst the applicant made clear in section 1.3 of [\[APP-262\]](#) that the basis of its application is for an onshore connection to the

proposed EACN substation, it remained committed to exploring the potential for an offshore connection as part of the Government's Offshore Transmission Network Review (OTNR) process. The applicant notes in paragraph 1.3.6 of [\[APP-262\]](#) that an offshore connection was not a viable or deliverable alternative at the time it submitted its applicant for development consent.

- 3.2.11. The applicant, along with the NF OWF and Sea Link (NGET), applied as a consortium for grant funding as part of the Offshore Coordination Support Scheme (OCSS). In December 2023 the Government announced that the consortium had been successful in receiving grant funding to explore the feasibility of a coordinated offshore solution. In March 2024, the consortium submitted a feasibility study [\[PD4-008\]](#) to the Department for Energy Security & Net Zero (DESNZ) as the next step of the grant funding agreement.

3.3. ISSUES CONSIDERED DURING THE EXAMINATION NEED

- 3.3.1. The overall need case for the proposed development was not a matter disputed by parties during the examination. For example Tendring District Council in [\[RR-112\]](#) and Essex Council in [\[RR-027\]](#) advised that they supported the Government's strategy for expanding renewable energy generation.
- 3.3.2. NPS EN-1 sets out that to produce the energy required for the UK and ensure it can be transported where it is needed, a significant amount of infrastructure is needed at both local and national scale. The Government's objectives for the energy system are to ensure the supply of energy always remains secure, reliable, affordable and consistent with net zero emissions in 2050. Even with major improvements in overall energy efficiency and increased flexibility in the energy system, analysis indicates that demand for electricity is likely to increase significantly over the coming years and could more than double by 2050. The Impact Assessment for the sixth carbon budget (CB6) gives an illustrative range of 465-515 terawatt hours (TWh) in 2035 and 610-800 TWh in 2050.
- 3.3.3. NPS EN-3 states that generation from renewable sources is an essential element of the transition to net zero and meeting the Government's statutory targets for the sixth carbon budget (CB6) which requires the UK to reduce greenhouse gas (GHG) emissions by 78% by 2035 compared to 1990 levels. In the Net Zero Strategy (2021), the Government committed to action, so that by 2035 all the UK's electricity will come from low carbon sources. The British Energy Security Strategy (2022), and the Growth Plan (2022) further reinforced ambitions and the importance of addressing the UK's underlying vulnerability to international oil and gas prices and reducing the UK's dependence on imported oil and gas. This includes an ambition to deliver up to 50 gigawatts (GW) of offshore wind by 2030. More recently, the Government published the Clean Power 2030 Action Plan (2024), setting out a pathway to a clean power system by 2030. The plan states that successful delivery will require rapid deployment of new clean energy capacity across the whole of the UK including 43-50 GW of offshore wind.
- 3.3.4. Part 3 of NPS EN-1 explains why it sees a need for significant amounts of large scale energy infrastructure to meet its energy objectives and why the Government considers that the need is urgent. Offshore wind is within the scope of NPS EN-1 and is identified as one of the lowest cost ways of generating electricity, helping to reduce costs and providing a clean and secure source of electricity supply. Additionally, the Government's analysis indicates that a secure, reliable, affordable,

net zero consistent system in 2050 is likely to be composed predominantly of wind and solar generation.

- 3.3.5. Paragraph 3.2.6 of NPS EN-1 states that applications for development consent for the types of infrastructure covered by the NPS should be assessed on the basis that there is a need for those types of infrastructure which is urgent. NPS EN-1 goes on to state in paragraph 3.2.7 that substantial weight should be given to this need.
- 3.3.6. Whilst the applicant typically refers in its submitted documents to the proposed development being operational and starting to generate in 2030 (for example section 1.11 of [\[AS-041\]](#) and section 1.13 of [\[APP-069\]](#)) this is dependent on a number of factors that might be subject to change, as set out in paragraph 1.13.1 of [\[APP-069\]](#). These dependencies are cited by the applicant as a reason why Requirement 1 of the dDCO [\[REP8A-004\]](#) specifies the time limit for commencing the authorised development as being seven years from the date on which a made Order would come into force (paragraph 3.2.11 in [\[REP1-059\]](#)).
- 3.3.7. The ExA also notes that in section 4 of the Tri-partite Position Statement submitted as annex A to [\[REP8-029\]](#) the construction programme for the proposed EACN, to which the proposed development would connect, is stated to complete in Q4 of 2031. Whether the proposed development would make a contribution towards the Government's target of up to 50 GW of offshore wind by 2030 is therefore by no means certain.

ExA's consideration

- 3.3.8. We agree with the applicant's case set out in section 5 of [\[APP-231\]](#), that when taken together with other legislation, policy and guidance, NPS EN-1 demonstrates a strong presumption in favour of the development of offshore wind projects such as the proposed development, which would meet the Government's energy objectives by contributing to:
- providing security of supply (by reducing reliance on imported oil and gas and not relying on one fuel or generation type);
 - providing an affordable and reliable system; and
 - ensuring the system is net zero consistent.
- 3.3.9. Our view is that, whilst there is uncertainty whether the proposed development would make a material contribution towards achieving the target of up to 50 GW of offshore wind by 2030, it would make a significant contribution towards the net zero by 2050 target. As secured by Requirement 2 of the dDCO the proposed development would be capable of providing up to 79 wind turbine generators (WTG), delivering an annual output of between around 3,700 to 4,700 GWh of renewable energy (section 3 of [\[REP8-038\]](#)). That would generate enough energy each year to power hundreds of thousands of homes.
- 3.3.10. We also acknowledge that the Government has identified a critical national priority (CNP) for nationally significant low carbon infrastructure, such as the proposed development (paragraph 4.2.4 in NPS EN-1). However, NPS EN-1 makes clear in paragraph 4.2.7 that the 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. Therefore, the application of the CNP policy would only apply following the normal consideration of the need case, the impacts of the proposed development and the application of the mitigation hierarchy. The applicant acknowledges this position at paragraph 5.1.13 of its need case [\[APP-231\]](#). As such, the correct place for CNP to be considered is in chapter 8 'Conclusions on the

case for development consent' of this recommendation in reference to any residual impacts that have been identified, once all project-specific issues have been considered.

ALTERNATIVES

- 3.3.11. In respect of the potential alternative option of an offshore connection, the applicant confirmed to us in section 2 of [\[PD4-006\]](#) that DESNZ on 3 September 2024, having reviewed the feasibility study [\[PD4-008\]](#) had decided not to grant further funding to explore the option of a coordinated offshore connection. Accordingly, the applicant confirmed in [\[PD4-006\]](#) that without further funding it would no longer be pursuing the option of an offshore connection.
- 3.3.12. Further to our request during CAH1, Essex County Council submitted a copy of the letter issued by DESNZ [\[AS-011\]](#). During CAH1, the ExA questioned the applicant about the feasibility study [\[PD4-008\]](#), with the applicant providing reassurance on the independence of the author of the study in investigating the practicalities of connecting to Sea Link and arriving at conclusions regarding costs and timescales in paragraph 1.3.19 of [\[REP1-059\]](#).
- 3.3.13. During the examination no parties queried the proposed landfall location. Whilst there were some issues raised regarding the siting of the proposed substation and the onshore and offshore cable routes, these were micro-siting issues rather than challenges regarding alternative routes or locations.
- 3.3.14. We are content that as part of the submitted ES [\[APP-066\]](#) the applicant has considered reasonable alternatives to the proposal for which it is seeking consent and has provided sufficient information as to why those alternatives were discounted.

3.4. CONCLUSIONS

- 3.4.1. The urgent need for offshore wind for both energy security and net zero is established by NPS EN-1 and NPS EN-3. We agree that the proposed development would make a meaningful contribution to meeting this need, would help in the transition to a low carbon system and would be in accordance with the designated NPSs. We are content that the applicant has also considered reasonable alternatives to the proposed development.
- 3.4.2. We conclude that, notwithstanding the consideration of project specific issues, the overarching need argument for the proposed development is very strong in terms of meeting the urgent need for low carbon energy, deliverability within a reasonable timeframe to meet growing energy demands and ensuring security of supply. Therefore, the overall need argument weighs heavily in favour of making the Order and carries very great positive weight in the planning balance.
- 3.4.3. In accordance with paragraph 4.1.3 of NPS EN-1, the starting point is therefore a presumption in favour of granting development consent unless any more specific policies set out in the relevant NPSs clearly indicate that consent should be refused and subject to the provisions in the Planning Act 2008.

4. OFFSHORE ISSUES

4.1. INTRODUCTION

4.1.1. In this chapter we assess the planning issues concerning the following offshore matters:

- Benthic ecology
- Offshore ornithology
- Marine mammals, fish and shellfish ecology
- Navigation and shipping
- Commercial fisheries
- Seascape and visual effects
- Other offshore infrastructure

4.2. BENTHIC AND INTERTIDAL ECOLOGY INCLUDING EFFECTS ON PHYSICAL PROCESSES AND SEDIMENT QUALITY

INTRODUCTION

4.2.1. This section considers the effects of the proposed development on benthic and intertidal ecology, including physical processes and sediment quality. General effects on onshore water quality are considered in section 5.7 in Chapter 5.

4.2.2. The effects on European sites in the context of the Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations) and The Conservation of Offshore Marine Habitats and Species Regulations 2017 are considered in detail in Chapter 7 and Appendix C of this report; however, there are some linkages with the content of this section.

POLICY AND GUIDANCE

4.2.3. In its consideration of benthic and intertidal ecology, the ExA has had regard to:

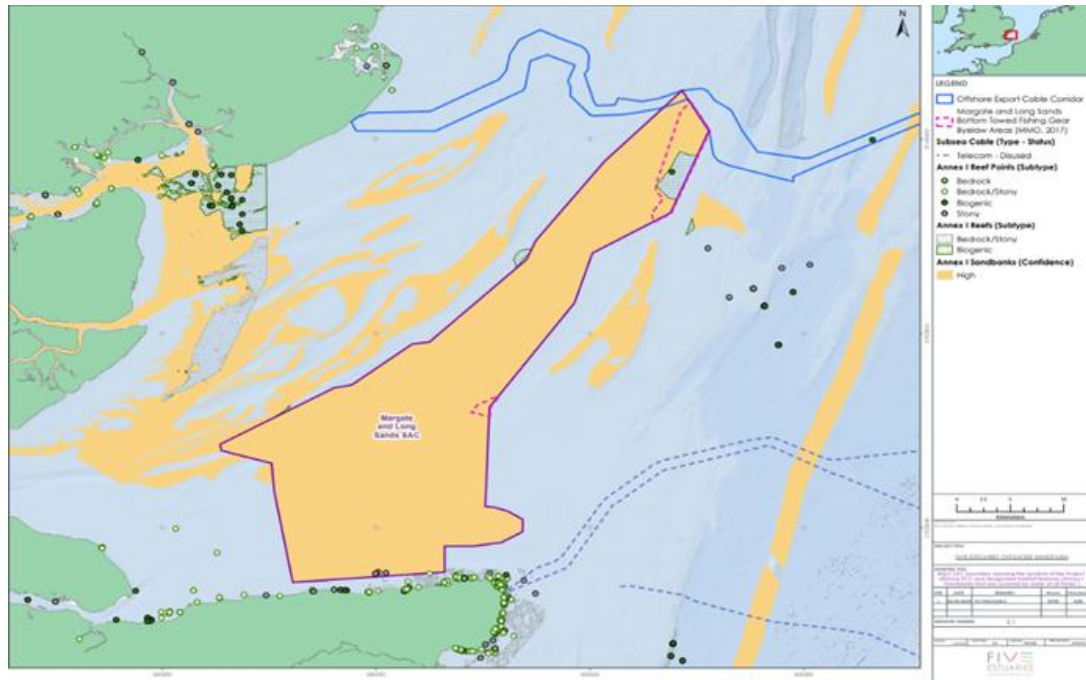
- Overarching National Policy Statement for Energy (EN-1) (NPS EN-1), including Sections 4.3 and 4.5;
- National Policy Statement for Renewable Energy Infrastructure (NPS EN-3), including paragraphs 2.8.101, 2.8.104, 2.8.106, 2.11.40, 2.8.116, 2.8.119, 2.8.126, 2.8.234, 2.11.53, 2.8.218, 2.8.296, 2.8.310, 2.8.317 and 2.8.352.
- The relevant policies of the UK Marine Policy Statement 2011 (MPS), East Inshore and East Offshore Marine Plans 2014 (EIEOMP) and the South East Inshore Marine Plan 2021 (SEIMP);
- The Marine Strategy Framework Directive;
- Any matters prescribed in relation to the proposed development; and
- Any other important and relevant matters.

THE APPLICATION

Scope and Methodology

- 4.2.4. The offshore components of the proposed development are detailed in the Environmental Statement (ES) in [\[APP-069\]](#) and associated Annex 1.1 [\[APP-070\]](#).
- 4.2.5. Impacts on physical marine physical processes are considered in the ES in [\[APP-071\]](#), with marine geology, oceanography and physical process sediment plume modelling in [\[REP1-057\]](#). Potential impacts on marine water and sediment quality are set out at in the ES in [\[APP-072\]](#).
- 4.2.6. The ES considers effects on benthic and intertidal ecology in [\[APP-074\]](#) during construction, operation and maintenance and decommissioning. The study area is shown at Figure 5.1 to ES [\[APP-074\]](#). The study area has been defined by the Order Limits of the proposed development, the maximum distance (22.5 kilometres (km)) that suspended sediments disturbed by development activities might have an impact on benthic habitats, together with intertidal habitats up to the Mean High Water Springs Mark within the offshore Export Cable Corridor (OfECC).
- 4.2.7. The assessment is informed by data collected through a desktop review of existing literature and data sources, together with site-specific surveys to characterise habitats and species within the study area. The broad regional characteristics and the site-specific character are set out in ES [\[APP-074\]](#) supported by the Main Array – Benthic Ecology Monitoring Report [\[APP-119\]](#), the Export Cable Route and Intertidal Benthic Ecology Monitoring Report [\[APP-120\]](#) and Main Array and Export Cable Route – Environmental Features Report [\[APP-102\]](#).
- 4.2.8. The study area for marine physical process and benthic assessment overlaps with several designated sites, as set out in Table 2.7 in [\[APP-071\]](#) and Table 5.10 in [\[APP-074\]](#). The proposed development would be several kilometres (km) away from the Blackwater, Crouch, Roach and Colne Estuaries (BCRCE) Marine Conservation Zone (MCZ), and around 6km away from Kentish Knock East (KKE) MCZ.
- 4.2.9. Part of the OfECC includes a short length on the very northern boundary of the Margate and Long Sands Special Area of Conservation (MLS SAC). Sections of the proposed development's marine elements are therefore within a designated site under the Habitats Regulations. A map of the MLS SAC in relation to the OfECC is provided below for ease of reference.

Figure 4.1: Margate and Long Sands SAC showing the OfECC (drawing number 2.1 in [APP-047]).



- 4.2.10. The qualifying feature of the MLS SAC is 'H1110 Sandbanks which are slightly covered by sea water all the time'. The conservation objectives for the MLS SAC are summarised by the applicant in [\[REP7-023\]](#). When read in conjunction with Natural England's (NE) updated condition assessment for the MLS SAC [\[REP7-110\]](#), the conservation objectives are to restore the extent, distribution, structure and function of qualifying natural habitats, together with supporting the processes on which they rely.
- 4.2.11. The applicant also submitted a Stage 1 Marine Conservation Assessment [\[APP-058\]](#), which considered impacts from the proposed development on MCZs screened into the assessment. Table 6-2 in that assessment sets out the MCZs and their qualifying features which are relevant to marine physical process and benthic ecology. These include:
- BCRCE MCZ – intertidal mixed sediments.
 - KKE MCZ – subtidal sand, coarse sediment and mixed sediment.
- 4.2.12. Table 6.4 of the Stage 1 Marine Conservation Zone Assessment [\[APP-058\]](#) sets out the conservation objectives for these MCZs, which are either to maintain or recover habitat to favourable condition.
- 4.2.13. Additionally, the applicant's survey work identifies the biotope 'A4.231 Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay'. That is a priority habitat under section (s) 41 of the Natural Environment and Rural Communities Act 2006 NERC2006. Although Sabellaria spinulosa is present in a number of grab samples, no areas of Sabellaria spinulosa reef (also a s41 habitat) have been identified in any of the applicant's surveys. Sensitive habitats, however, include peat and clay exposures with Piddocks (with and without stoney reef).

Potential Cable Burial

- 4.2.14. As stated within Table 1.23 of the ES in [\[APP-069\]](#), offshore cables would either be laid on the seabed and protected or buried to a maximum depth of 3.5 metres (m) below.
- 4.2.15. While it may be possible to bury the cables in the MLS SAC and avoid protection, which would have a lesser effect on its qualifying feature, the applicant's assumptions within its maximum design scenario (MDS) cannot exclude this. From the precautionary MDS assessment, two cables within the MLS SAC could be protected to a maximum length of around 900m during the construction phase. The area of cable affected by protection would be around 5,400 square metres (sq.m), equating to around 0.0008% of the MLS SAC's total area.

Applicant's Assessment of Effects and Mitigation

- 4.2.16. The applicant's assessment considered a total of 10 impact pathways during the phases of the proposed development for benthic ecology, 12 impact pathways for marine physical processes and nine impact pathways for water and sediment quality. This includes those relating to temporary and permanent habitat loss, effects generated by inter-array and export cables and wind turbine generators (WTG), as well as associated change to tidal, wave and sediment transport regimes.
- 4.2.17. No effects greater than 'minor adverse' are predicted in relation to benthic ecology and marine physical processes. Effects in relation to water and sediment quality are not significant and do not require mitigation. That said, a number of measures are proposed to mitigate any potential effects. For example, the applicant's Offshore In-Principle Monitoring Plan (IPMP) [\[REP6-028\]](#) shows that, should any pre-construction surveys identify that *Sabellaria spinulosa* has developed since the baseline surveys, relevant areas would be avoided through micro-siting wherever possible. This would also be the case should additional areas of peat and clay exposures be identified.
- 4.2.18. Where peat and clay exposures have already been identified from the baseline surveys, the applicant has committed to not dispose of any dredge material within this area. This includes an identified area of Piddocks in the OfECC. This approach is secured within the Outline Sediment Disposal Management Plan [\[REP8A-035\]](#).
- 4.2.19. There is a commitment to using trenchless techniques as set out in the Outline Landfall Methodology [\[APP-261\]](#) and outline Cable Specification and Installation Plan (CSIP) [\[REP7-040\]](#).
- 4.2.20. Additionally, a specific Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [\[REP8A-011\]](#) has been produced. Amongst other things, that plan shows that, should cable protection ultimately be required within the MLS SAC, rock placement would not be used. Rather, a removable concrete mattress or other form of protection that is equivalent to or less in terms of footprint or impact would be used. That, along with any cables above the seabed, would be removed as part of the proposed development's decommissioning.
- 4.2.21. Subject to mitigation, the applicant concluded a minor adverse effect to coastal receptors from the OfECC installation at landfall and in the intertidal area. The applicant considers that there would be no potential for longer term morphological change to the beach that could result in impacts to Holland Haven Marshes Site of Special Scientific Interest (SSSI), because the proposed works would be located

landward of existing sea defences. Furthermore, with regard to duties under s125 and s126 of the Marine and Coastal Access Act 2009 (MCAA2009), the applicant concluded that there would be no hindrance to the conservation objectives alone or cumulatively at any MCZ.

- 4.2.22. Overall, the applicant's assessment concludes that there would be no significant residual effects on marine physical processes, water and sediment quality or the benthic environment in Environmental Impact Assessment (EIA) terms.

ISSUES CONSIDERED DURING THE EXAMINATION

MDS and Worst-Case Methodology for Effects to Benthic Ecology

- 4.2.23. Throughout the examination, including in [\[PD2-004\]](#) and [\[PD2-007\]](#), NE raised a number of concerns in relation to the applicant's methodology for determining the proposed development's MDS.
- 4.2.24. To address those concerns, the applicant produced a Technical Note – Methodology for Determining MDS (Offshore) [\[REP2-027\]](#). Following the ExA's written question ExQ2 ME.2.05 [\[PD-014\]](#), that Technical Note was updated and the latest version is [\[REP6-037\]](#).
- 4.2.25. Amongst other things, the Technical Note provides further clarification on the MDS's volume and area of cable protection. That has resolved particular issues raised by NE in this regard (see Point 1 to the Benthic Ecology section of NE's Risk and Issues Log [\[REP8A-053\]](#)). It also confirms that the MDS assumptions include any requirement for cable repair, replacement or exposure during operation. Any further cable protection beyond this would require a separate marine license. Moreover, scour protection has been considered, with the draft Development Consent Order (dDCO) securing the submission of further details for the Marine Management Organisation's (MMO) consideration under condition 27 of Part 2 of Schedule 10 of the deemed marine licence (DML) for the proposed generation assets.
- 4.2.26. Overall, the issues raised by NE concerning the MDS were responded to in detail by the applicant. On the basis of the evidence submitted throughout the examination by the applicant, we are content that the MDS provides a reasonable and realistic basis for the assessment of the potential worst-case effects for the benthic environment.

Worst-case Effects for Marine Physical Processes

- 4.2.27. NE in [\[PD2-004\]](#) also raised concerns regarding the worst-case scenario for activities that could affect the intertidal zone. Amongst other things, these related to the absence of detail for potential sheet piling and trenching. Nevertheless, a detailed description of the proposed works is given in the applicant's Outline Landfall Methodology [\[APP-261\]](#). Amongst other things, this shows that any sheet piled exit pits would be seaward of sea defence structures and would not interact with any SSSI. Additionally, trenching could occur anywhere in the zone shown in Figure 1.1 of [\[APP-261\]](#), extending seaward from each horizontal directional drilling exit pit.
- 4.2.28. The ExA is content that worst-case effects have been suitably detailed and assessed in relation to marine physical processes.

OfECC characterisation and sediment environment for benthic environment

- 4.2.29. Concerns were raised by Interested Parties (IPs), including the MMO in [\[RR-070\]](#) with respect to the applicant's characterisation of the sediment environment in the OfECC.
- 4.2.30. Following discussions with NE, additional modelling was undertaken by the applicant in relation to suspended sediment concentrations and sediment deposition. The results from that modelling was included in [\[REP1-057\]](#). Raw data for sediment quality has also been submitted directly to the MMO. Furthermore, the applicant provided justification for its approach to the OfECC's characterisation in [\[PD4-006\]](#) and [\[REP4-040\]](#).
- 4.2.31. The MMO in [\[REP8A-031\]](#) acknowledges that the applicant has alleviated some of its concerns in terms of knowledge gaps in this regard. In any event, the MMO stated that this is not a major outstanding issue and discussions can continue following examination's close.
- 4.2.32. On the basis of the evidence provided, the ExA is content that the applicant's characterisation of the OfECC and its consideration of the sediment environment are appropriate for the purposes of the consideration of this application. Our view on this matter is reinforced by the applicant's submission of the IPMP [\[REP6-029\]](#), which appropriately explains how Sabellaria spinulosa tube structures have been measured in order to inform the "reefiness" assessment.

ExA's Consideration of Effects, Mitigation and Monitoring

- 4.2.33. NE is content that it should be possible to mitigate effects arising from impact pathways relating to suspended sediment and deposition, as well as in terms of changes to physical processes. Nevertheless, NE raised a number of other concerns, including in [\[REP8A-052\]](#), with regard to the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [\[REP8A-011\]](#). That plan being proposed for inclusion amongst those for certification in Schedule 15 of the dDCO.
- 4.2.34. NE has concerns relating to [\[REP8A-011\]](#), including the absence of measures to minimise any effect to priority habitats if encountered, together with the effectiveness of mitigation in the absence of information including planned pre-construction surveys. NE also raised specific concerns relating to seabed preparation associated with any sandwave levelling (a mitigation designed to reduce the necessity for cable protection).
- 4.2.35. Having regard to NE's concerns relating to the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [\[REP8A-011\]](#), we consider this plan should at this stage be treated as an outline document. That is particularly the case given the absence of certain survey work and the sensitive nature of the benthic environment, which includes priority habitat and the MLS SAC. We therefore recommend that a detailed version of this mitigation plan, addressing NE's outstanding concerns, should be submitted for the MMO's approval, in consultation with NE, prior to cable laying. In that regard we have recommended a change to condition 22 in the transmission assets DML in Part 2 of Schedule 11 of our rDCO.
- 4.2.36. Turning to monitoring, it is noted that the MMO in [\[REP8A-031\]](#) considers that the monitoring of paint flakes should take place as part of pre-and post-construction surveys. Nevertheless, the MMO accepts that the scale of materials released as a result of the proposed development would be limited. It would therefore be difficult

to establish any trend of impact in relation to the release of paint flakes from the proposed development itself compared to background levels. This is made more difficult given the presence of other nearby offshore wind farms. Accordingly, in the absence of any IP submitting that there would be significant effects in this regard, we are not persuaded that the monitoring of paint flakes would be reasonable or necessary.

- 4.2.37. Taking everything together, subject to the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [\[REP8A-011\]](#) being treated as an outline document, with a detailed version to be submitted and approved at a later date, should a DCO be made for the proposed development, the ExA is content that habitats protected under s41 of NERC2006 would not be harmed. Furthermore, the overall effects to the benthic environment, including marine water and sediment quality, would not be significant in EIA terms. The ExA's findings in this regard are reinforced given that on-going discussions with IPs have resulted in design improvements, such as the removal of gravity based jacket foundations as an engineering solution.
- 4.2.38. Additionally, no IP disputed the applicant's conclusion of no significant effects for benthic qualifying features of the BCRCE and KKE MCZs in the Stage 1 Marine Conservation Zone Assessment or the applicant's view that achievement of the conservation objectives would not be hindered. We have no reason to conclude otherwise in that regard.

CONCLUSIONS ON BENTHIC AND INTERTIDAL ECOLOGY INCLUDING EFFECTS ON PHYSICAL PROCESSES AND SEDIMENT QUALITY

- 4.2.39. We are content that the applicant's assessment of effects on marine physical processes and sediment quality is appropriate. Amongst other things, the applicant's assessment in this regard accords with paragraph 5.16.3 of NPS-EN1 and paragraphs 2.8.111, 2.8.122, 2.8.113 and 2.8.114 of NPS-EN3. We similarly consider the applicant's assessment in relation to benthic ecology is appropriate and accords with, amongst other things, paragraphs 2.8.101 and 2.8.116 of NPS-EN3.
- 4.2.40. Subject to mitigation, including the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [\[REP8A-011\]](#) being updated and resubmitted in a final for form for the MMO's approval, we concur with the findings in the ES, most particularly [\[APP-071\]](#), [\[APP-072\]](#) and [\[APP-074\]](#), that the significance of residual effects from the proposed development on marine physical processes, water and sediment quality and the benthic and intertidal environment would be no greater than negligible or minor adverse from any phase of the proposed development, either alone or cumulatively. Those effects would not be significant in EIA terms. Mitigation can be suitably secured via the provisions of the DCO and the DMLs and would accord with advice, including paragraph 5.16.9 in NPS-EN1 and paragraphs 2.8.114 and 2.8.234 in NPS-EN3.
- 4.2.41. We agree with the applicant's conclusion of no significant effects for the benthic qualifying features of the BCRCE and KKE MCZs and we are content that there would be no hindrance for the conservation objectives subject to mitigation being implemented. We consider that the duties in relation to MCZs imposed by s125 and s126 of MCAA2009 would be met. Moreover, we concur with the applicant's conclusion of no significant effects for the Holland Haven Marshes SSSI from marine physical process change.

- 4.2.42. As such, we are content that the proposed development accords with NPS EN-1, NPS EN-3, the relevant policies in the MPS, EIEOMP and the SEIMP, as well as the Marine Strategy Framework Directive and other national and local policies and strategies and the other relevant legislation. WE consider there are no other important or relevant considerations relating to this topic.
- 4.2.43. When effects of the proposed development are considered over its lifetime, we attach a little negative weight to marine process, water and sediment quality and benthic and intertidal ecology matters in the planning balance.

4.3. OFFSHORE ORNITHOLOGY

INTRODUCTION

- 4.3.1. In this section we consider the effects of the proposed development on offshore ornithology.
- 4.3.2. The effects on European sites in the context of the Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations) are considered in detail in Chapter 7 and Appendix C of this report; however, there are some linkages with the content of this section.

POLICY AND GUIDANCE

- 4.3.3. In its consideration of offshore ornithology, the ExA has had regard to:
- Birds Directive – Council Directive 2009/147/EC on the Conservation of Wild Birds;
 - Wildlife and Countryside Act 1981 (as amended);
 - NPS EN-1, including paragraphs 4.6.6, 5.4.16, 5.4.17, 5.4.42 and 5.4.55.
 - NPS EN-3, including paragraphs 2.8.101, 2.8.102, 2.8.103, 2.8.104, 2.8.106, 2.8.107, 2.8.126, 2.8.143, 2.8.144, 2.8.231, 2.8.240, 2.8.242, 2.8.302, 2.8.303 and 2.8.305.
 - The relevant policies of the MPS, the EIEOMP and the SEIMP;
 - Any matters prescribed in relation to the proposed development; and
 - Any other important and relevant matters.

THE APPLICATION

Relevant Documents

- 4.3.4. The Applicant's assessment of effects and impacts for offshore ornithology is principally set out in the ES [\[APP-073\]](#). That part of the ES is supported by, amongst other things, an Offshore Ornithology Technical Report [\[APP-103\]](#).
- 4.3.5. In addition, several documents were submitted with a primary focus on the Habitats Regulations Assessment (HRA). This includes a number of documents that were specifically in relation to offshore ornithology. Those documents are referred to in Chapter 7 (our Habitats Regulations Assessment summary) and are discussed where relevant in this section of the report.

Scope and Methodology

Study Area and Data Collection

- 4.3.6. The suitability of the study area for the purpose of environmental impact assessment was agreed with NE and the Royal Society for the Protection of Birds (RSPB) during pre-application engagement. Matters considered at this stage are set out at Table 4.2 of ES [\[APP-073\]](#).
- 4.3.7. The study area included the array areas and the linear export cable route (within which the OfECC would be located) beyond the array boundary, up to and including the intertidal zone at Holland Haven and ending at the mean high-water spring. In line with Statutory Nature Conservation Body (SNCB) guidance (last updated in 2022), the study area also comprised a maximum displacement buffer of 4km around the array areas.
- 4.3.8. A series of project-specific aerial surveys (24 in total and one per month) were undertaken between March 2019 and February 2021 [\[APP-114\]](#) and [\[APP-115\]](#). Amongst other things, the data collected was used to identify the bird species present, seasonal abundance, distribution, behaviour, location, numbers, sex and age (where possible) and direction of travel.
- 4.3.9. Furthermore, Collision Risk Modelling (CRM) was conducted [\[APP-110\]](#), [\[APP-112\]](#) and [\[REP8-016\]](#) and a design-based method was used to estimate each species' density and abundance, based on aerial survey records within the study area [\[APP-104\]](#) to [\[APP-109\]](#). Other baseline data sources included a variety of academic literature to inform a desk-based survey to describe the baseline environment. These are identified in Table 4.3 in [\[APP-073\]](#).
- 4.3.10. The applicant's methodology for its cumulative assessments is set out at Cumulative Effects Assessment Methodology [\[REP4-009\]](#). Amongst other things, it follows guidance established by academic literature and NE.

Baseline Environment

- 4.3.11. The proposed development is located beyond the foraging range of most breeding seabirds. Nevertheless, a number of species were recorded during the baseline aerial surveys within the study area. These, together with their conservation status, are shown at Table 4.8 in [\[APP-073\]](#). Species include red-throated diver (RTD), gannet, puffin, razorbill, guillemot, kittiwake, lesser black backed gull (LBBG) and herring gull. Breeding seasons and migration periods for the species are shown in Table 4.9 in [\[APP-073\]](#). Data concerning biogeographic population sizes and estimated proportions of immatures per breeding adult in the population is shown in Table 4.10 in [\[APP-073\]](#).
- 4.3.12. While effects on designated European sites are fully considered and summarised in Chapter 7, it should be noted that the proposed OfECC route would overlap with the Outer Thames Estuary Special Protection Area (OTE SPA) for approximately 16km. The RTD is a qualifying feature of the OTE SPA. Furthermore, a number of European sites, such as the Alde-Ore Estuary Special Protection Area and Ramsar site, incorporate SSSIs.

Applicant's Assessment of Effects and Proposed Mitigation

- 4.3.13. Potential impact pathways for the proposed development's MDS (see Table 4.15 in [\[APP-073\]](#)) and cumulative effects have been considered during the construction,

operational, maintenance and decommissioning phases. Those effects include direct disturbance, displacement, collision risk during operation and indirect effects through effects on habitats and prey species.

- 4.3.14. The applicant assessed there would be no effects greater than “*minor adverse*” across the phases of the proposed development and mitigation measures relating to offshore ornithology are set out at Table 4.16 in [\[APP-073\]](#). Those measures include the implementation of a best practice protocol for minimising disturbance to the OTE SPA population of RTD as summarised in Working in Proximity to Wildlife in the Marine Environment [\[REP8A-013\]](#). Within the applicant’s Report to Inform the Appropriate Assessment (RIAA) [\[REP8-004\]](#), a seasonal restriction on export cable installation between 1 November and 31 March is also proposed within the boundary of the OTE SPA. Additionally, there would be “*soft starts*” and “*ramp-up*” to piling operations as set out in the Outline Marine Mammal Mitigation Protocol – Piling (oMMMP- Piling) [\[REP7-044\]](#).
- 4.3.15. Subject to mitigation, the applicant’s assessment concludes that there would be no effects greater than “*minor adverse*” during construction and decommissioning. During operation, displacement impacts on RTD, gannets, razorbills and guillemots would not create effects of more than “*minor adverse*” during any biological season. The risk to birds from collisions with wind turbines from the proposed development alone is assessed as no greater than “*minor adverse*” for gannet, kittiwake, LBBG and great black-backed gull when considered for all biological seasons against the most appropriate population scale. The applicant contends that none of those effects would be significant in EIA terms.
- 4.3.16. Several potential effects of the proposed development were screened in for cumulative assessment. Those include construction disturbance and displacement, operational disturbance and displacement and collision risk. A summary of the predicted magnitude of change and significance of cumulative residual effects is presented in Table 4.69 in [\[APP-073\]](#). Cumulative effects were considered to be of low or negligible magnitude prior to mitigation and no greater than “*minor adverse*” for all species residually. The applicant submits that would not be significant in EIA terms.

ISSUES CONSIDERED DURING THE EXAMINATION

General Methodological Matters

- 4.3.17. A number of general methodological concerns were raised by the RSPB during the examination, including in [\[RR-094\]](#) and [\[REP2-068\]](#). The Statement of Common Ground (SoCG) between the applicant and the RSPB [\[REP5-067\]](#) highlights a number of outstanding areas of disagreement.

Highly Pathogenic Avian Influenza

- 4.3.18. For example, the RSPB has expressed concern that the applicant has not given proper consideration to highly pathogenic avian influenza (HPAI). The applicant’s precautionary assessment considered baseline data taken pre-HPAI and impacts are calculated based on larger populations and assessed on the basis of the most recently available affected population (post/during HPAI) counts. Furthermore, on the evidence before the ExA, populations of the species considered by the applicant on a without prejudice basis appear to have fared reasonably well since the HPAI outbreak.

- 4.3.19. We are therefore content that suitable regard has been given to this matter in the applicant's assessments.

Digital Aerial Surveys

- 4.3.20. The RSPB raised concern in terms of the applicant's digital aerial survey methodology. The applicant in [\[APP-114\]](#) provided detail on the nature of the aerial surveys undertaken, including potential biases and the consideration of bird response due to survey.

- 4.3.21. We are content that the applicant's digital aerial survey programme, which followed the industry-standard approach, was carried out appropriately and that its contents can be relied on. This is particularly so noting that NE does not appear to have concerns about the methodology used for undertaking the aerial surveys when it has been considering the applicant's data collection and processing in respect of the ES and the RIAA, as explained by the applicant in [\[REP1-051\]](#).

ExA's Overall Findings on General Methodological Matters

- 4.3.22. Overall, methodological matters raised by IPs have been considered in detail. These include those discussed in greater detail by us in Chapter 7. On the basis of the evidence submitted as part of the application and throughout the examination by the applicant, we are content that the applicant's methodology provides a reasonable and realistic basis for the assessment of the potential worst-case effects on relevant bird species.

Red-throated Diver – Seasonal Restriction for Cable Laying

- 4.3.23. NE raised concern with the applicant's seasonal restriction for cable laying activities [\[REP8A-050\]](#) aimed at reducing vessel traffic impacts for RTD. To prevent significant adverse effects (cumulative and in-combination) for RTD, including adverse effects on the integrity (AEoI) for the OTE SPA, NE advised that this restriction should be applied not just along any part of the OfECC within this designated site, but also to areas within 2km of the boundary of OTE SPA.
- 4.3.24. That said, NE agreed that seasonal restrictions were not required for areas of the OfECC with low RTD densities. Nevertheless, this is not the case for the mid-northern sector of NE's proposed additional 2km buffer. That section includes deep water routes and has a small overlap with the OTE SPA (0.18%) where RTD densities are higher.
- 4.3.25. The applicant demonstrated with Figure 10.22 in [\[APP-240\]](#) that the mid-northern sector of NE's proposed buffer would fall within a highly trafficked shipping lane. RTD activity is therefore likely to already be notably disturbed by shipping movements at this location. Table 1.35 in [\[APP-069\]](#) showed 35 vessels likely to be on site at any one time, making up to 96 construction vessel trips. That would not be a marked increase compared to the baseline for vessel movements in this area.
- 4.3.26. Vessels associated with the proposed development would also be grouped and slow moving. Moreover, as explained by the applicant in paragraph 2.3.12 of [\[REP1-059\]](#), cable laying vessels could progress at a rate of around a few hundred metres per hour. Cable laying within NE's suggested buffer area would therefore not occur over extended periods of time.

ExA's Finding on Effects to RTD

- 4.3.27. Based on the submitted evidence and subject to the mitigation set out in the Working in Proximity to Wildlife in the Marine Environment [\[REP8A-013\]](#), we consider that additional vessel movements from the proposed development within NE's proposed additional buffer would be unlikely to increase the amount of disturbance for or reduce the distribution of RTD compared to the existing situation.
- 4.3.28. We therefore consider the applicant's seasonal restriction for cable laying activities (excluding a 2km buffer) would be acceptable and that NE's approach would be unduly cautious. The restriction proposed by the applicant would be secured by a DML included in the dDCO [\[REP8A-004\]](#). Subject to this, together with other identified mitigation, we are content that residual effects for RTD would not be significant for the proposed development alone or cumulatively.

CONCLUSIONS ON OFFSHORE ORNITHOLOGY

- 4.3.29. We have considered the applicant's submitted assessments and the issues raised by IPs during the examination relating to offshore ornithology.
- 4.3.30. Subject to mitigation, such as the Working in Proximity to Wildlife in the Marine Environment [\[REP8A-013\]](#) (to be secured via the proposed DML) and the oMMMP – Piling [\[REP7-044\]](#), a document for certification as part of any made DCO for the proposed development and implemented via the DML for various phases of the proposed development, we agree with the applicant's findings in [\[APP-073\]](#). The significance of residual effects from the proposed development for offshore birds would be no greater than negligible or minor adverse from any phase of the proposed development, alone or cumulatively. That would not be significant in EIA terms.
- 4.3.31. The Applicant's assessment of offshore ornithology has followed the mitigation hierarchy and meets the policy tests stated in NPS EN-1 and NPS EN-3. WE consider there are no other important or relevant considerations.
- 4.3.32. When effects of the proposed development are considered over its lifetime, we attach a little negative weight to offshore ornithological matters in the planning balance.

4.4. MARINE MAMMALS AND FISH AND SHELLFISH ECOLOGY

INTRODUCTION

- 4.4.1. In this section we consider the effects of the proposed development on marine mammals and fish and shellfish ecology.
- 4.4.2. The effects on European sites in the context of the Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 are considered in detail in Chapter 7 and Appendix C of this recommendation, however, there are some linkages with the content of this section.

LEGISLATION, POLICY AND GUIDANCE

- 4.4.3. In its consideration of marine mammals and fish and shellfish ecology, the ExA has had regard to:

- NPS EN-1, including paragraphs 5.4.4, 5.4.5, 5.4.7, 5.4.8, 5.4.16, 5.4.17 and 5.4.18.
- NPS EN-3, including paragraphs 2.8.127, 2.8.128, 2.8.129, 2.8.130, 2.8.131, 2.8.132, 2.8.133, 2.8.134, 2.8.135, 2.8.237, 2.8.238 and 2.8.239.
- The relevant policies of the MPS, the EIEOMP and SEIMP, including those which seek to ensure that biodiversity is protected, conserved and, where appropriate, recovered.
- Marine Strategy Framework Directive
- Any matters prescribed in relation to the proposed development
- Any other important and relevant matters

THE APPLICATION

Environmental Statement (ES)

- 4.4.4. The offshore components of the proposed development are detailed in the Offshore Project Description [\[APP-069\]](#) and the Detailed Offshore Project Design Envelope [\[APP-070\]](#).
- 4.4.5. The ES in [\[APP-075\]](#) and [\[APP-076\]](#) considers fish and shellfish and marine mammal ecology respectively for the construction, operational, maintenance and decommissioning phases of the proposed development. Amongst other things, those ES chapters are supplemented by [\[APP-071\]](#), [\[APP-072\]](#), [\[APP-074\]](#) and [\[APP-077\]](#).

Scope and Methodology

Marine Mammals

- 4.4.6. In terms of marine mammals, [\[APP-076\]](#) identifies a number of potential ecological impacts. The impact pathways were considered either in terms of direct loss or damage to habitats or adverse effects on particular species. That includes underwater noise impacts during foundation piling or from unexploded ordnance (UXO) clearance. An Underwater Noise Technical Report [\[REP2-018\]](#) and a Landfall Impact Piling Technical Report [\[REP6-011\]](#) have informed the applicant's assessment.
- 4.4.7. The study areas for all relevant sections of the ES were agreed between the applicant and the appropriate nature conservation bodies prior to the application's submission.
- 4.4.8. The study areas vary depending on the species, having regard to individual species' ecology and behaviour. As set out in the Marine Mammal Baseline Characterisation [\[APP-126\]](#), the study area was defined at two spatial scales. Those being a site-specific region and a regional scale area providing a wider geographic context. The regional scale study area is shown at Figure 7.1 in [\[APP-076\]](#). Developments considered in the cumulative assessment are identified in [\[REP4-009\]](#).
- 4.4.9. For each species of marine mammal, study areas were based on the relevant management unit (MU), as follows:

- Harbour porpoise: North Sea MU
- Harbour seal: Southeast England MU
- Grey seal: Combined Southeast and Northeast England MUs

4.4.10. With particular regard to the Habitats Regulations, designated European sites with marine mammal qualifying features are identified within Chapter 7 and Annex C of this recommendation. This includes the Southern North Sea Special Area of Conservation (SNS SAC) which has a harbour porpoise qualifying feature.

4.4.11. The potential underwater noise impacts from pile driving of WTG foundations has been assessed at three locations within the proposed array areas: Northern Array northern edge (53.9m depth), Northern Array northeast corner (48.2m depth) and the Southern Array southwest corner (44.7m depth). Those locations are shown in Figure 7.8 in [\[APP-076\]](#). Two foundation scenarios were also assumed in the underwater noise modelling for installing the proposed WTGs. Those were a monopile scenario, for the installation of a 15m monopile with a maximum of 7,000 kilojoule (kJ) hammer energy and a pin pile (jacket) scenario for the installation of 3.5m piles with a maximum of 3,000kJ hammer energy. Piling parameters for these scenarios are shown in table 7.14 in [\[APP-076\]](#).

Fish and Shellfish ecology

4.4.12. Turning to fish and shellfish ecology, the study area is dynamic, in that it varies according to the nature of the impact being studied. The study area is therefore defined by the furthest reaching zone of influence (Zol). The largest Zol typically relates to underwater noise from and piling in array areas. In this case, the Underwater Noise Technical Report [\[REP2-018\]](#) determined noise thresholds for the MDS for the greatest spatial and temporal effects. As such, the proposed development's furthest reaching Zol (underwater noise Zol) is around 39km from the proposed array areas. However, the applicant has taken a precautionary approach and a 50km Zol for underwater noise impacts has been applied.

4.4.13. As piling would not occur within the OfECC, a secondary study area was considered appropriate for that part of the proposed development. A resulting sedimentary Zol, based on the mean spring tidal excursion buffer for the site (a maximum excursion of 22.5km), was used to represent the expected maximum distance that suspended sediments may be transported from the OfECC area.

4.4.14. The two aforementioned Zols have been merged to create a study area representing the largest potential Zol. The study area is shown in Figure 6.2 in [\[APP-075\]](#).

4.4.15. The baseline, as detailed in the Fish and Shellfish Ecology Technical Baseline Report [\[APP-121\]](#), was deemed sufficient for the purpose of the EIA by the MMO and NE together with the Centre for Environment, Fisheries and Aquaculture Science.

4.4.16. A wide range of fish and shellfish species are expected to inhabit the proposed development's study area. Valued ecological receptors are identified in Table 6.9 in [\[APP-075\]](#) and include lemon sole, sand eels, common whelk, European lobster and herring. Additionally, there are fish spawning and nursery areas that overlap, or are close to, the study area. Those areas are shown in Figure 6.4 in [\[APP-075\]](#).

- 4.4.17. Of particular note, is a herring spawning ground that intersects with the western side of the study area. Furthermore, there is a herring spawning ground located in the Blackwater estuary, approximately 10km south of the nearshore section of the OfECC.
- 4.4.18. A heatmapping exercise, as detailed in [\[APP-121\]](#) and [\[APP-124\]](#) identified the proposed southern array area as having medium to high confidence that the seabed may be suitable for herring spawning. However, on a broader scale, the applicant submits that preferred spawning substrates and significantly higher densities of herring larvae are located to the south of the proposed array areas. Overall, the applicant assesses that the proposed array areas are unlikely to be a focus for herring spawning.

Applicant's Assessment of Effects and Proposed Mitigation

Marine Mammals

- 4.4.19. Table 7.13 in [\[APP-076\]](#) sets out the potential effects based on the worst-case assumption. This includes potential for a total of 60 UXO that would require clearance pre-construction, with a maximum of two clearance events within 24 hours. In terms of piling, worst-case effects are considered for monopile WTGs and other monopile structures, as well as for multi-leg jacket WTGs and the offshore substation platform. For example, monopile WTGs have been assessed as having a 15m maximum pile diameter and piling could occur for a total of 592.5 hours over 79 days (assuming 1 pile per day).
- 4.4.20. The applicant identifies a range mitigation measures for the construction, operation and decommissioning of the proposed development in Table 7.16 in [\[APP-076\]](#). Potential impacts arising from, amongst other things, collision risk from construction vessels and operational noise from WTGs have been identified. Identified mitigation includes:
- Pollution prevention as set out in the Outline Project Environmental Management Plan (PEMP) [\[APP-249\]](#).
 - Measures to reduce auditory injury to mammals as set out in the Outline Marine Mammal Mitigation Protocol (oMMMP) – Piling [\[REP7-044\]](#).
 - Measures to reduce auditory injury to mammals during UXO clearance, as set out in the oMMMP – UXO [\[REP7-046\]](#).
 - Measures to reduce vessel disturbance as set out in Working in Proximity to Wildlife in the Marine Environment [\[REP8A-013\]](#).
- 4.4.21. Additionally, a number of mitigation measures are included in the DMLs. Those measures include provisions during construction ensuring that the maximum hammer energy to be used during pile driving would not exceed 7,000kJ for monopiles and 3,000kJ for pin piles. It should also be noted that a detailed MMMP-UXO [\[REP7-046\]](#) would be subject to a separate marine licence application for the MMO's consideration, should UXO clearance be required in any post-consent phase.
- 4.4.22. In the absence of mitigation there could be minor significant effects on receptors. However, following the application of mitigation, the applicant's case is that there would not be any significant adverse residual effects for marine mammals during

any of the phases of the proposed development. Neither would there be a significant cumulative effect from underwater noise or vessel disturbance.

Fish and Shellfish Ecology

- 4.4.23. In [\[APP-075\]](#) a number of potential impacts are identified. Those include mortality, injury or behavioural impacts arising from noise and vibration, sediment disruption and habitat loss. The worst-case effects assessed for fish and shellfish are described in Table 6.10 in [\[APP-075\]](#). Those effects include the concurrent piling of monopiles and a total sediment volume suspended in the OfECC of 10,487,073m³.
- 4.4.24. Mitigation is set in Table 6.11 in [\[APP-075\]](#) and includes:
- Adherence to the outline CSIP [\[REP7-040\]](#) and measures within the Outline Cable Burial Risk Assessment [\[APP-239\]](#) to, amongst other things, ensure appropriate cable burial depth and minimise the risk of cable exposures.
 - Measures such as soft starts and ramp up procedures during piling operations included in the oMMMP - Piling [\[REP7-044\]](#).
 - The avoidance of disposal of dredge material within the proposed southern array area to ensure that the sediment characteristics of this area would be maintained, secured through provisions of the DMLs included in Schedules 10 and 11 of the dDCO [\[REP8A-004\]](#).
- 4.4.25. Additionally, the applicant's assessment identified two potential significant effects, from underwater noise and sediment disposal, for spawning herring during construction. The applicant has therefore proposed a seasonal piling restriction during the peak herring spawning period, considered to be 25 November to 3 January, to provide mitigation against potential impacts from underwater noise. Further information on the definition of this peak spawning period for herring is set out in the Herring Seasonal Restriction Note (HSRN) [\[REP6-013\]](#).
- 4.4.26. Subject to the implementation of mitigation, the applicant's assessment finds that there would be no significant residual effects in terms for fish or shellfish.

ISSUES CONSIDERED DURING THE EXAMINATION

Fish and Shellfish Ecology

Mitigation – Piling Restriction and Sediment Disposal

- 4.4.27. Throughout the examination, including in [\[RR-070\]](#), [\[REP3-029\]](#) and [\[REP8-046\]](#), the MMO raised a number of concerns in relation to seasonal piling restrictions and sediment disposal.
- 4.4.28. There remains a disagreement between the applicant and the MMO (MMO11 in [\[REP8A-031\]](#)) concerning the applicable piling restriction period in respect of the peak herring spawning start and end dates. The applicant's HSRN [\[REP6-013\]](#) proposes restrictions between 25 November and 3 January (39 days). The applicant contends that period corresponds to the earliest start date and latest end date for the spawning scenarios identified in Table 2-6 in the HSRN, based on its precautionary assessment.
- 4.4.29. The MMO argues that, when parameters such as the minimum temperature recorded in the International Herring Larvae Survey (IHLS) are considered, herring

spawning occurs earlier in the season (from 2 November to 17 December). The applicant shows the peak spawning start and end dates using parameters set out by the MMO in Table 2-7 in the HSRN [\[REP6-013\]](#).

- 4.4.30. Taking into account buffer periods to allow adult fish to migrate to the spawning ground without risk of injury and to allow developing larvae to drift away from the spawning grounds in their early developmental stages without injury, the MMO in [\[REP8A-031\]](#) stated that an overall temporal piling restriction from 1 November to 24 December (53 days) would be appropriate.
- 4.4.31. In the interest of reducing suspended sediment concentrations and deposition to promote herring spawning success, the MMO has also suggested that seasonal restrictions should apply to the proposed seabed preparation and cable laying works in the southern array area. The MMO in [\[REP8A-031\]](#) therefore advanced a restriction on percussive piling, cable laying and seabed preparation between 1 November to 24 January (84 days).
- 4.4.32. We acknowledge the literature considered by the applicant to inform its assessment of likely peak spawning periods and that its approach was consistent with other developments that have involved the application of the IHLS to inform spawning calculations. Nevertheless, the academic literature relied on is somewhat dated. Given the proposed southern array area would overlap with areas of high herring spawning potential, notable effects for herring spawning cannot be excluded. Moreover, there is likely to be increased cumulative effects for fish arising from the growing number of offshore wind farms in this particular region.
- 4.4.33. Turning to sediment disposal, the applicant's mitigation and the removal of the use of gravity-based foundations from the MDS are noted. However, on the evidence before us, the impacts of elevated sediment dispersal may extend a considerable distance (up to 500m) from the source. We therefore cannot be certain, in a finely balanced situation, that the applicant's proposed mitigation and design approach would sufficiently reduce effects for spawning herring.
- 4.4.34. Accordingly, we favour the MMO's extended duration for the seasonal piling restriction. We consider that restriction should also be applied to seabed preparation and cable laying works. In reaching this finding, we are mindful that there is no substantive evidence to show that the restriction sought by the MMO would significantly affect the proposed development's delivery.
- 4.4.35. As such, in the interest of protecting spawning herring and resultant eggs and larvae, the ExA recommends that Condition 12(6)¹ in Schedule 10 and Condition 13(6)² in Schedule 11 of the dDCO [\[REP8A-004\]](#) should be amended as follows: transposition

"6) Percussive piling associated with wind turbine generator foundations, together with cable laying or seabed preparation must not take place between 1 November to 24 January (inclusive) in any year within the southern array area for the protection of spawning herring unless otherwise agreed in writing by the MMO. For the purposes of this condition "southern array area" means the area identified as having medium to high confidence in terms of suitability for

¹ Renumbered Condition 21(6) in the ExA's recommended DCO (rDCO), for the reasons explained in Chapter 10 of our recommendation

² Renumbered Condition 22(6) in the ExA's rDCO, for the reasons explained in Chapter 10 of our recommendation

herring spawning within the heatmapping exercise detailed within the Fish and Shellfish Ecology Technical Baseline Report.”

CONCLUSIONS ON MARINE MAMMALS, FISH AND SHELFISH ECOLOGY

- 4.4.36. The applicant’s assessment in relation to marine mammals is appropriate having regard to the provisions of paragraphs 5.4.17 and 5.4.18 in NPS-EN1 and paragraph 2.8.131 in NPS-EN3.
- 4.4.37. Subject to mitigation, which we consider can be appropriately managed and secured through the provisions of DMLs included in any made DCO for the proposed development, we agree with ES conclusions in [\[APP-076\]](#) that the significance of the residual effects on marine mammals would be no greater than negligible or minor adverse from any phase of the development, either alone or cumulatively. Those effects would not be significant in EIA terms. Mitigation would protect habitats and species, in line with the advice stated in paragraph 5.4.16 of NPS-EN1 and paragraphs 2.8.127, 2.8.238 and 2.8.239 in NPS-EN3.
- 4.4.38. The applicant’s assessment in relation to fish and shellfish ecology is also appropriate and accords with paragraphs 5.4.17 to 5.4.18 in NPS-EN1 and 2.8.101 and 2.8.150 in NPS-EN3. We agree with the ES conclusions made in [\[APP-075\]](#) that, subject to mitigation, residual effects, either alone or cumulatively, arising from the proposed development on fish and shellfish ecology would not be significant in EIA terms during any phase.
- 4.4.39. Amongst other things, mitigation in relation to fish and shellfish ecology would accord with the policy stated in paragraph 5.4.35 of NPS-EN1 and paragraph 2.8.218 of NPS-EN3. However, the ExA recommends that Condition 12(6) in Schedule 10 and Condition 13(6) in Schedule 11 of the DMLs in dDCO [\[REP8A-042\]](#) are amended to extend the duration of the restrictions applying to the undertaking of piling, seabed preparation and cable laying works. That would be in the interests of protecting spawning herring and resultant eggs and larvae in the proposed southern array area. The recommended changes to the DMLs have been included in our rDCO (Appendix E) and relate to renumbered Condition 21(6) in Schedule 10 and 22(6) in Schedule 11.
- 4.4.40. Accordingly, we are content that the proposed development would be in accordance with the relevant policy in NPS EN-1, NPS EN-3, in the MPS, the EIEOMP, the SEIMP and the provisions of the Marine Strategy Framework Directive, as well as other national and local policies and strategies and other relevant legislation. We consider there are no other important or relevant considerations.
- 4.4.41. When effects of the proposed development are considered over its lifetime, we attach a little negative weight to marine mammal and fish and shellfish ecology matters in the planning balance.

4.5. NAVIGATION AND SHIPPING

INTRODUCTION

- 4.5.1. In this section we consider the effects of the offshore elements of the proposed development on navigation and shipping. This includes during the pre-construction, construction, operation and maintenance, and decommissioning stages.

- 4.5.2. Given the location of the proposed WTG array areas within the North Sea at the outer extremities of the Thames Estuary, the effects on busy shipping routes and other marine vessels are a key consideration for the determination of this application, in particular whether through appropriate mitigation, navigational risks can be reduced to as low as reasonably practicable (ALARP).
- 4.5.3. Relevant representations (RRs) raising substantive navigation and shipping matters were received from the following IPs: Corporation of Trinity House of Deptford Strond (TH) [\[RR-015\]](#), Maritime and Coastguard Agency (MCA) [\[RR-071\]](#), UK Chamber of Shipping (CoS) [\[RR-118\]](#), Harwich Haven Authority (HHA) [\[RR-043\]](#), London Gateway Port Limited (LGPL) [\[RR-067\]](#), Port of London Authority (PLA) [\[RR-090\]](#), and Port of Tilbury London Limited [\[AS-007\]](#).
- 4.5.4. Representations made by Harwich Harbour Fishermen's Association and the National Federation of Fishermen's Organisations during the examination touched on vessel safety concerns. Those concerns are considered in section 4.6 in this chapter in assessing the effects on commercial fishing activities.
- 4.5.5. Consideration in this section is given to:
- Legislation, policy and guidance relevant to navigation and shipping
 - The application proposals
 - Issues considered during the examination

LEGISLATION, POLICY AND GUIDANCE

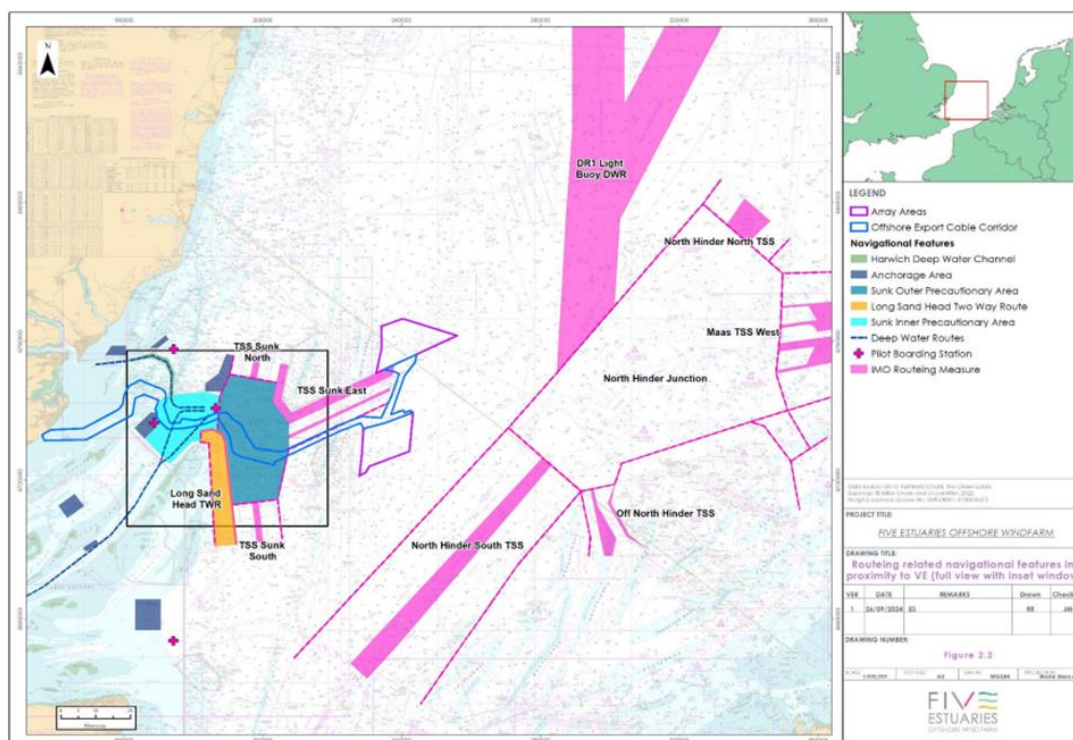
- 4.5.6. The following legislation and regulations are relevant:
- MCAA2009
 - Article 60(7) of the United Nations Convention on the Law of the Sea (UNCLOS)
 - Rules 8(a), 9, 18(a)(ii) and 19(b) of the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs)
 - Regulations 33 and 34 of the International Convention for the Safety of Life at Sea (SOLAS)
- 4.5.7. The following policy is relevant to the assessment of effects for shipping and navigation:
- NPS EN-3 - Paragraphs 2.8.179, 2.8.184, 2.8.186, 2.8.187, 2.8.189, 2.8.190, 2.8.195, 2.8.259
 - National Policy Statement for Ports (NPSfP) - Paragraph 5.14.2
 - MPS - Paragraph 3.4.7
 - EIEOMP - Policies PS1, PS2 and PS3
 - SEIMP – Policies SE-PS-1, SE-PS-2 and SE-PS-3
- 4.5.8. Of relevance is also the guidance in the MCA's Marine Guidance Note (MGN) 654 *"Safety of Navigation: Offshore Renewable Energy Installations (OREIs) - Guidance on UK Navigational Practice, Safety and Emergency Response"*.

THE APPLICATION

- 4.5.9. The offshore elements of the proposed development would comprise up to 79 WTGs and up to 2 offshore substation platforms (OSP) across two array areas, linked by up to 200 km of inter-array cables and an OfECC. The proposed OfECC would make landfall between Frinton-on-Sea and Holland-on-Sea to connect with the proposed development's onshore elements.

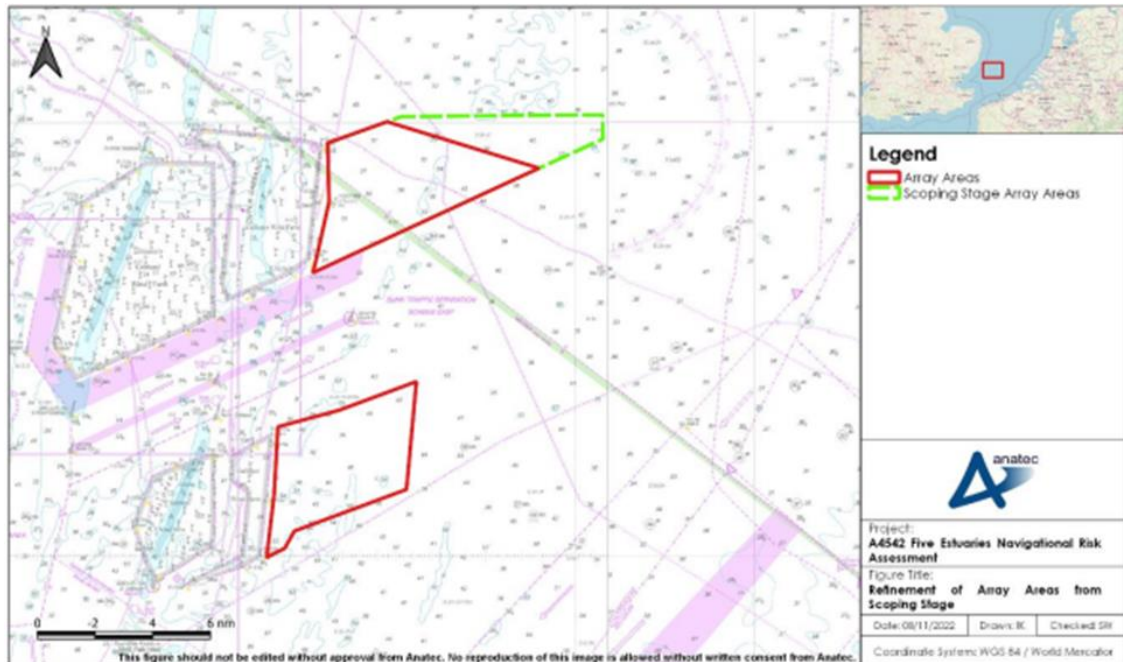
- 4.5.10. The two WTG array areas would be located in the vicinity of an area of intensive existing shipping activities. Vessels accessing ports on the east coast of England, including the various ports on the Thames, the Port of Felixstowe and Harwich International Port would pass by the proposed WTG array areas. There are a number of International Maritime Organisation (IMO) routing measures in proximity to the proposed array areas, as shown in the figure below. The OfECC would cross both the Trinity and Sunk deep water routes (DWRs). Two pilot boarding stations (Colne and Crouch and Sunk) are located in the vicinity of the proposed OfECC.

Figure 4.2: IMO routing measures and other navigational features in proximity to the proposed development [appendix 3 in REP1-060]



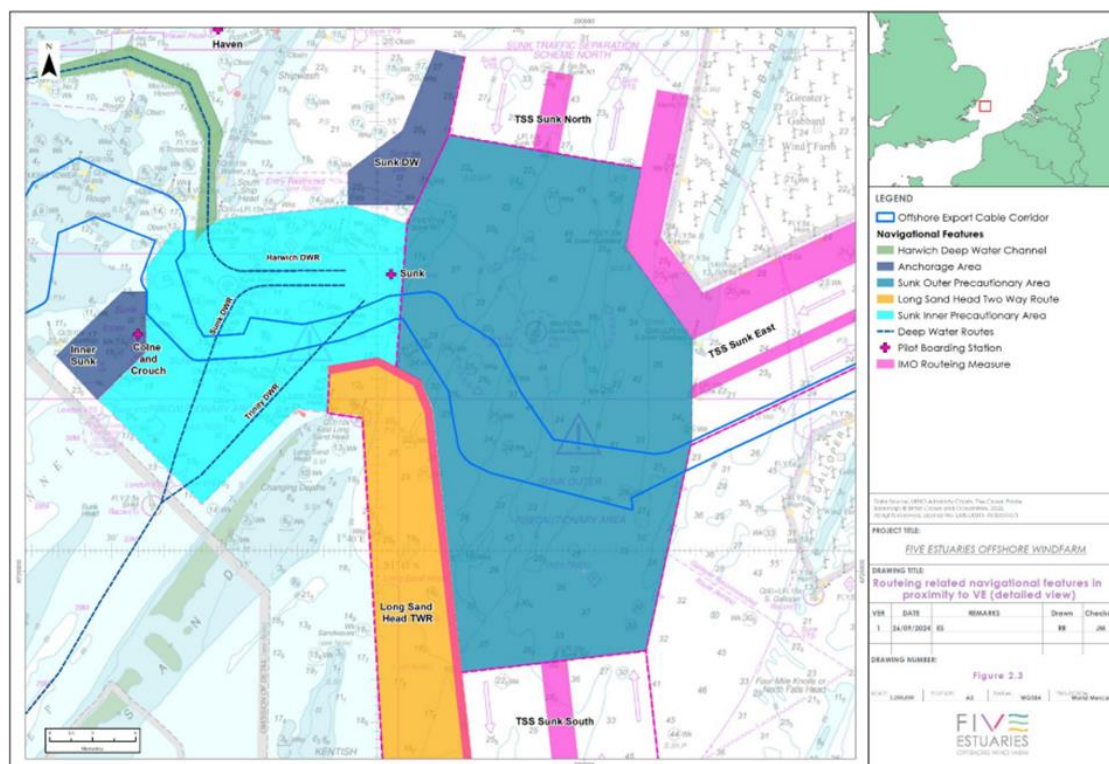
- 4.5.11. The application was accompanied by a Navigational Risk Assessment (NRA) [APP-240] which informed ES Part 2, Chapter 9: Shipping and Navigation [APP-078]. Additionally, the applicant submitted a Safety Zone Statement [APP-230], an Outline Cable Burial Risk Assessment (oCBRA) [APP-239], an Outline Cable Specification and Installation Plan (oCSIP) [APP-242, superseded by REP7-040], and an Outline Navigation and Installation Plan (oNIP) [APP-252, superseded by REP7-048].
- 4.5.12. Responding to concerns raised by IPs during pre-application consultation, the applicant amended the boundary of the proposed Order Limits to remove the north-eastern corner, as illustrated in the below figure. IPs were concerned that the original boundary would have resulted in congested vessel movements in and around the North Hinder Junction with consequential safety risks. The amendment to the boundary for the proposed works has reduced the developable area for the northern WTG array area by 23% (14% of the overall array area).

Figure 4.3: Amendment made by the applicant to the proposed northern array area boundary [figure 6.2 in APP-240]



- 4.5.13. In designing the layout of the proposed OfECC, the applicant has sought to maximise the distance from the Sunk pilot boarding station and to ensure a perpendicular crossing of the charted DWRs into the Thames, with as small a interaction as possible. In order to achieve a safe operational distance from the Sunk pilot boarding station to the north, the proposed OfECC would encroach into the MLS SAC, the implications for which are covered in section 4.2 and chapter 7 of this recommendation.
- 4.5.14. The applicant has prepared the oNIP [\[REP7-048\]](#) as bespoke mitigation to address the concerns of IPs in relation to the management of installation activities within the busy waters around the Sunk pilot boarding area and the DWRs, as illustrated in the figure below. Issues covered by the oNIP include management of concurrent working activity and the use of pilots.

Figure 4.4: Navigational features in proximity to the proposed OfECC [appendix 3 of REP1-060]



- 4.5.15. The NRA [APP-240] was prepared to address the requirements of MGN 654 and was informed by risk modelling and the output of a hazard workshop attended by key stakeholders. Section 17 of [APP-240] sets out the safety case for the navigation corridor for vessels which would be created between the proposed northern WTG array area and the consented East Anglia Two offshore wind farm (OWF) to the north. The NRA concludes that, with appropriate mitigation including the oNIP [REP7-048], a final version of which would be secured under Condition 13 of the DML in Schedule 11 of the dDCO [REP8A-004] (Condition 22 in our rDCO), the risks associated with the proposed development during pre-construction, construction, operation and decommissioning would be reduced to ALARP.
- 4.5.16. The ES therefore concludes in [APP-078] that all residual effects would be broadly acceptable or tolerable with mitigation, in accordance with MGN 654 and NPS EN-3. Table 9.10 in [APP-078] sets out the applicant's proposed mitigation for shipping and navigation. Embedded mitigation includes relevant DML conditions in Schedules 10 and 11 of the dDCO. Those conditions would require, amongst other things, post consent consultations with the MCA and TH in relation to the detailed layout within the proposed array areas.

ISSUES CONSIDERED DURING THE EXAMINATION

NAVIGATIONAL RISK ASSESSMENT

- 4.5.17. At the outset of the examination, during Issue Specific Hearing (ISH) 1 and ISH3 and as part of the ExA's first round of written questions (ExQ1 NS.1.06 and NS.1.07 in [PD-011]) the ExA invited IPs to highlight any concerns that they might have had with the applicant's NRA [APP-240] and any other navigation and shipping related concerns.

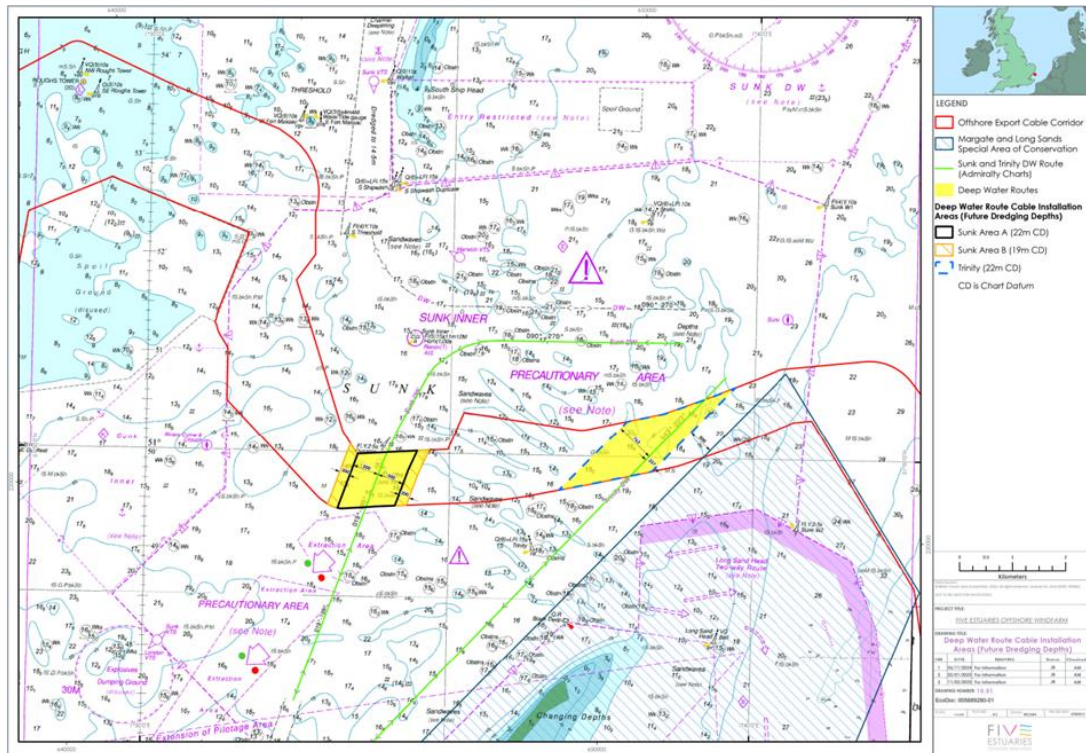
- 4.5.18. The MCA in [\[REP1-065\]](#) and [\[REP2-056\]](#) and TH in [\[REP2-069\]](#) confirmed they were content with the NRA, as submitted, and welcomed the reduction made by the applicant to the extent of proposed northern WTG array area. That position was maintained in their final SoCGs [\[REP7-068\]](#) and [\[REP5-051\]](#) respectively. Throughout the examination, no IPs raised concerns regarding the NRA. No amendments were therefore made to the NRA during the examination. The reduction in the extent of the proposed northern array area made prior to the application's submission appears to have resolved any concerns IPs might otherwise have had about the NRA.

THE OfECC INTERSECTING THE DEEP WATER ROUTES

- 4.5.19. The primary matter explored in relation to shipping and navigation during the examination was the OfECC intersecting with the Sunk and Trinity DWRs. The DWRs are of prime importance to the London ports as the only approaches available for larger vessels accessing the ports on the Thames. IPs were concerned about both the permanent impacts of the depth of the proposed cable installation within the DWRs and also the temporary impacts during construction and pre-construction activities: LGPL in [\[RR-067\]](#); the PLA in [\[RR-090\]](#); and HHA in [\[AS-007\]](#).
- 4.5.20. The matter of the OfECC crossing the Sunk and Trinity DWRs was explored with the applicant, PLA and LGPL during ISH1, ISH3, and ISH6. Submissions presented by the HHA in [\[AS-069\]](#) and the PLA in [\[REP5-107\]](#) suggested that in order to future proof the DWRs for use by larger vessels, the DWRs will need to be able to accommodate vessels with draughts (meaning the vertical distance between the waterline and the lowest point of the hull, which is typically the keel) of up to 20m. IPs suggested that a 10% buffer should then be applied to account for under keel clearance. That would mean the proposed cables would need an installation depth within the DWRs that would accommodate dredging of the seabed to a level of 22m below chart datum (CD).
- 4.5.21. The applicant did not dissent from the 22m level suggested by IPs to allow for future dredging of the DWRs. However, there was disagreement as to how such a commitment should be secured as part of any made DCO. The applicant's view was that the cable installation depth within the DWRs would be secured through the MMO's approval of a final version of the CSIP under the provisions of the DML. The PLA indicated in ISH6 [\[REP6-060\]](#) that it was not satisfied with that approach and required greater assurance that the agreed depth of cable burial within the DWRs would be secured.
- 4.5.22. Accordingly, we issued [\[PD-024\]](#) requesting the applicant and other IPs to consider wording provided by the ExA or suggest alternative wording for inclusion as a requirement or condition within either or both of Schedules 2 (Requirements) and 11 (Transmission Assets DML) of any made DCO. We also highlighted that a plan would be required to accompany a requirement or condition identifying the extent of the OfECC within the DWRs to which the commitment to a dredging level of 22m below CD would apply. That plan would be included amongst the documents to be certified under Schedule 15 of any made DCO.
- 4.5.23. The PLA [\[REP6-059\]](#), LGPL [\[REP6-080\]](#) and HHA [\[AS-073\]](#) and the applicant [\[Appendix 1 in REP6-001\]](#) generally responded favourably to the ExA's issuing of [\[PD-024\]](#). At examination deadline (DL) 6 the applicant submitted a revised version of the dDCO [\[REP6-007\]](#) which included in Schedule 2 a new Requirement 2(3) committing to allowing for dredging to a level of 22m below CD on the face of any

made DCO for the proposed development. The applicant also submitted at DL6 a Deep Water Route Cable Installation Area (Future Dredging Depths) Plan [REP6-055] (see figure below) as a certifiable document under Schedule 15 of the dDCO. That plan illustrates the spatial extent to which Requirement 2(3) would apply. The Trinity DWR area as illustrated on the plan has been aligned to allow for a 500m buffer between the dredging area and the MLS SAC.

Figure 4.5: Deep Water Route Cable Installation Area (Future Dredging Depths) Plan [REP6-055]



- 4.5.24. We are content that the applicant's inclusion of Requirement 2(3) the dDCO and the accompanying plan [REP6-055] would be an appropriate means of ensuring future dredging activities could safely continue within the Sunk and Trinity DWRs and would address IPs' concerns with respect to the OfECC intersecting with the DWRs.

OTHER MATTERS RESOLVED DURING THE EXAMINATION

- 4.5.25. To address concerns raised by IPs over a lack of controls relating to the disposal of inert materials within the OfECC as a consequence of dredging activities that would occur in the corridor, the applicant prepared an Outline Sediment Disposal Plan [REP4-041, superseded by REP8A-035], a final version of which would be secured under Condition 13 (Condition 22 in our rDCO) of the DML in Schedule 11 of the dDCO in order to ensure that no sediment disposal would take place within the DWRs.
- 4.5.26. The applicant updated both the oNIP [REP1-039, REP5-031, superseded by REP7-048] and the oCSIP [REP4-019, REP6-020, superseded by REP7-040] at various deadlines during the course of the examination to address other comments and concerns raised by IPs.

PLA's onshore radar site

- 4.5.27. As part of its RR [\[RR-090\]](#) the PLA highlighted the potential for onshore works associated with the proposed development to negatively impact the Holland Haven radar site, which is part of a network of 18 towers enabling the PLA to oversee safe navigation on the River Thames and to which it requires unrestricted access 24 hours a day, seven days a week.
- 4.5.28. The applicant and the PLA agreed onshore protective provisions (PP) in favour of the PLA to address these concerns, which were submitted at DL4 as a new Part 9 in Schedule 9 of the dDCO [\[REP8A-004\]](#). The SoCG between the applicant and the PLA confirmed that this matter had been resolved (reference PLA7 in table 3.2 in [\[REP7-074\]](#)).

MATTERS UNRESOLVED AT THE CLOSE OF THE EXAMINATION

- 4.5.29. At the close of the examination, there remained disagreement between the applicant and the PLA, HHA and LGPL on certain matters, including PPs.

PLA

- 4.5.30. Whilst the PLA was satisfied with the content of the revised versions of the oNIP [\[REP7-048\]](#) and oCSIP [\[REP7-040\]](#) by the close of the examination, the mechanism for their approval remained a point of contention between the PLA and the applicant [\[REP7-074\]](#).
- 4.5.31. Final versions of the NIP and CSIP are to be approved by the MMO as regulator under part of Condition 13 (Condition 22 in our rDCO) of the DML in Schedule 11 of the dDCO. The PLA would be consulted on the NIP and CSIP under the PLA's PPs in the dDCO (Part 10 of Schedule 9 in [\[REP8A-004\]](#)) prior to their submission to the MMO for final approval. The PLA maintained that it should also approve the NIP and CSIP [\[REP7-113\]](#), given the potential for works affecting the DWRs to impact on the passage of vessels to and from the Port of London. The applicant argued that the MMO as regulator should be the only approval body. Notwithstanding that disagreement between the PLA and the applicant, in the final version of the dDCO [\[REP8A-004\]](#) the PLA has been included as consultee of the MMO, when the latter is considering applications for approvals relating to the DWRs under Condition 13 (Condition 22 in the rDCO) of Schedule 11.
- 4.5.32. We agree with the view of the applicant, that approval of control documents, such as the NIP or CSIP should sit with a single body, the MMO in this instance as the relevant regulator. That said the PLA, via the proposed PPs in its favour and the provisions of the DML in Schedule 11 of the dDCO, would have the ability to raise any concerns it might have about the NIP and the CSIP with the applicant and the MMO, prior to any application being determined by the MMO.
- 4.5.33. In addition to the above point, the PLA had other outstanding issues in relation to PPs and the content of the dDCO and DML in [\[REP8-055\]](#) and [\[REP8-056\]](#). The applicant's response to these issues is set out in section 9 of [\[REP7-090\]](#). Those matters are addressed in chapter 10 of this recommendation.

HHA

- 4.5.34. The HHA has requested PPs [\[AS-069\]](#). The applicant does not consider PPs would be necessary, as any works within the HHA's harbour limits would require a works licence to be issued by it and therefore the interests of HHA would be suitably

protected without the need for PPs (paragraph 3.10.9 of [\[REP8A-038\]](#)). This is a matter we have reported on in more detail in chapter 10.

LGPL

- 4.5.35. The principle of PPs in favour of LGPL being included in any made DCO for the proposed development was accepted by the applicant when it submitted its application (Part 7 of Schedule 9 in [\[APP-024\]](#)). The applicant and LGPL remain in disagreement however regarding the precise wording of PPs following the submission of LGPL's drafting at DL6 [\[REP6-080\]](#). The applicant does not agree that the changes sought are appropriate as set out in section 7 of [\[REP7-090\]](#). This is a matter we have reported on in more detail in chapter 10.

CONCLUSIONS ON NAVIGATION AND SHIPPING

- 4.5.36. Effects of the proposed development on navigation and shipping have been assessed by the applicant in ES Part 2, Chapter 9 [\[APP-078\]](#), informed by an NRA [\[APP-240\]](#). The applicant has submitted various control documents in support as mitigation for navigation and shipping effects, including a Safety Zone Statement [\[APP-230\]](#), oCBRA [\[APP-239\]](#), oCSIP [\[REP7-040\]](#) and oNIP [\[REP7-048\]](#).
- 4.5.37. The NRA [\[APP-240\]](#) has been prepared by the applicant to meet the requirements of MGN 654 and paragraph 2.8.189 of NPS EN-3. Appendix A of the NRA sets out a checklist demonstrating compliance against MGN 654. No parties challenged the methodology or conclusions of the NRA. Accordingly, we are content that the applicant has addressed the requirements of MGN 654.
- 4.5.38. Paragraph 2.8.179 of NPS EN-3 advises that to ensure safety of shipping, applicants should reduce risks to navigational safety to ALARP. In the ES [\[APP-078\]](#) the applicant concludes that, with appropriate mitigation including the oNIP [\[REP7-048\]](#) a detailed version of which would be secured through the rDCO, the risks associated with the proposed development during construction, operation and decommissioning would be reduced to ALARP. No IPs disagreed with that assessment during the examination. We are content that, with the mitigation identified, the risks to navigational safety would be reduced to ALARP.
- 4.5.39. Addressing the requirements of paragraph 2.8.259 of NPS EN-3, lighting and marking is included as a mitigation in section 9.9 of [\[APP-078\]](#) with the final array layout to be agreed in consultation with MCA and TH post any DCO being made.
- 4.5.40. Section 17 of the NRA [\[APP-240\]](#) presents the safety case for the navigation corridor between the proposed northern WTG array area and the consented East Anglia Two OWF to the north, as required under rule 9 of the COLREGs. IPs confirmed during the examination that they were satisfied with the safety case presented.
- 4.5.41. During the examination, the applicant responded to concerns expressed by IPs in relation to the OfECC crossing the DWRs and committed to a cable installation depth within the DWRs that would enable dredging of the seabed up to a level of 22m below CD. This commitment is secured in the dDCO via Requirement 2(3) in Schedule 2 [\[REP8A-004\]](#). We are content that requirement would address IPs' concerns about the future accessibility in the DWRs for vessels with draughts of up to 20m.
- 4.5.42. Whilst there remain some outstanding matters of detail unresolved at the close of the examination in relation to drafting of the dDCO, most particularly the

transmission assets DML (Schedule 11) and PPs between the applicant and the PLA, HHA and LGPL, we are content that the applicant has demonstrated that, with mitigation, the proposed development can be safely constructed, operated and decommissioned from a navigation and shipping perspective.

- 4.5.43. We are therefore content that subject to the mitigation identified and secured through the provisions of the rDCO the offshore works would accord with all relevant legislation, policy and guidance in relation to navigation and shipping. The effects of the proposed development on navigation and shipping are therefore considered neutral and neither weigh for nor against in the planning balance.

4.6. COMMERCIAL FISHING

- 4.6.1. In this section we consider the proposed development's effects for commercial fishing, with particular regard to fishing ground access, fisher displacement and mitigation measures.

POLICY AND GUIDANCE

- 4.6.2. NPS EN-3 addresses commercial fishing in the following paragraphs:

- 2.8.152 to 2.8.164 - applicant's assessment of impacts
- 2.8.250 and 2.8.251 - mitigation
- 2.8.318 to 2.8.324 - SoS's decision making with respect to impacts

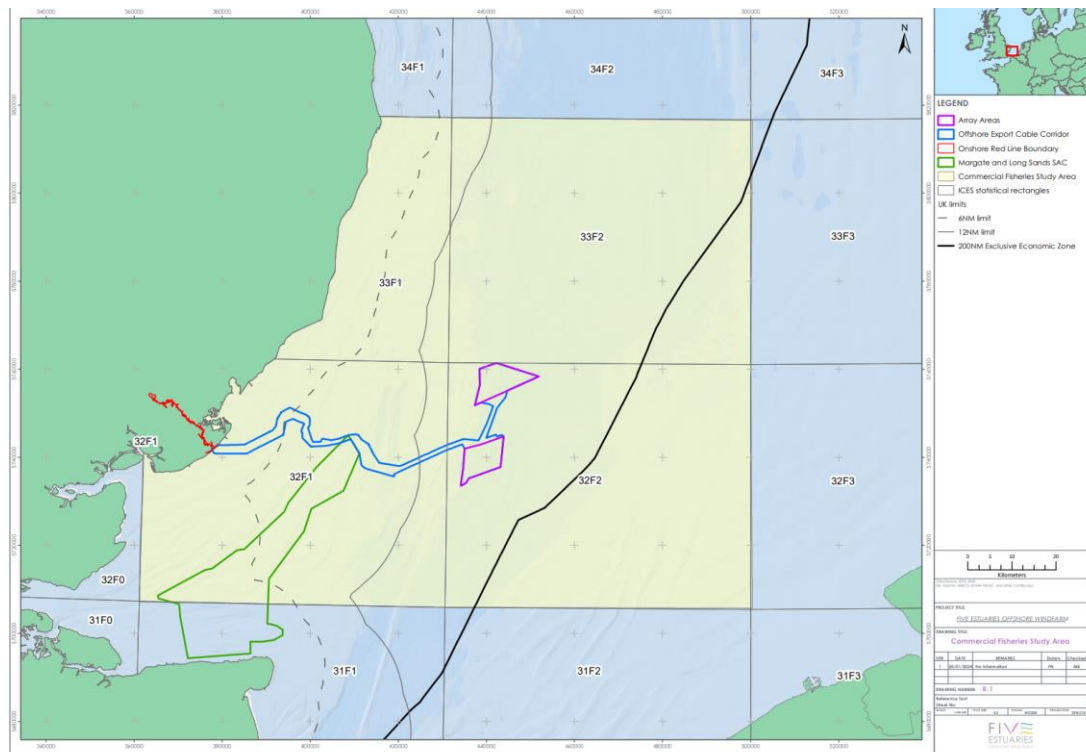
- 4.6.3. Section 3.16 of the EIEOMP sets out fishing policies in the east marine plan areas, with Policy FISH1 addressing affected fishing activities.

- 4.6.4. Policy SE-FISH-2 of the SEIMP addresses proposals affecting fishing activities.

THE APPLICATION

- 4.6.5. The proposed development's effects on commercial fishing are assessed in the ES in [\[APP-077\]](#). The study area for that assessment is shown in the figure below and it is based on internationally recognised statical areas identified by the International Council for the exploration of the Sea. In section 8.7 of [\[APP-077\]](#) it is explained that the study area is fished by fishers from the UK, Belgium, France and the Netherlands using different methods (potting, netting, beam trawling, demersal/bottom trawling, pelagic/midwater trawling and hooks) to variously catch fish and shellfish. Between 2016 and 2022 the average annual value of the study area's fish catch was around £3.0 million [paragraph 8.7.2 in APP-077]. The proposed array areas and OfECC would respectively occupy 1.03% and 1.36% of the study area [paragraph 8.4.8 in APP-077].

Figure 4.6 Commercial Fisheries Study Area [Figure 8.1 in APP-077]



- 4.6.6. Impacts for commercial fishing variously affected during the pre-construction, construction, operational (including maintenance) and decommissioning phases have been assessed [paragraph 8.4.3 in APP-077] and include:
- Reduced access to or exclusions from fishing grounds and displacement of fishing activities to grounds beyond the proposed Order Limits (including additional steaming/travel time to reach) and increased pressure on adjacent fishing grounds. Reduced access could include stationary pots needing to be removed or becoming inaccessible to fishers at certain times. For fishers trawling with nets reduced access may entail temporary physical exclusion from areas where construction or major maintenance works were being undertaken or avoidance of areas where infrastructure has been installed and fishers deciding for themselves that there would be insufficient room available to fish safely.
 - Disturbance to fish and shellfish stocks leading to displacement or disruption to fishing activities.
 - Vessel congestion during construction interfering with fishing activities.
 - The physical presence of infrastructure and the potential for fishing gear snagging.

- 4.6.7. The applicant intends to use safety zones during construction and then more sporadically during maintenance. During construction, rolling 500m diameter safety zones would be applied in both the array areas and the OfECC. Within those safety zones, commercial fishing would be precluded, with the purpose of separating fishing vessels from active construction activities. Additionally, during construction 50m diameter safety zones would be imposed around incomplete structures, while 500m passing distances would be applied to ensure separation between transiting construction craft and fishing vessels. For the operational phase, 500m diameter safety zones would be imposed around manned offshore platforms (permanently) and individual WTGs when they were being maintained.

- 4.6.8. Sections 8.10 to 8.12 in [APP-077] respectively assess the proposed development's impacts during the construction, operational (including maintenance) and decommissioning phases. Those assessments consider the monetary value for the various catches across the study area and the proportion of the study area that would be affected by the proposed development to determine the proposed development's impacts. The applicant considers for commercial fishers the magnitude of the impacts would range between negligible, low adverse or medium adverse, while fishers' sensitivity to the impacts would be negligible, low or medium.
- 4.6.9. The range of measures for mitigating effects on commercial fishing are set out in section 8.9 of [APP-077]. That mitigation would comprise a combination of embedded design measures and additional mitigation, with the latter being applied to any significant effects. The proposed mitigation measures are summarised in Table 8.9 in [APP-077] and comprise:
- Project design
 - Fisheries liaison, including: the appointment of a fisheries liaison officer; the issuing of notices to mariners and fishers providing warnings/information about works and the imposition of safety zones; and the development and implementation of a Fisheries Liaison and Co-existence Plan (FLCP)
 - Marking and lighting
 - The development of and implementation of a CSIP
 - The implementation of a CBRA
 - The use of safety zones
 - Co-ordinated use of project vessels and deployment of guard vessels
- 4.6.10. The applicant considers with the application of additional mitigation, such as applying the FLCP's measures and the making of "*justifiable*" disturbance payments, as necessary, there would be no significant adverse residual effects for commercial fishing, as summarised in Table 8.16 in [APP-077].
- 4.6.11. The applicant's predictions for the significance of the proposed development's residual effects following the application of mitigation would be negligible adverse and minor adverse, which would not be significant in EIA terms or moderate adverse, which would be potentially significant in EIA terms.
- 4.6.12. The cumulative effects assessment (CEA) for commercial fishing is contained in section 8.13 of [APP-077] and Table 8.13 identifies the other projects that have been considered in the CEA. The projects listed in Table 8.13 are those that are under construction, have been consented or are planned for which there is a level of confidence they will proceed because they have reached the application stage or information about them is in the public domain. The CEA includes other offshore wind farms, offshore wind farm export cables, interconnectors and designated habitats management schemes. Paragraphs 8.13.10 and 8.13.11 in [APP-077] explain why some impacts have been excluded from the CEA, for example the increased risk of fishing gear snagging or increased vessel traffic within fishing grounds due to changes to shipping routes have been excluded because the impact significance has been assessed as being negligible.
- 4.6.13. The impacts considered in the CEA for the construction and operational phases are:
- Reduction in access to or exclusion from established fishing grounds. For this impact the proposed development's construction would follow many of the other assessed projects becoming operational and fishing in those affected areas is expected to have resumed to some degree limiting the scale of the cumulative

impact. It is expected the proposed development's construction would overlap with the construction for the proposed North Falls and East Anglia Two offshore wind farms. Overall, it is predicted that the significance of the cumulative residual effect for commercial fisheries for this impact would be minor adverse, which would not be significant in EIA terms.

- Displacement leading to fishing gear conflict and increased fishing pressure on established fishing grounds. This cumulative impact correlates with the preceding one. Accordingly, the predicted significance of the cumulative residual effect for commercial fisheries would also be minor adverse and would not be significant in EIA terms.
- Displacement or disruption of commercially important fish and shellfish resources. Overall, it is predicted that the significance of this cumulative residual effect for commercial fisheries would be minor adverse, which would not be significant in EIA terms.

ISSUES CONSIDERED DURING THE EXAMINATION

- 4.6.14. Representations and/or submissions were made by National Federation of Fishermen's Organisations (NFFO) [[RR-077](#) and [REP2-088](#)] and the Harwich Harbour Fisherman's Association (HHFA) [[RR-042](#), [REP1-063](#), and [REP4-074](#)]. HHFA is also a member of a regional Commercial Fisheries Working Group (CFWG), a forum³ established by the applicant representing around 50 fishing vessels⁴ to discuss its proposals during the pre-application and post application phases for the proposed development. An action arising from the discussion of commercial fishing at [ISH3](#) was for HHFA, other fishing organisations and the applicant to enter into a SoCG. A SoCG between CFWG and the applicant, prepared with HHFA's assistance, was submitted at Deadline 7 [[REP7-072](#)].
- 4.6.15. NFFO in its relevant representations [[RR-077](#)] voiced concerns that the construction and operation of offshore wind farms is "... *contributing to the spatial squeeze on fisheries in the region ...*" and the over simplified assumption that mobile gear vessels can simply move between areas to avoid offshore construction works. NFFO further submitted that the spatial squeeze for fishers in this area is extensive and it does not agree that the effects for fishers would not be significant.
- 4.6.16. NFFO in its written representation [[REP2-088](#)] submitted in summary:
- In the east and south east marine regions, commercial fisheries are facing spatial restrictions from existing and proposed wind farms, marine protected areas and legislative restrictions. Further displacement of commercial fishing will result in economic harm from loss of earnings and additional operating costs due to extra steaming times.
 - Concerns relating to the outline FLCP's provisions, most particularly: which phases (pre-construction, construction and/or operation) would the FLCP relate to; using standardised liaison practices, based on the applicant's experience elsewhere would not necessarily account for regional variations; lack of clarity about the availability of an appointed company fisheries liaison officer for the proposed development's life; and the availability of a cable exposure mitigation plan.

³ Also including Felixstowe Ferry Fishermen's Association, Kent and Essex Inshore Fisheries and Conservation Authority, Orford and District Fishermen's Association, Southwold Fishermen's Association, Thanet Fishermen's Association and West Mersea Fishermen's Association

⁴ As explained during the course of ISH3

- Concerns about the level of detail included in the oCBRA [\[APP-239\]](#).

4.6.17. With respect to cable burials the SoCG between the NFFO and applicant [\[REP5-062\]](#) records disagreement about:

- Whether the proposed export cables would be buried to a sufficient depth, given experience with exposures occurring at the London Array Offshore Wind Farm.
- Whether the applicant should commit to remediating cable exposures.

4.6.18. As explained in [\[REP1-063\]](#), HHFA represents 22 vessels, most of which are under 10 metres in length and operated by single fishers. HHFA's members use multiple fishing methods and it was explained during ISH3 that many of HHFA's members are day fishers journeying generally no more than 25 miles to access fishing grounds. HHFA is content with the way the applicant has liaised with its members, but it was concerned the applicant would not acknowledge that some of the fishing methods used in the immediate area and other parts of the east coast would be affected during the proposed development's construction and operational phases. At ISH3, HHFA's representative elaborated on this concern, advising that for pre-construction surveying the applicant had drawn a distinction between fishers using trawling or drift nets or long lines when encountering surveying would be expected to move to a different fishing ground and would not be compensated, while fixed net or pot fishers who were excluded from their fishing grounds would be compensated when surveying was being conducted. HHFA explained that in practice fishers using trawling or drift nets would not simply be able to go to another fishing ground and would potentially incur £100s of wasted fuel costs [around five minutes onwards in [EV6-007](#)].

4.6.19. HHFA further submitted during ISH3 that fast surveying boats, for example, cause bass to disperse over a wide area. For other projects, such fish dispersal during surveying has not been a concern, because their developers have accepted all fishing methods could be affected and would be eligible to receive compensation payments. A wide variety fishing methods are employed in the area and could be affected during the proposed development's construction. Accordingly, HHFA submitted all fishing methods should be included in any compensation schemes.

4.6.20. At ISH3, HHFA also submitted that other projects have adopted total exclusion zones for commercial fishing during their construction phases, with agreements having been entered into so that fishers avoid those areas. It was hoped that similar arrangements would be adopted by the applicant for the proposed development. HHFA contended that when a wind farm becomes operational their array areas become no go areas for fishers [eight minutes in [EV6-007](#)].

4.6.21. HHFA submitted in [\[REP1-063\]](#) that while disruption payments have "cushioned" effects during the construction of other wind farms its objection to the proposed development "... has nothing to do with money, we just do not want any more wind farms ...".

4.6.22. With respect to safety, HHFA is concerned because of the continually shifting nature of the seabed that it cannot be guaranteed safe conditions for fishing would always be available. Buried cables do not always remain that way, as has been the experience with the Galloper and Great Gabbard offshore wind farms. Exposed cables present dangerous snagging hazards for commercial fishers and providing protection at cable crossings would create additional fishing hazards [\[REP1-063\]](#).

4.6.23. HHFA has submitted that the presence of other wind farms has been restricting commercial fishing activities over very large areas and:

“... any additional projects on the east coast must be given serious consideration. These sites were regular fishing grounds used by our members but are now no longer available. The knock on effect is that all the fishing activities have been condensed into much smaller areas, with our members struggling to have viable areas to work. Any new additional wind farm will compound this issue, hence our objection.” [REP1-063].

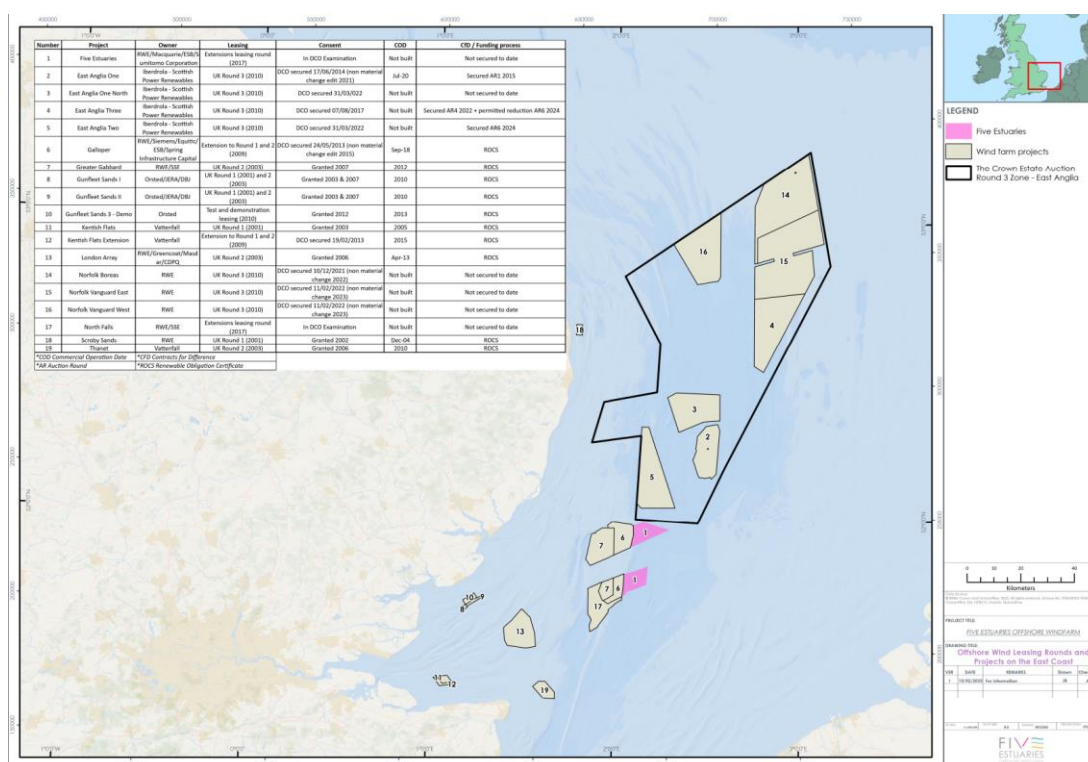
- 4.6.24. In [REP1-063] HHFA further contends the proposed development in combination with: North Falls; East Anglia Three; East Anglia One North; East Anglia Two; aggregate extraction; and restrictions applying in the Marine Conservation Zones would result in there being no areas that can lawfully be fished. At ISH3 HHFA elaborated on its fishing ground reduction concerns, commenting that within the array areas for Gunfleet Sands, London Array, Galloper and Great Gabbard only fishing with rods and lines now takes place. With a shifting seabed there is too great a risk for fishing gear becoming damaged by wind farm infrastructure, with insurance for such damage being unavailable [from around 11 minutes onwards in [EV6-007](#)].
- 4.6.25. In [REP1-063] the HHFA also submitted that some fish species are now avoiding fishing grounds because of construction works and the presence of WTGs and cables. Cod is cited as having become less abundant north and south of the Thames Estuary over the last 12 years. With the increasing numbers of wind farms, fishers will need to travel greater distances and for longer, with there being safety concerns about how far single handed vessels can travel safely.
- 4.6.26. The applicant accepted at ISH3 that the operation of construction safety zones could have significant effects because fishing grounds would temporarily be unavailable resulting in lost earnings and increased journeying times. Measures, to be secured via the FLCP, would provide some mitigation, although some significant residual effects would remain following the application of the FLCP’s mitigation. Given that, the applicant confirmed it would consider entering into evidence based cooperation agreements with fishers relying on potting, fixed nets, drift nets and hooked gear, variously catching whelk, lobster, brown crab, bass, sole and rays [section 1.4 in [REP3-022](#)].
- 4.6.27. Further to the holding of ISH3 and the subsequent discussions between the CFWG and the applicant, the OFLCP was revised at Deadline 5 [\[REP5-029\]](#). Amongst the revisions made to the OFLCP was a commitment that during construction all affected fishers would be eligible to apply for disruption payments by entering into evidence based cooperation agreements. At ISH6 the applicant further clarified that the OFLCP was an outline document which would be developed further in consultation with the CFWG.
- 4.6.28. During ISH6 HHFA expressed concern that the final FLCP would not adequately address the proposed development’s operational effects, given the likelihood of fishers avoiding the array areas and increased competition amongst fishers to fish areas unaffected by the presence of wind farms [around 49 minutes onwards in [EV10-005](#)].
- 4.6.29. With respect to NFFO’s concerns about rectifying cable exposures, the applicant explained the response would depend on the nature of the exposure. For example, if an exposure occurred in a mobile sandbank area then a “*watch and see*” approach might be adopted. Other exposures might require reburial and additional protection [paragraph 1.4.13 in [REP6-045](#)].

- 4.6.30. The SoCG between the CFWG and the applicant [\[REP7-072\]](#) records there was disagreement with respect to the following matters:
- Whether there would be significant effects for the mobile gear fishing fleets (inshore trawl fleet).
 - The proposed development's cumulative effects with other wind farms for accessing fishing grounds.
 - The use of cooperation agreements and the making of disruption payments, with the CFWG seeking a more flexible approach and the applicant considering the use of agreements should be evidence based to achieve a position whereby fishing interests would neither be advantaged nor disadvantaged, ensuring impacted fishers would receive payments aligning with their potential losses.
 - Whether effects for commercial fishing should be surveyed before, during and post construction, with the applicant considering that such surveying would not be necessary based on the results of its impact assessment.
- 4.6.31. In relation to finalising the FLCP, the SoCG between the CFWG and the applicant records an expectation that the OFLCP [\[REP6-024\]](#) will evolve, with:
- The CFWG wishing to be involved in the FLCP's evolution.
 - The applicant indicating alternative measures may be pursued including: addressing uncertainty through scientific projects and monitoring; and fishery community adaptation schemes involving investment in safety equipment, training for fishers or contributions to a fuel allowance.

CONCLUSIONS ON COMMERCIAL FISHING

- 4.6.32. We are content that the applicant has undertaken an impact assessment for commercial fishing addressing the matters for consideration identified in paragraphs 2.8.152 to 2.8.164 of NPS EN-3. There are, however, disagreements between the representative of the fishing industry and the applicant regarding the conclusions drawn in the latter's assessment, most particularly relating to the longevity of any displaced fishing activities and the proposed development's cumulative impacts with other existing or proposed wind farms. HHFA has also raised, in essence, an in principle objection on the grounds that there are too many existing or proposed wind farms in the area fished by its members [\[REP1-063\]](#).
- 4.6.33. At an early stage in the pre-application period the applicant in response to feedback from shipping and navigation consultees decided to reduce the extent of the proposed northern array by around 22% to reduce effects on the sea room available for commercial shipping [section 4.11 in [APP-066](#)]. We consider that reduction in the northern array's area would to some degree reduce the proposed development's effects on commercial fishing. We are also of the view it is unlikely that the extent of the array areas could be further reduced without significantly reducing the proposed development's generating capacity. Accordingly, we are content that the applicant has sought to design its proposal to minimise the loss of fishing opportunity (paragraph 2.8.322 in NPS EN-3).
- 4.6.34. The figure below shows the proposed development's array areas relative to 18 other existing or proposed offshore wind farms off the coasts of Essex, Kent and Suffolk. Nine of those wind farms shown either have not been consented or built and some will be significantly larger than those that are currently operational.

Figure 4.7 Locations for existing and proposed offshore wind farms of the coasts of Essex, Kent and Suffolk [Appendix 1 in REP6-047]



4.6.35. Taking account of the prevalence of the existing and proposed wind farms in the area and: aggregate extraction; marine telecommunications and power cables (existing and proposed); and the volume of commercial shipping, it is evident that access to commercial fishing in the southern North Sea and eastern English Channel is likely to become more constrained. We are therefore sympathetic to the disquiet raised by the commercial fishing industry that its activities are being “spatially squeezed” (NFFO in [\[RR-077\]](#)), given the number of existing and proposed offshore wind farms in this area.

4.6.36. HHFA’s contention, elaborated upon during ISH3, that there has been diminished fishing activity in some fishing grounds following the introduction of wind farms is a matter the MMO has researched. In that context the MMO has commissioned a report titled “Sensitivity of the under 12m fishing fleet to offshore wind development in the east marine plan areas” (2024). The findings in that report afford some support HHFA’s contention, commenting:

“The level of sensitivity to wind farms is particularly high in the south Norfolk, Essex and Suffolk area. Here demersal trawlers reported large areas of fishing grounds which are considered no longer productive or viable in recent years i.e. barren, despite a perceived long-term decline in fishing pressure. Participants in this region emphasised the significant recent decline of sole and rays.

Traditionally drift netters would have used the sandbanks in the outer Thames Estuary, including Gunfleet Sands, Long Sands and further east, the Gabbard and Galloper Sands. A significant proportion of these sands are now occupied by OWFs and therefore a sizeable element of their accessible grounds has been lost. Although, beyond the scope of the east marine plan area, fishers from within the east marine planning area fish these grounds and therefore it does have an impact

on the local economy within the east marine planning areas.” [page 80 in [REP4-074](#)].

- 4.6.37. The applicant considers fishers would not be dissuaded from fishing amongst the installed WTGs and this effect on accessing fishing grounds would not be significant. Given the findings reported by the MMO in [REP4-074] and the submissions made by HHFA, we consider evidence is emerging, which is not simply anecdotal, of commercial fishing activities being constrained by the presence of offshore wind farms in the southern North Sea and eastern English Channel. We consider the applicant's stance with respect to this matter to be somewhat naive, with it being possible some fishers would treat the presence of WTGs as an impediment to their free and/or safe fishing, leading to a reduction in or cessation of commercial fishing in the affected grounds.
- 4.6.38. NFFO and HHFA have submitted that some of the existing wind farms in the area have experienced cable exposures, with those exposures having the potential to cause gear snagging hazards. While the applicant has advised that the condition of the marine cables would be regularly monitored, it has not committed to initiating immediate repairs. Instead, the applicant has explained that a “*watch and see*” approach might, for example, be utilised within mobile sandbank locations, with further sandbank movement being relied on as the means for the reburial of inter array cables [section 1.4 in [REP6-045](#)].
- 4.6.39. We recognise that there may be some merit in adopting the watch and see approach to cable reburials, given that would be less disruptive than deploying maintenance vessels. However, adopting such an approach could heighten fishers concerns about fishing within the array areas, increasing the potential for them to be avoided. The potential avoidance of historic fishing grounds would be an adverse effect. However, we consider that adverse effect needs to be weighed against the contribution the proposed development would make to the UK's electricity generating capacity. In that regard the value of the catch across the study area is around £3.0 million per year, effecting around 50 UK fishing vessels.
- 4.6.40. The applicant has concluded that the significance of the proposed development's effects for commercial fishing would generally be either negligible or minor adverse. The exception being the identification of moderate adverse effects in relation to reduced access to fishing grounds for the UK potting and netting/hooked gear fleets, with those adverse effects being assessed as reducing to minor adverse when mitigation is applied.
- 4.6.41. The mitigation proposed by the applicant has been informed by its experience of constructing and operating other wind farms (described by the applicant as a portfolio approach). However, we have concerns about how transferable past experience might be, having regard to the increased concentration of wind farms that may arise should all of the consented or planned projects within the proposed development's vicinity be developed. Mitigation previously applied elsewhere might not necessarily be adequate in a location where wind farms may become more prevalent. We therefore consider it is uncertain that the proposed development's most significant adverse effects would mainly be borne by the UK potting and netting/hooked gear fleets.
- 4.6.42. Accordingly, we agree with HHFA that it was incorrect of the applicant to have concluded in the ES that fishers using more mobile fishing methods would be able to readily switch to alternative fishing grounds should they be prevented from using their usual fishing grounds during the construction works. We therefore welcome the

applicant's amendment to the OFLCP [REP6-024], giving fishers using any fishing method the opportunity to seek to enter into cooperation agreements with the applicant and become the recipients of evidence based disruption payments during the construction phase.

- 4.6.43. The proposed development would undoubtedly give rise to some interference for commercial fishing, particularly during the construction phase when multiple safety (exclusion) zones may be in force. However, we consider the OFLCP now includes a range of matters that would mitigate the adverse effects to an acceptable level. Conditions have been included in the DMLs for the proposed offshore generating and transmission assets (Schedules 10 and 11 in the dDCO [REP8A-004]) intended to secure the approval of a final FLCP by the MMO prior to the commencement of the works subject to the DMLs. The mitigation measures included in a FLCP would constitute additional mitigation necessary to minimise any adverse effects for commercial fishing arising from the proposed development's construction and operation. Accordingly, conditions securing the approval of a final FLCP by the MMO are included in the Schedules 10 and 11 of our rDCO.
- 4.6.44. As explained above, we consider there would be some adverse effects for commercial fishing. However, with the implementation of mitigation measures included in a FLCP, we are content that the significance of the residual effects for the proposed development would be no more than negligible to minor adverse and would therefore not be significant in EIA terms.
- 4.6.45. For the reasons given above we consider that the proposed development accords with policy relating to commercial fishing in NPS EN-3. We further consider that with the application of the proposed mitigation measures the proposed development accords with Policy FISH1 of the EIEOMP because access to fishing activities would not be prevented; and Policy SE-FISH-2 of the SEIMP because there would not be significant adverse impacts on access for fishing activities.
- 4.6.46. We therefore attach a little negative weight to the proposed development's effects for commercial fishing in the planning balance.

4.7. SEASCAPE, LANDSCAPE AND VISUAL EFFECTS

INTRODUCTION

- 4.7.1. In this section we consider the effects of the offshore elements of the proposed development on the surrounding seascape, landscape and visual receptors, including views from the coast and various viewpoints.
- 4.7.2. This section covers: the relevant legislation, policy and guidance in relation to seascape, landscape and visual effects; the application; remaining disagreements between the parties; and the issues considered during the examination. Landscape and visual matters in relation to the onshore elements of the proposed development are considered in section 5.1 of our recommendation.
- 4.7.3. As part of a 'rebranding' exercise for areas of outstanding natural beauty (AONB), they are in some instances being referred to as national landscapes, as a result of recent policy and guidance changes. However, AONB is still the statutory term used in the legislation including 245(6) in the Levelling Up and Regeneration Act 2023 (LURA2023), and the applicant and other IPs continued to refer to AONB. Accordingly for the purposes of this section, we have also referred to AONB.

LEGISLATION, POLICY AND GUIDANCE

4.7.4. In its consideration of seascape, landscape and visual effects, we have had regard to:

- Section 245 of LURA2023 and Section 85(A1) of the Countryside and Rights of Way Act 2000 (CROW2000)
- NPS EN-1 - in particular Section 5.10, paragraphs 5.10.1, 5.10.5 - 5.10.10, 5.10.12 – 5.10.15, 5.10.18, 5.10.21, 5.10.24 – 5.10.27, 5.10.29 – 5.10.30 and 5.10.34 – 5.10.38
- NPS EN-3, in particular Section 2.8, paragraphs 2.8.43, 2.8.49, 2.8.66, 2.8.68, 2.8.73, 2.8.204 – 2.8.2.8.212, 2.8.263 – 2.8.264 and 2.8.349 – 2.8.2.8.352
- Policy SOC3 of the EIEOMP
- Policy SE-SCP-1 of the SEIMP
- DEFRA Guidance: Guidance for relevant authorities on seeking to further the purpose of Protected Landscapes (16 December 2024)
- National Planning Policy Framework - Chapter 15: Conserving and Enhancing the Natural Environment
- Suffolk Coasts and Heaths AONB Natural Beauty and Special Qualities Indicators (2016)
- Local Impact Reports (LIR), to the extent that they are relevant to the topic, submitted by Babergh District Council, Essex County Council, East Suffolk Council and Suffolk County Council (SCC) [[REP2-040](#)], [[REP2-041](#)], [[REP2-042](#)], [[REP2-043](#)], [[REP2-046](#)]
- Any other matters prescribed in relation to the development
- Any other important and relevant matters

THE APPLICATION

4.7.5. The applicant has carried out assessments in relation to seascape, landscape and visual matters in a Seascape, Landscape and Visual Assessment (SLVIA) in [[APP-079](#)], which forms part of the ES. The SLVIA is supplemented by:

- ES Annex 10.1 Seascape, Landscape and Visual Methodology [[APP-197](#)]
- ES Annex 10.2 Seascape, Landscape and Visual Viewpoint Assessment [[APP-198](#)]
- ES Annexes 10.3.1 to 10.3.5 Seascape, Landscape and Visual Figures 10.1 to 10.25 [[APP-199](#)] to [[APP-203](#)]
- ES Annexes 10.3.6 to 10.3.26: Figures 10.26 to 10.46 relating to Viewpoints 1 – 14 and A – G [[REP2-031](#) to [REP2-038](#) and [APP-214](#) to [APP-224](#)];
- ES Annexes 10.8.1 to 10.8.3: Wireline Figures 10.47 to 10.67 [[PD4-010](#) to [PD4-012](#)]

4.7.6. The proposed turbines would be sited in northern and southern arrays, approximately 37km from the Suffolk coastline at their closest point. The exact number and size of the proposed WTGs have not yet confirmed by the applicant, with it seeking flexibility to allow for advances in technology and turbine development. The maximum height for the proposed WTGs was reduced to 370m during the course of the examination. Prior to the application's submission the extent of the proposed northern array area was reduced, in response to representations made during the pre-application stage by IPs with an interest in navigation and shipping matters. The applicant's assessments in terms of seascape, landscape and visual matters have also been undertaken on a worst

case scenario basis, with a precautionary approach in relation to the frequency of effect, based on optimum (clear) visibility.

- 4.7.7. There are a number of existing offshore wind farms in the vicinity and the proposed development would be an extension to the existing Galloper OFWF, which is an extension of the Greater Gabbard OFWF. Figures 10.1 and 10.2 in [APP-199] show the design envelopes for the Maximum Height (41 WTG) and Maximum Number (79 WTG).

Figure 4.8 Distribution of proposed wind turbine generators by maximum height
[Source APP-199]

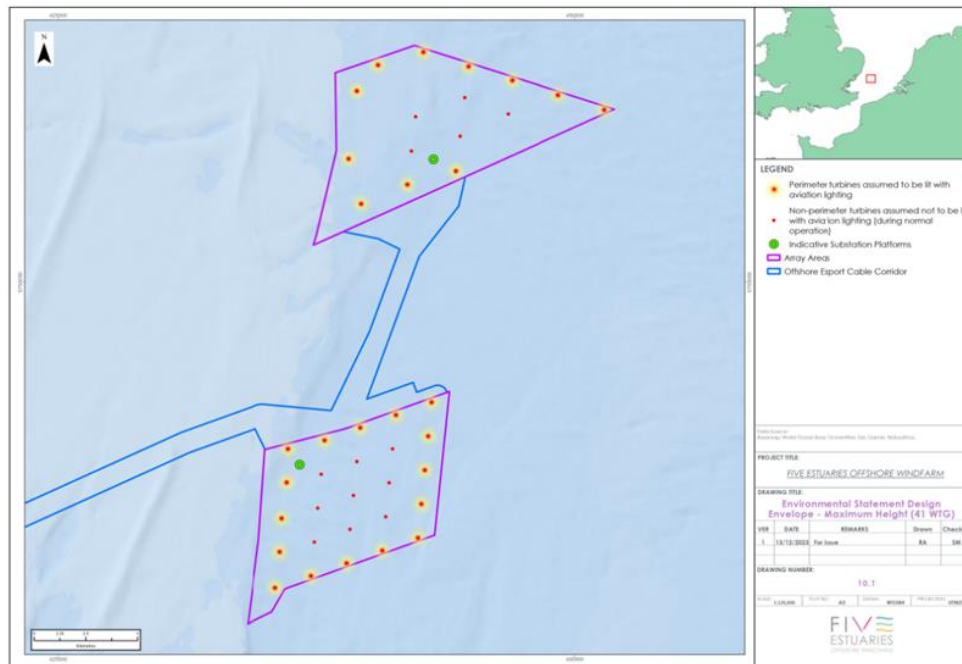
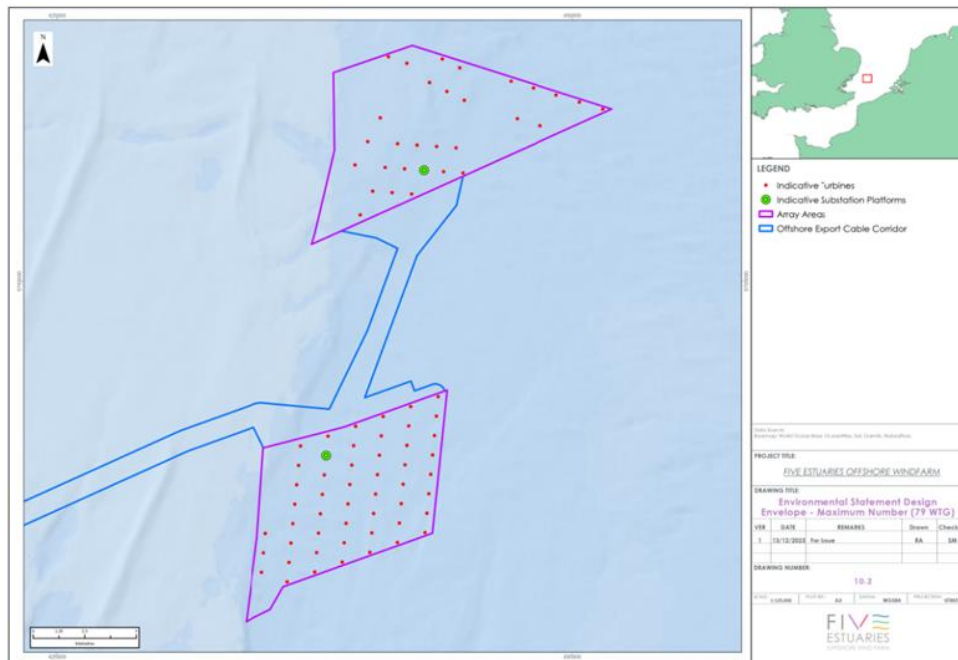


Figure 4.9 Distribution of proposed wind turbine generators by maximum number
[Source APP-199]



- 4.7.8. The proposed development's effects on seascape, landscape and visual receptors as a result of the offshore elements are assessed in the ES in [APP-079]. The spatial scope of the SLVIA [APP-079] is 60km from the array areas and a number of impacts throughout all phases of the project have been assessed, namely construction, operation and maintenance and decommissioning stages. The assessments have also included cumulative effects with the existing, consented and proposed projects.
- 4.7.9. Preliminary impacts on seascape, landscape and visual receptors are identified in Table 10.19 of [APP-079] which identifies the potential for significant effects that require detailed assessment in four areas, SCT03 Nearshore Waters, SCT05 Coastal Waters, SCT06 Offshore Waters and MCA19 Essex and South Suffolk Estuaries and Waters. It identifies that there is potential for long-term, reversible impacts through the construction, operation and maintenance and decommissioning phases of the proposed development and undertakes further assessments in paragraphs 10.11.2 to 10.11.4 and 10.11.7 to 10.11.21 of [APP-079], concluding that the effects would be not significant.
- 4.7.10. The ES in [APP-079] also assesses the impacts of the proposed development on Landscape Designations which are detailed in Table 10.25. Of these designations, the SCHAONB including Suffolk Heritage Coast is assessed as having the potential for significant effects that require detailed assessment, and this is carried out in paragraphs 10.11.171 to 10.11.280. The applicant has assessed the impacts with respect to sensitivity to change, landscape quality, scenic quality, relative wildness, relative tranquillity and natural heritage features, and summarises that the effects of the proposed offshore elements of the proposal on the special qualities of the SCHAONB would be of low to negligible magnitude and not significant.
- 4.7.11. The applicant considers that the majority of the WTGs would be viewed behind and in the same view as the existing Greater Gabbard and Galloper OFWFs and would only be seen in optimal weather conditions. Furthermore, their distance offshore would be around 37.3km and the proposed development would therefore be seen

on the very distant skyline. The applicant's assessment in relation to the SCHAONB concludes that although there may be some not significant (moderate/minor) effects of low magnitude on the special qualities, the purpose of the SCHAONB designation would not be compromised nor its fundamental character. Table 10.26 of [APP-079] provides a summary of effects on the special qualities of the SCHAONB and Table 10.36 considers the cumulative effects.

- 4.7.12. The ES [APP-079] also considers the effect of the proposed development on representative viewpoints, detailed in Table 10.27 and the applicant has provided numerous visualisations and wireline drawings from various viewpoints along the coast showing the proposed turbines within the seascape. [APP-200] shows the viewpoint locations. Tables 10.29 and 10.30 in [APP-079] provide an assessment of the sensitivity to change, magnitude of change and significance of effect for the various viewpoints and an assessment of the England Coast Path and Suffolk Coast Path. Cumulative effects are assessed in relation to the representative viewpoints in Table 10.32, the coastal paths in Table 10.33 and seascape and landscape character in Tables 10.34 and 10.35.
- 4.7.13. A summary of the effects for seascape, landscape and visual are detailed in Table 10.39 in [APP-079] for each phase – construction, operation, decommissioning – and cumulative effects.
- 4.7.14. The applicant proposes mitigation measures which included a reduction of the northern array boundary and reduction in the tip height of the proposed turbines. The ES concludes that there would therefore be no significant effects upon the seascape, landscape and visual amenities surrounding the offshore elements of the proposed development.

ISSUES CONSIDERED DURING THE EXAMINATION

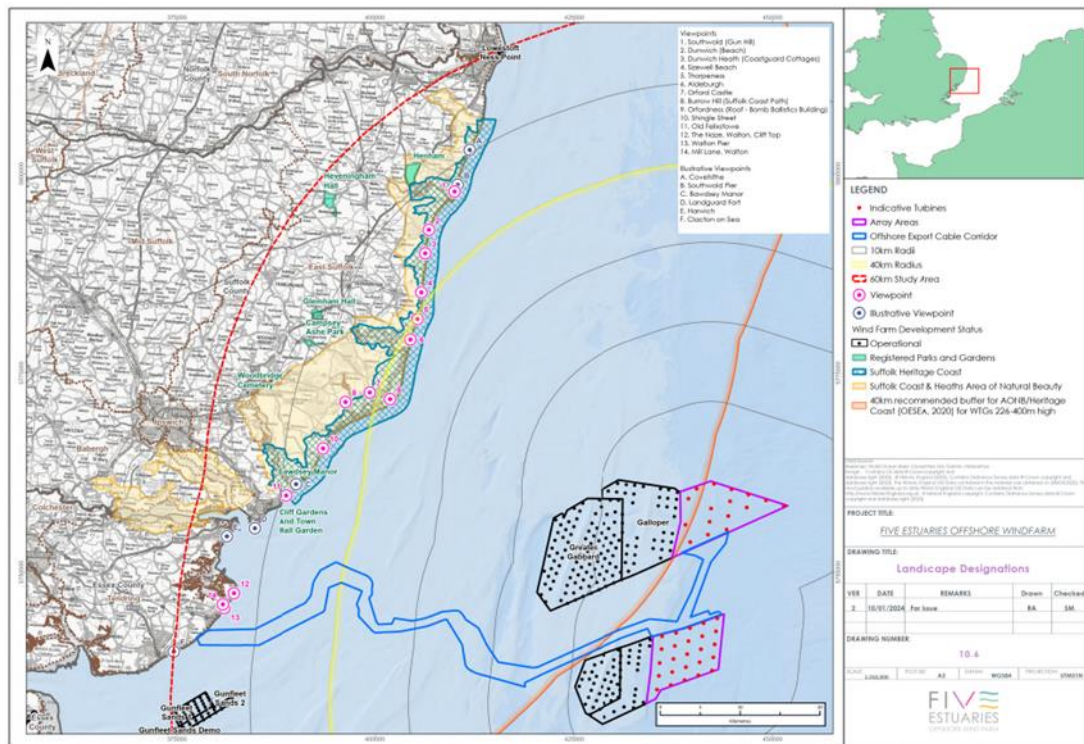
- 4.7.15. During the examination, issues were raised with respect to applying the enhanced duty stated in s245(6) of LURA2023, as in incorporated into s85(A1) of CRoW2000 because of the proximity and visibility of the proposed development relative to the SCHAONB [EV6-001, EV9-001, EV10-001, EV10-012]. The Department for the Environment, Food and Rural Affairs published "*Guidance for relevant authorities on seeking to further the purpose of Protected Landscapes*" (16 December 2024) and following that guidance's publication the applicant and IPs were asked for their comments about in respect of the proposed development. In relation to the enhanced duty extensive submissions were made throughout the course of the examination. SCC and the Suffolk and East Coast and Heaths National Landscape Partnership raised concerns in relation to the application of the enhanced duty during ISH6 [EV10-001].
- 4.7.16. An action arising from ISH6 was for the applicant and IPs to make consolidated/full written submissions relating to the interpretation of the enhanced duty under s85 of CRoW2000. The applicant did that through the submission of [REP6A-002] which largely relied on the opinion from King's counsel submitted as [REP6-050], SCC made its submissions in [REP6A-009] and Suffolk and East Coast and Heaths National Landscape Partnership in [REP6A-010], noting that it was relying SCC's submission in this regard.
- 4.7.17. At the close of the examination, there were remaining matters in disagreement between the Applicant, SCC, the Suffolk and Essex Coast and Heaths National Landscape Partnership and Natural England [REP5-064, REP5-049 and REP8A-053] including the ability to comply with the enhanced duty, its application

and the visual impacts of the proposed arrays. The main issues in relation to seascape, landscape and visual matters at the close of the examination therefore relate to the application of the duty to further the purposes of protected landscapes and the visual effect of the proposed development on the SCHAONB, including visual cluttering and juxtaposition and potential loss of visual gaps between the existing and proposed OWFs (potential curtaining effects) due to the proximity to the existing arrays.

The duty to further the purposes of protected landscapes under the LURA2023 and CROW2000

- 4.7.18. Table 10.13 in the SLVIA [APP-079] identifies the landscape designations and defined areas for the assessment's study area and the zone of theoretical visibility (ZTV). The SCHAONB is located approximately 37.3km from the closet point of the proposed array (shown in the following figure). Table 10.14 in the SLVIA [APP-079] assesses the Special Qualities of the SCHAONB, which include the landscape qualities, scenic qualities, relative wildness, relative tranquillity, natural heritage features and cultural heritage.

Figure 4.10: Location of the proposed arrays relative to the SCHAONB [Source Figure 10.6 in APP-200]



- 4.7.19. Section 245(6) of LURA2023 amended the duty within s85 of CRow2000. The enhanced duty states that *“In exercising or performing any functions in relation to, or so as to affect, land in an area of outstanding natural beauty in England, a relevant authority other than a devolved Welsh authority must seek to further the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty.”*

- 4.7.20. In relation to applying the enhanced duty, the applicant and both SCC and the Suffolk and Essex Coast and Heaths National Landscape Partnership remain in disagreement [[REP5-064](#), [REP5-049](#), [REP6-074](#) and [REP6A-009](#)] on the interpretation of the duty and whether or not the duty has been met in this instance.
- 4.7.21. In its Deadline 6 submission [[REP6-066](#)] and [[PD2-011](#)], Natural England make reference to the LURA2023 and highlighted that it considers that the applicant should demonstrate how the proposed development proposes to enable the decision-maker to discharge the duty to further the purposes of the SCHAONB and any opportunities for enhancement should also be explored and secured as part of the DCO.

Applicant's Position

- 4.7.22. In response to the concerns raised in relation to the enhanced duty, the applicant has outlined its position in [[REP6-048](#)] and submitted an opinion from King's Counsel [[REP6-050](#)]. The applicant considers that the offshore element of the proposed development would not have significant adverse impacts on the natural beauty and special qualities of the SHCAONB and the statutory purpose would not be compromised. In that regard the applicant contends the proposed development has minimised the harm to the landscape and achieved appropriate mitigation to minimise adverse effects.
- 4.7.23. In [[REP6-050](#)] the applicant submitted that the enhanced duty does not override the decision-making framework, and a judgement should be made on what is reasonable and proportionate in fulfilling the duty. A distinction is also made between it not being a duty to ensure that the statutory purpose is furthered but rather, “*seeks to*” further, in a way that is reasonable and proportionate to the facts of the particular case. In [[REP6-050](#)] consideration is given to the matters to be taken into account, which include: the scale, extent and significance of any harm that the development may cause to the statutory purposes of the AONB; the NPS policies in relation to the impacts including any operational constraints; the proportionality of the measures; the impacts of any loss of function amongst other things; the six tests for imposing conditions; and the Planning Practice Guidance relating to the imposition of planning conditions [paragraph 103 in [REP6-050](#)]. The applicant considers that there is no obligation under s85(A1) of CRoW2000 or the NPSs to achieve an improvement to the AONB or avoid any or all harm.
- 4.7.24. The applicant states that the project reasonably conserves the special qualities and features of the SCHAONB because reasonable efforts have been made to avoid or minimise significant adverse impacts and that measures beyond those already identified would not be proportionate.

ExA Considerations

- 4.7.25. NPS EN-1 requires projects to be designed sensitively, given the various siting, operational and other relevant constraints and states that the duty to seek to further the purposes of nationally designated landscapes also applies when considering applications for projects outside the boundaries of AONBs which may have impacts within them. The SoSESNZ should be satisfied that measures which seek to further the purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development (paragraphs 5.10.7 and 5.10.8 in NPS EN-1).
- 4.7.26. The Defra guidance in relation to the new duty requires a context specific and proportionate judgement to be reached, using phrases such as taking appropriate,

reasonable and proportionate steps to explore measures to further the purpose, and “as far as reasonably practical and operationally feasible”.

- 4.7.27. We acknowledge that by its very nature a development of the type proposed will struggle to ‘enhance’ the special qualities of an AONB. The applicant has sought to assess, manage and mitigate the impacts of the proposed development on the SCHAONB, whilst taking into consideration what is operationally feasible and practical with a development of this scale and type.
- 4.7.28. We are of the view that consideration should be given to: the proximity of the WTGs at their closest point to the SCHAONB; the reduction in the proposed WTGs height that arose during the examination to safeguard the operation of the military radar system (which additionally would reduce the visibility of the proposed WTGs for visual receptors); and the meteorological and atmospheric conditions that would potentially occur which, during our site inspection on a clear day, made it very difficult to observe the existing more distant WTGs due to the sea haze. At their closest point the proposed WTGs would be around 37km from the SCHAONB and the majority of the SCHAONB’s coastline is located in excess of 40km from the proposed development. Accordingly, we consider the intervisibility between the proposed development and the SCHAONB would be very limited. We therefore consider that the proposed array areas would not affect the setting of the SCHAONB. The applicant has assessed the proposed development impacts on the setting and special qualities of the SCHAONB as being not significant, infrequent and long distance. The ExA concurs with that assessment, having had regard to the evidence presented to us and our own observations of the area.
- 4.7.29. The wording of s85 of CRow2000 refers to ‘seek to’ and does not imply a legal duty to enhance or further the purpose of a protected landscape. We consider that the design measures the applicant has applied to mitigate the effects of the proposed development on the SCHAONB’s setting are reasonable and appropriate. Having regard to the nature of the proposed development and the absence of obligations under s85(A1) of CRow2000 or the NPS to secure an improvement to the SCHAONB or avoid any harm whatsoever, we consider that the applicant has applied proportionate measures in designing the proposed development to conserve the special qualities of the SCHAONB. Accordingly, we consider no further mitigation would be necessary in fulfilment of the enhanced duty under s85 of CRow2000.

Visual Effects

- 4.7.30. NE has detailed their outstanding concerns in [\[REP8A-053\]](#). Those concerns relate to the applicant’s judgements on the effects, the potential for a densification effect, the sensitivity of the special qualities of the SCHAONB, the potential for visual juxtaposition with the existing arrays, the mitigation for any cluttering effects and the potential for a curtaining effect to occur.
- 4.7.31. NE in [\[REP6-069\]](#) provides a table (Table 1) with its own numeric assessment of the effects of the proposed development, showing apparent heights for the closest of the proposed WTGs under a 370m tip height MDS scenario from selected viewpoints. It considers anything above 0.4 degrees in comparison to the apparent heights of Greater Gabbard and Galloper from Orford Ness as being potentially significant and have highlighted the viewpoints at Dunwich Heath, Sizewell Beach, Thorpeness, Aldeburgh and Orford Ness to be significant.

Applicant’s Position

- 4.7.32. The applicant has responded to NE's concerns in [\[REP5-075\]](#), [\[REP7-076\]](#) and [\[REP8A-038\]](#). At the close of the examination, the applicant's position was that in relation to the significance of impacts, NE had used a quantitative approach based on the vertical field of view whereas the applicant's assessments are based on the findings in the SLVIA [\[APP-079\]](#) supported by viewpoints and photomontages, which indicate that impacts on views and the special qualities of the SCHAONB would be likely to be moderate/minor adverse or less, and that a finding of significant landscape and visual effects would be disproportionate given the distance between the closest of the proposed WTGs and the coastline.
- 4.7.33. In response to the potential effects arising from the proposed arrays and the existing arrays, the applicant has detailed the design mitigation in Table 10.18 in [\[APP-079\]](#). In addition, the further reduction in blade tip height to 370m maximum would be secured under Requirement 2 of the dDCO [\[REP8A-004\]](#) and would serve to reduce the ZTV and apparent scale of the WTGs and achieve a reduction in their lateral spread. That it is submitted would assist in avoiding filling in the gap between the existing wind farms when viewed from the Suffolk Coast.
- 4.7.34. The applicant considers that there is only one viewpoint, Viewpoint 1 Southwold [\[APP-204\]](#) where the gap would be bridged (narrowed) by the proposed array, and in all other viewpoints a gap would be maintained between the proposed array and the East Anglia Two OFWF. The applicant has also submitted that a reduction in the potential for lateral spreading has arisen because of the lessening in the extent of the proposed northern array, in the period between the undertaking of pre-application consultations and the application's submission.

ExA's Considerations

- 4.7.35. We undertook a number of unaccompanied site inspections [\[EV5-001\]](#), [\[EV5-002\]](#), [\[EV5-003\]](#), [\[EV5-004\]](#), [\[EV5-005\]](#) and sought to view the existing arrays from a number of the agreed viewpoints. During the daytime visits the weather was clear and sunny, however despite the favourable weather conditions, the more distant existing arrays were hard to see and were not readily visible because the sea haze.
- 4.7.36. In relation to the seascape effects, we have considered the level of impacts identified by the applicant in its SLVIA [\[APP-079\]](#) and we are content with the methodology used by applicant to reach its conclusions. It is noted that NE's quantitative approach does not appear to be set out in relevant guidance or best practice. We consider the applicant's assessments undertaken in its SLVIA [\[APP-079\]](#) are appropriate and proportionate and are supported by numerous photomontages. Taking into account the visualisations, whilst the proposed development would result in an increase in number of WTGs out at sea and form an extension to the existing arrays, the reduction in the northern array and the reduction in blade tip height has served to reduce the visual impacts and maintain a suitable level of separation between the existing, consented and proposed offshore wind farms.
- 4.7.37. The applicant has worked to minimise and mitigate the visual impacts on the Essex and Suffolk coastlines and the SCHAONB, whilst retaining the operability of the proposed development and the need to accommodate other offshore activities, such as the passage of commercial vessels to and from the various nearby ports and the undertaking of commercial fishing.
- 4.7.38. Furthermore, the distance from the coastline of around 37km at its closest point would reduce the proposed development's visual impacts. When we undertook our

site inspections on 6 and 7 March 2025, conditions were clear and sunny and yet the sea haze meant that visibility for the more distant existing array areas was extremely limited.

- 4.7.39. Accordingly, we consider that the proposed arrays would not give rise to a significant visual effect.

CONCLUSIONS

- 4.7.40. In conclusion, as a result of the presence of the existing arrays, the proposed development's distance from shore and the evidence put forward by the applicant and other IPs, we are content that whilst the proposed development would increase the number of WTGs out at sea and the proposed WTGs would be taller than the existing WTGs, there would be no unacceptable impacts for the seascape or the SCHAONB.
- 4.7.41. Accordingly, in respect of seascape, landscape and visual matters, the ExA considers the proposed development would comply with the relevant the policies stated in NPS EN-1 and NPS EN-3 and Policy SOC3 of the EIEOMP and Policy SE-SCP-1 of the SEIMP. There would be some conflict with the requirements of s85(A1) of CROW2000, because it would not be possible for a development of this scale, by its very nature, to conserve or enhance the special qualities of the SCHAONB, in terms of landscape and scenic qualities. Given that low level of conflict we attach a little negative weight to the seascape, landscape and visual effects of the proposed development in the overall planning balance.

4.8. OTHER OFFSHORE INFRASTRUCTURE AND ACTIVITIES

- 4.8.1. East Anglia Two Limited (EA2L) as the applicant/undertaker for the East Anglia Two Offshore Wind Farm (EA2) contends that the proposed development's siting relative to EA2 would cause downstream wake (airflow disruption) and blocking effects. EA2L has submitted that those effects would deprive EA2 of some of its wind resource adversely affecting that wind farm's generating output. EA2 forms part of the East Anglia Offshore Wind Farm Zone, a zone that was granted rights for development by The Crown Estate (TCE) as part of its third seabed leasing round in 2009. The lease option for EA2 was signed in February 2016 [\[REP6-079\]](#) and its DCO was made on 31 March 2022. The installation of EA2's WTGs had not been commenced at the examination's close [paragraph 2.1 in [REP8-044](#)].
- 4.8.2. The Ministry of Defence (MoD) raised concerns about the affect the operation of the originally proposed WTGs could have the operation of its radar facility at Neatishead in [\[REP2-055\]](#)
- 4.8.3. No other issues concerning other offshore infrastructure were raised by IPs during the examination. Issues relating to other offshore activities, such as navigation and shipping and commercial fishing are reported upon in other sections in Chapter 4. In this section we therefore consider:
- Whether other OWFs close to a proposed OWF should be considered as being other offshore infrastructure for the purposes of NPS EN-3.
 - Whether the proposed development's proximity to EA2 would adversely impact upon the latter's operation, necessitating the securing of mitigation in any made DCO.
 - The effect of the proposed development on the operation of the military radar system.

POLICY

4.8.4. Section 5.5 of NPS EN-1 addresses civil and military aviation and defence interests.

NPS EN-3 addresses “*Other offshore infrastructure and activities*” in the following paragraphs:

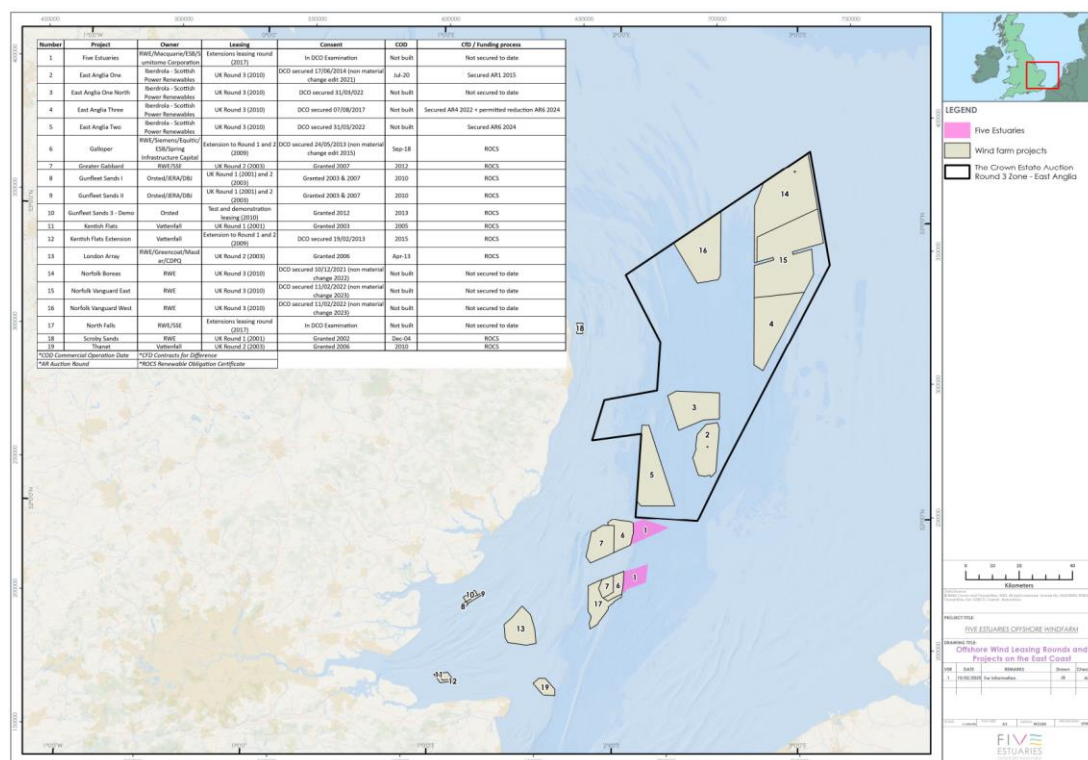
- 2.8.44 to 2.8.50 - applicant's assessment and factors influencing site selection and design
- 2.8.196 to 2.8.203 - applicant's assessment of impacts
- 2.8.261 and 2.8.262 - mitigation
- 2.8.341 to 2.8.348 - SoS's decision making with respect to impacts

THE APPLICATION

4.8.5. Neither the ES nor any of the other submitted application documents provide an assessment of wake loss for either EA2 or any other nearby existing or proposed offshore wind farms.

4.8.6. The northern boundary of the proposed northern array area would be just over 5km from the southern extremity of the offshore limits for EA2. The figure below shows the siting of EA2 relative to the proposed development.

Figure 4.11 Location of existing and proposed offshore wind farms granted leases by the Crown Estate [Source Appendix 1 in REP6-047]



WAKE LOSS EFFECTS

EA2L

- 4.8.7. EA2L contends that the proposed development's proximity to EA2 would, through wake effects, reduce the amount of wind received by EA2 resulting in generating losses that would be "material" [section 1 in [REP2-079](#)].
- 4.8.8. EA2L's case is set out in [[REP2-079](#), [REP4-072](#), [REP4-073](#), [REP6-079](#), [REP7-116](#), [REP7-117](#) and [REP8-044](#)]. In Annex 8 of [[REP6-079](#)] EA2L has provided a wake loss assessment (WLA), as requested by the ExQ in [[PD-019](#)]. In section 4 of that WLA it is estimated that the interaction between EA2's and the proposed development's WTGs would cause EA2 to experience generating losses of 1.3% (expressed as a central estimate) with 0.4% of uncertainty around the standard deviation. In section 5 of EA2L's WLA it is explained that the impact for EA2 has been predicted to range between 3.4% for the WTGs along its southern edge reducing to 0.2% for the WTGs along EA2's northern edge [e-page 266 in [REP6-079](#)].
- 4.8.9. Further to the ExA's request for further information [[PD-031](#)] EA2L provided the following clarifications in [[REP7-117](#)]:
- The installed generating capacity for EA2 would be 960 megawatts (MW).
 - The predicted annual output for EA2, without any wake effect from the proposed development, is estimated to be 4,030.6 gigawatt hours (GWh), based on a capacity factor (similar to load factor) of 47.9%.
 - Applying the central wake loss estimate, EA2's predicted annual generating output for EA2 would be 3,978.2GWh, based on a reduced capacity factor of 47.3%. That would amount to a generating loss of 52,398 megawatt hours (MWh) per year.
 - Applying a 95% confidence level to the wake effect it is estimated, it is estimated EA2 would experience an annual generating loss of 84,642MWh.
- 4.8.10. In [[REP7-117](#)] EA2L explained the above mentioned generating loss estimates take account of internal wakes for EA2 and external wakes from the East Anglia One, Greater Gabbard and Galloper (the nearby operating wind farms) and East Anglia Three, East Anglia One North, Norfolk Vanguard and Norfolk Boreas (wind farms either under construction or consented). A concern EA2L has is that should the layout for the proposed development "... *include a very high turbine density to the northern boundary* ..." that could result in significantly higher generating losses for EA2 [paragraph 4.6 in [REP7-117](#)], with there being "... *nothing to stop Five Estuaries potentially producing a layout which maximises turbines on their north-eastern boundary* ..." [paragraph 3.2 in [REP8-044](#)].
- 4.8.11. EA2L contends that when regard is paid to the policy relating to "Other offshore infrastructure and activities" in NPS EN-3 that the applicant should have included a WLA in its application. EA2L considers the proposed development's impact on EA2's operation is an important and relevant matter for the SoSESNZ's decision making. With respect to the SoSESNZ's decision making, EA2L cites, as precedent, the Awel y Môr Offshore Wind Farm (AyM) application's determination and the inclusion of Requirement 25 in its made DCO. That requirement involves the submission of a post consent WLA and details of any necessary mitigation measures for the SoSESNZ's approval prior to the installation of any WTGs [e-page 67 in [REP4-044](#)]. Requirement 25 was imposed on the ExA's recommendation.

- 4.8.12. In [\[REP7-116\]](#) EA2L has suggested that the proposed development's impact on the operation of EA2 might be mitigated by ensuring there was sufficient separation between their WTGs. In that regard the WTGs in close proximity to the proposed development's northern boundary are expected to have the greatest wake effects for EA2. EA2L has submitted, based on the results of its WLA, that a distance of 8km between the respective wind farms' WTGs might reduce the predicted wake losses from 1.3% to 1.1%, section 2 in [\[REP7-116\]](#). To mitigate any wake losses EA2L has submitted that an AyM type WLA requirement should be included in any made DCO for the proposed development.
- 4.8.13. EA2L further contends any lost output for EA2 due to wake effects would also have implications for the proposed development's greenhouse gas (GHG) emissions assessment, something that ought to have been assessed by the applicant [paragraph 1.5 in [REP7-116](#)].

The applicant

- 4.8.14. The applicant is of the view that policy relating to "*Other offshore infrastructure and activities*" included in NPS EN-3 does not apply to neighbouring offshore wind farms and that there is no requirement for it to undertake a WLA for the effects of its proposed development on EA2. The applicant contends that prior to AyM's determination it had been the industry's understanding that the wake loss impact of one wind farm on another was not for consideration, with offshore wind farms being beyond the scope of "*Other offshore infrastructure and activities*" for the purposes of both the extant version of NPS EN-3 and its predecessor. In that regard the applicant has referred to EA2L not being obligated to undertake either a WLA or provide mitigation for EA2's wake effects on the Galloper, Greater Gabbard or Five Estuaries offshore wind farms when the application for EA2 was being determined [section 9 in [REP5-073](#)]. In [\[REP5-073\]](#) the applicant contends:

"... to require the Applicant to undertake an assessment of potential wake effects of the Proposed Development on the East Anglia Two project and potentially to take steps to minimise any such effects, where East Anglia Two Limited has not been required to undertake an equivalent assessment of its impacts on other offshore wind farms or seek to minimise them would create an unequal playing field between developers and have the potential to hinder the development of offshore wind projects, contrary to the National Policy Statements and wider government policy for renewable energy."

- 4.8.15. The applicant contends AyM was incorrectly determined with respect to any wake loss effects for Rhyl Flats. See for example [section 1.8 in [REP6-045](#) (the applicant's summary of its oral case made at ISH6) and section 3.24 in [REP8A-038](#) (applicant's closing examination submissions)].
- 4.8.16. The applicant argues that TCE's provision of 5km buffers around wind farms, as part of the leasing process, takes account of wake effects, as confirmed by TCE when it responded to an ExA question as part of AyM's examination. The 5km buffer would be complied with because at its closest the proposed development would be located approximately 5.3km from the boundary with EA2 [page 56 in [REP3-024](#)].
- 4.8.17. In [\[REP8A-038\]](#) the applicant has further contended that the references to "*Other offshore infrastructure and activities*" should in any event do not be applied to any wake effects for EA2 because that wind farm does yet exist and its application was submitted with full knowledge that the proposed development would be promoted given the sequencing of the granting of leases for both EA2 and the proposed

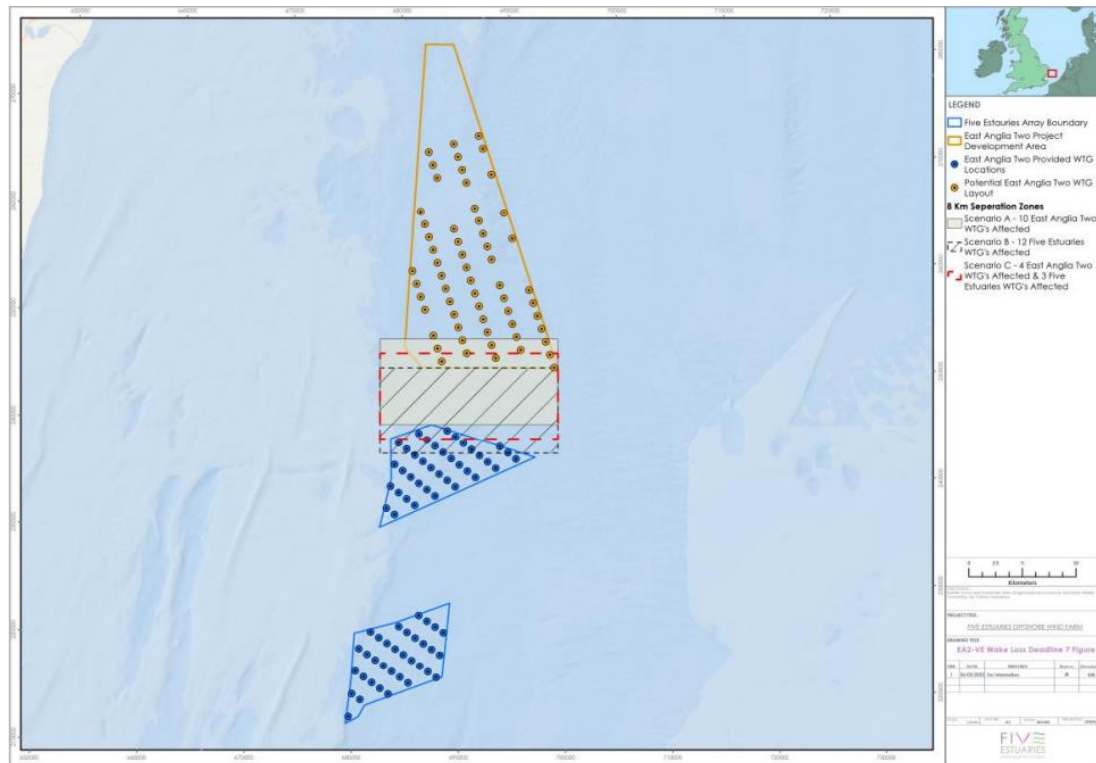
development. With respect to the later point the applicant has advised that it was announced in August 2019 that an extension to the Galloper Offshore Wind Farm would proceed, a matter it considers EA2L should have taken account of in its planning for EA2 [paragraph 2.1.12 in [REP7-087](#)].

- 4.8.18. The applicant argues it would be unreasonable for it to be required to mitigate any wake losses for EA2 by reducing the extent of the proposed northern array area. That is because that would be inconsistent with meeting the government's objective for maximising the capacity of offshore wind farms (paragraph 2.8.2 in NPS EN-3).
- 4.8.19. In section 2.3 of [\[REP7-087\]](#) the applicant has commented on EA2L's WLA and considers that assessment is founded on "... *the incorrect premise that East Anglia Two should be regarded as akin to an existing, operational wind farm with a fixed layout which will inevitably and unavoidably be affected by wake effects from the Proposed Development*" [paragraph 2.3.3 in REP7-087].
- 4.8.20. The applicant is critical of EA2L's WLA, in summary, for the following reasons:
- No consideration has been given to EA2's potential to cause wake losses for the proposed development and the operational Galloper and Greater Gabbard Winds Farms.
 - WTGs have rated wind speeds determining their maximum generating capacity and when the wind speed exceeds the rated speed a turbine will not generate any extra energy. Below the rated wind speed changes in wind speed have a significant effect on generating output. Accordingly, if the wind at WTGs affected by wakes remains above their rated wind speed then there will be a negligible effect on output.
 - While the wind rose presented by EA2L appears to show strong south westerly winds prevailing, EA2 will have an effect on the proposed development when the wind is from the non-prevailing direction, which should have been considered by EA2L.
 - None of the operational or proposed wind farms "*up wind*" in the prevailing wind direction have been modelled and any wake or blocking effects for EA2 have not been accounted for leading to an overestimation of the proposed development's impact.
 - As EA2 does not exist assumptions about the types of WTGs it would utilise and their operational efficiency will have been relied upon, resulting in more uncertainties in the inputs used to produce the WLA that would be the case if operational data from an existing wind farm was available.
 - As the design for the proposed development has not been finalised there are uncertainties about any impact it might have for EA2's operation.
 - WTGs on the edge of wind farms are known to be more productive than interior ones because they are not subject to internal wake effects. While the proposed development's northern WTGs and EA2's southern WTGs would interact with each other there would be greater separation between those peripheral WTGs compared with the internal WTG spacing within each project.
 - Uncertainties identified in EA2L's WLA constitute the standard deviation. It is more appropriate to reflect uncertainty through estimating confidence levels. Based on a normal distribution graph "... *with a mean of 1.3% and a standard deviation of 0.4% there is a 95% chance that the value of wake loss will be between 0.5 and 2.1%; or there is a 68% chance that the value of wake loss will be between 0.9 and 1.7%*" [paragraph 2.3.37 in REP7-087]. Contextually, the range for the 95% confidence level is greater than the central estimate of wake loss and that level of uncertainty is before any assumption uncertainty is accounted for. That results in a high level of uncertainty which has implications

for estimating impacts on generating output. The average standard deviation for an entire wind farm will have a lower range than for individual WTGs, given an individual WTG's output is affected by where it is located within an array.

- 4.8.21. Given the uncertainties and limitations of WLAs the applicant contends they are *"... not reliable enough to inform decision-making"* [paragraph 2.4.5 in REP7-087].
- 4.8.22. In section 2.3 of [REP7-087] the applicant has commented on the following potential mitigation measures that could be used to reduce wake effects between the proposed development and EA2:
- Increasing the buffer between the wind farms. However, if their nameplate (installed) capacities were to be maintained that would be likely to require WTGs being sited closer together, causing greater internal wakes and reduced output.
 - Reducing the number of WTGs in both projects, while reducing their wake interaction would reduce their generating capacities.
 - Using WTGs' control systems designed to maximise generating output to curtail wake effects would make the respective wind farms less productive.
 - Designing the proposed development to minimise wake effects for EA2 could result in adverse effects for navigation and shipping and environmental receptors, lead to WTG fatigue and cause other maintenance issues.
- 4.8.23. The applicant has further submitted that EA2L's WLA:
- "... is excessively conservative (ie it provides an unrealistically high estimate) of the Proposed Development on East Anglia TWO as it does not consider North Falls, or the other operational wind farms "up wind" in the prevailing direction which will also be impacting the wind resource in the "up wind" prevailing direction. These additional wind farms that have not been modelled will further reduce the East Anglia TWO capacity factor in both the "without Five Estuaries" and "with Five Estuaries" calculations."* [paragraph 4.1.4 in [REP8-038](#)]
- 4.8.24. Table 4 in [REP8-038] identifies an example range of reciprocal wake effects for the proposed development attributable to EA2 applying various assumed capacity factors (based on installed capacity between 920MW and 1080MW) and impact levels (expressed as percentages). Annually EA2's waking effects for the proposed development could cause losses of between 7,720MWh and 45,320MWh.
- 4.8.25. In section 5 of [REP8-038] the implications of wake effects on the assessment of GHG emissions for the proposed development is considered. The applicant advises that for the range of wake effects predicted by EA2L the implications upon GHG emissions would be well within the sensitivity of the submitted GHG assessment [\[APP-094\]](#). That assessment explored load factors ranging between 45% and 53% for the proposed development. The applicant therefore contends no further assessment is necessary and there are no implications for GHG emissions, planning policy or Habitat Regulations assessment cases it has made.
- 4.8.26. In section 5 of [REP8-038] consideration is given to mitigating wake effects by establishing an 8km buffer as referred to by EA2L in [\[REP7-116\]](#), so that either EA2 or the proposed development or both projects reduced the number of WTGs they installed by between seven and twelve, as shown in the figure below. Applying an 8km buffer and parameters used by EA2L in its WLA, the applicant has undertaken an assessment using three scenarios removing WTGs. If those affected WTGs each had installed generating capacities of 15MW, generating losses of between 440.6GWh and 755.3GWh might arise annually.

Figure 4.12 Impact on WTG numbers if an 8km buffer was created between the proposed norther array area and the East Anglia Two offshore wind farm [Figure 1 in REP8-038]



4.8.27. An alternative to removing WTGs would for them to be more densely sited. The applicant submits that would increase internal wind farm wake effects that would exceed any inter wind farm wake effects. Increasing the buffer distance between the wind farms and increasing their WTG densities would result in greater generating losses compared with applying no mitigation, a conclusion supported by the findings in the “Offshore Wind Leasing Programme Array Layout Yield Study” of (October 2023)⁵ [Appendix A in REP8-038]. The applicant contends applying the mitigation suggested by EA2L in section 2 of [REP7-116] “... can be expected to reduce the UK’s total offshore wind generation capacity and would be in conflict with government policy for renewable energy policy in EN-3 ...” [paragraph 5.1.12 in REP8-038].

4.8.28. The applicant has therefore submitted that no wake mitigation measures should be incorporated into any made DCO, with it contending that an AyM type requirement “... would fail the legal tests for planning requirements, in particular the tests of necessity, enforceability, precision and overall reasonableness” [paragraph 6.1.1 in REP8-038].

ExA’s considerations

4.8.29. While the applicant has argued vigorously that the sections of NPS EN-3 that address “Other offshore infrastructure and activities” do not apply to offshore wind farms, we do not share that view. That is because while NPS EN-3’s section 2.8 is offshore wind technology specific that section’s references to other offshore infrastructure does not imply there is a ‘closed list’ of applicable infrastructure types. No infrastructure types are expressly excluded in paragraphs 2.8.44 to 2.8.50,

⁵ Prepared by the Frazer Nash Consultancy on behalf of The Crown Estate

2.8.196 to 2.8.203 or 2.8.341 to 2.8.348. For example, in paragraph 2.8.44 there is reference to “... *the presence of other offshore infrastructure, such as oil and gas ... marine aggregate dredging, telecommunications, or activities such as aviation and recreation*” (emphasis added by the ExA). The use of the phrase “*such as*” clearly indicates that the infrastructure types that are referred to do not constitute an exhaustive list.

- 4.8.30. Additionally, when it comes to the SoSESNZ’s consideration of impacts in decision making, paragraph 2.8.300 advises that impacts identified in the following paragraphs of NPS EN-3, including paragraphs 2.8.341 to 2.8.348, “... *are not intended to be exhaustive*.” Paragraph 2.8.301 goes on to state “*The Secretary of State should consider any impacts which it determines are relevant and important to its decision*.”
- 4.8.31. We therefore consider that wording of NPS EN-3 should not be read as precluding the consideration of wake loss effects. The ExA is therefore of the view that the matter for consideration is whether any wake effects caused by the proposed development would materially undermine the government’s expectation that “... *offshore wind ... will play a significant role in meeting the demand for electricity and decarbonising the electricity system ...*” and the objective for all offshore wind developments to “... *maximise their capacity within the technological, environmental and other constraints of the development*” (respectively paragraphs 2.8.1 and 2.8.2 of NPS EN-3).
- 4.8.32. EA2L predicts that any generating losses for EA2 would be of the order of 1.3%. The applicant accepts that there would be some wake effects for EA2, but it also contends that the proposed development would at times experience wake effects caused by EA2. Based on the parties’ evidence we consider there is uncertainty about how much lost output either EA2 or the proposed development would experience because of wake effects. That said, if reliance is only placed on EA2L’s evidence we consider any generating losses experienced by EA2 would be relatively modest and therefore marginal. We say that having regard to EA2L’s predictions for its generating output with and without the proposed development referred to above. In that regard we consider it notable that EA2L has not sought to argue any generating losses attributable to the proposed development would render EA2 unviable.
- 4.8.33. We consider the absence of a viability argument on EA2’s part to be unsurprising. That is because EA2L predicts EA2 would generate around 4,031GWh per year without the proposed development, reducing, at worst, to 3,946GWh with the proposed development. EA2L’s predicted worst case loss being around 85,000MWh per year, a figure appearing to make no allowance for EA2 having any reciprocal effects for the proposed development. A predicted worst case generating loss of 85,000MWh per year for EA2 is a figure we consider would be comparatively modest and should be viewed in the context of the UK’s future demand for electricity being orders of magnitude greater, being measured in 100s of terawatt hours per year (paragraph 3.3.3 in NPS EN-1).
- 4.8.34. EA2L’s primary concern about generation losses for EA2 appears to relate to the proximity and density of WTGs within the proposed northern array area, submitting in paragraph 4.6 of [\[REP7-117\]](#) that a “... *very high turbine density ...*” in that part of the proposed development might cause significant losses of generating output for EA2. We find the likelihood of WTGs being sited at a very high density along the proposed development’s northern boundary to be highly improbable. That is because under Requirement 2 in Part 1 of Schedule 2 of the dDCO [\[REP8A-004\]](#)

there is a parameter securing a minimum siting distance of 830m between the centre points of the individual WTGs. A minimum separation of 830m between WTGs would appear to us not to constitute a high density.

- 4.8.35. During the course of Issue Specific Hearing 2 (ISH2), as recorded in the applicant's post ISH2 note [paragraph 2.3.9 in [REP1-059](#)], the applicant explained that the separation distance of 830m had been technically derived to avoid turbine fatigue and impairment of the wind resource internal to the proposed development. In paragraph 2.3.9 of [REP1-059] it is explained the 830m separation figure has been calculated by multiplying the turbine rotor diameter by four and subtracting 50m as a micro siting allowance. Applying that separation formula to the maximum rotor diameter quoted in the dDCO the distance between the largest WTGs that could permissibly be installed would be of the order of 1.3km.
- 4.8.36. Accordingly, having regard to the applicant's oral and written submissions concerning WTG siting, it appears to us it would not be in the interests of the applicant/undertaker/operator for the WTGs to be sited closer together than 830m. Given any made DCO would secure a minimum separation distance of 830m between WTGs within the proposed development, we consider a very high density along the proposed development's northern boundary would be highly improbable. That is something we consider should have been accounted for in EA2L's WLA, given the WTG 830m separation distance was a parameter included in the dDCO submitted with the application [[APP-024](#)] and remained in every subsequent update of the dDCO, including the finally submitted version [[REP8A-004](#)]. If the 830m minimum separation distance has not been accounted for in EA2L's WLA, then allowing for that would be likely to reduce any wake loss effects estimated by EA2.
- 4.8.37. With respect to effects on GHG emissions, we are content that any effects attributable to wake effects would come within the sensitivity included in the applicant's assessment [[APP-094](#)]. Accordingly, we are not persuaded that any generating losses for EA2 attributable to wake effects would have a significant effect on the ability to reduce GHG emissions in the UK. That is because the UK is on a path to ending its reliance on burning fossil fuels for power generation and replacing that generation with renewable sources, as demonstrated, for example, by "*... an ambition to deliver up 50 gigawatts (GW) of offshore wind by 2030 ...*" (paragraph 3.3.21 in NPS EN-1). That is expected to give rise to very substantial reductions in GHG emissions and we consider any modest generating losses because of wake loss effects at individual wind farms are unlikely to have any significant effect on the UK's overall reduction in GHG emissions.
- 4.8.38. In terms of mitigating any wake loss effects, EA2L appears to be seeking greater separation between EA2 and the proposed development [section 2 in [REP7-116](#)], with that being achieved via the imposition of an AyM type requirement. We share the applicant's views, as expressed in section 5 of [[REP8-038](#)], that such mitigation would be likely to be counterproductive. That is because the resultant reduction of installed WTGs and/or their more dense siting in a smaller northern array area would lead to a generating loss greater than would be the case maintaining the proposed minimum separation of 5.3km between the proposed development's WTGs and those of EA2 [page 56 in [REP3-024](#)]. We therefore consider it has been demonstrated that imposing an AyM type requirement would be inappropriate and incompatible with the government's policy objective for maximising the generating capacity of all offshore wind farms (paragraph 2.8.2 of NPS EN-3).
- 4.8.39. It is unfortunate that the applicant has refused to undertake a WLA. However, for the reasons given above we consider that is of no particular consequence, with the

predictions for EA2's generating losses being quite modest in relative terms. Given the likelihood of any lost generating output for EA2 being quite modest, we consider the absence of an applicant WLA should not be treated as an impediment to the determination of this application, particularly when having regard to paragraph 2.8.261 of NPS EN-3.

- 4.8.40. In making its case, EA2L has sought in part to rely on the way wake loss was treated as part of the making of a DCO for AyM. However, for the purposes of the determination of the current application, we consider the approach taken for AyM should not be treated as setting a precedent. That is because the issue of wake loss for AyM concerned the interaction between the operational Rhyl Flats Offshore Wind Farm and the proposed AyM, with the former nearing the end of its operational life and being comparatively small⁶ and there being a predicted generating loss of 26,000MWh over five years⁷. The circumstances for the SoSESNZ in determining the current application and AyM are not directly comparable because EA2 and the proposed development would have similar generating capacities, with any losses of generating output for one caused by the other likely in part to be offset by the other's output, and EA2, unlike Rhyl Flats, not yet built and operational.
- 4.8.41. As indicated above, we consider any wake loss effects for EA2 would be very limited and would likely be outweighed by the contribution the proposed development could make to the UK's generating capacity. We are not persuaded that any wake effects experienced by EA2 would be at a level requiring mitigation secured in any made DCO for the proposed development. Accordingly, we find that without mitigation of any wake effects for EA2 there would be no conflict with NPS EN-3, most particularly paragraphs 2.8.261 and 2.8.345. Based on the considerations discussed above, the ExA concludes that the proposed development's effect on the operation of EA2 attracts very little negative weight against the making of a DCO.
- 4.8.42. Notwithstanding whether the various paragraphs in NPS EN-3 relating to "*Other offshore infrastructure and activities*" do or do not include wind farms, having regard to the process by which TCE awards leases in various rounds, we are of the view there is an inevitability that some wind farms will be sited at such a proximity to one another for the potential for wake effects to be experienced. That is something that we consider prospective developers for wind farms and TCE ought to be taking account of respectively when leases are being sought and awarded and that the concerns raised by EA2L are of a commercial nature rather than something to be addressed as a land use planning matter. It is evident from the various submissions made by EA2L and the applicant, for example page 56 in [\[REP3-024\]](#), that under the leases granted by TCE should a lessee wish to undertake works encroaching into its lease's buffer then those works cannot be progressed without an adjoining lessee's agreement. That provides a means for protecting the commercial interests of rival wind farm developers/operators. We would observe that the government has identified that this is an issue that it needs to address, as highlighted in the "Clean Power 2030 Action Plan: A new era of clean electricity" (December 2024) [see Annex 6, e-page 247 in [REP6-079](#)].

MILITARY RADAR

- 4.8.43. The MoD in [\[REP2-055\]](#) objected to the proposed development on the grounds of potential interference with the operation of its air defence radar equipment at

⁶ An installed capacity of 90MW [e-page 15 in [REP6-079](#)]

⁷ Annex 3 in [\[REP6-079\]](#), e-page 48]

Neatishead. That was because of the scale of the originally proposed WTGs, given their maximum height of 399m above the lowest astronomical tide. In response to the MoD's concern the applicant amended the application reducing the proposed WTGs maximum height above the lowest astronomical tide to 370m in the version of the dDCO submitted at Deadline 3 [\[REP3-005\]](#), a change to the proposed development which remained in the dDCO, including in the finally submitted version [\[REP8A-004\]](#).

- 4.8.44. The MoD in [\[AS-065\]](#) and [\[REP8-042\]](#) advised that while the reduced height turbines would be detectable to its radar equipment there would be no operational impact. The MoD therefore confirmed it no longer had an objection to the proposed development.
- 4.8.45. Given the withdrawal of the MoD's objection, we are content that the proposed development would have no adverse effect on the operation of the military radar system and that in that respect there would be no conflict with the relevant policy in NPS EN1 and NPS EN-3. We therefore consider this to be a neutral matter in the planning balance.

5. ONSHORE ISSUES

5.1. INTRODUCTION

5.1.1. In this chapter we assess the planning issues concerning the following onshore matters:

- Landscape and visual effects
- Farming
- Traffic and transport
- Living conditions for residents of the area
- Onshore ecology and biodiversity
- Flood risk and water quality

5.2. LANDSCAPE AND VISUAL EFFECTS

INTRODUCTION

5.2.1. This section considers the proposed development's landscape and visual effects for the construction, operation and decommissioning phases. Matters relating to seascape and visual considerations are considered in Chapter 4 of this recommendation.

5.2.2. As part of a 'rebranding' exercise for areas of outstanding natural beauty (AONB), they are in some instances being referred to as national landscapes, as a result of recent policy and guidance changes. However, AONB is still the statutory term used in the legislation including 245(6) in the Levelling Up and Regeneration Act 2023 (LURA2023), and the applicant and other IPs continued to refer to AONB. Accordingly for the purposes of this section, we have also referred to AONB.

LEGISLATION, POLICY AND GUIDANCE

5.2.3. In considering onshore landscape and visual effects the Examining Authority (ExA) has had regard to the following matters.

5.2.4. As a consequence of the proposed onshore substation's (OnSS) proximity to the Suffolk Coastal Heaths Area of Outstanding Natural Beauty (SCHAONB) and Dedham Vale Area of Outstanding Natural Beauty (DVANOB) the provisions of section 85 of the Countryside and Rights of Way Act (2000) (CRoW2000) are important and relevant.

5.2.5. National policy relevant to the consideration of landscape and visual effects is stated in the National Policy Statements (NPS) for energy as follows:

- Section 5.1 in the Overarching National Policy Statement for Energy (EN-1) (NPS EN-1)
- National Policy Statement for Renewable Energy Infrastructure (EN-3) (NPS EN-3) – paragraphs:
 - 2.5.2 and 2.5.3 – consideration of good design
 - 2.6.2 – flexibility in the project details
 - 2.8.43, 2.8.73 and 2.8.208 – applicant's assessment of impacts
 - 2.8.213 – mitigation
- National Policy Statement for Electricity Networks (EN-5) (NPS EN-5) paragraphs:

- 2.2.8 to 2.2.11 – factors influencing site selection and design
- 2.4.1 to 2.4.4 – consideration of good design for energy infrastructure
- 2.7.1 to 2.7.5 – holistic planning
- 2.9.7 to 2.9.12, 2.9.18 and 2.9.19 – applicant assessment
- 2.10.5 to 2.10.8 – mitigation
- 2.11.2 to 2.11.6 – Secretary of State decision making

5.2.6. We have also had regard to the following local impact reports (LIR), to the extent that they are relevant to this topic:

- Essex County Council (ECC) and Tendring District Council (TDC) joint LIR [[REP2-043](#) and [REP2-042](#)]
- Babergh District Council (BDC) [[REP2-040](#)]
- East Suffolk Council (ESC) [[REP2-041](#)]
- Suffolk County Council (SCC) [[REP2-046](#)]

5.2.7. We have also had regard to the policy contained in Chapter 15 (Conserving and enhancing the natural environment) of the National Planning Policy Framework (2024) as a potentially important and relevant consideration.

THE APPLICATION

5.2.8. The applicant's landscape and visual impact assessment (LVIA) [[APP-084](#)] forms part of the submitted Environmental Statement (ES) and the LVIA is supplemented by the following documents:

- The Onshore Project Description [[AS-041](#)]
- The LVIA Figures [[APP-180](#) to [APP-196](#) inclusive]
- The Onshore Substation Design Principles Document [[REP8-020](#)]
- The Outline Landscape and Ecological Management Plan (oLEMP) [[REP8A-017](#)]
- The Arboricultural Report [[REP8-026](#)]
- The Tree Preservation Order and Hedgerow Plan [[AS-025](#)]
- Technical Note - Screening planting Options for Land Plot 17-024 [[REP4-038](#)]
- Viewpoints Series [[REP5-075](#) to [REP5-086](#)] inclusive

5.2.9. The onshore elements of the proposed development are summarised in Chapter 1 of our recommendation. The proposed OnSS, onshore export cable corridor (OnECC), tree and hedgerow removal and landscaping works would have the greatest significance in landscape and visual effect terms.

Figure 5.1 Location of the proposed onshore substation [Figure 2.7 in APP-180]



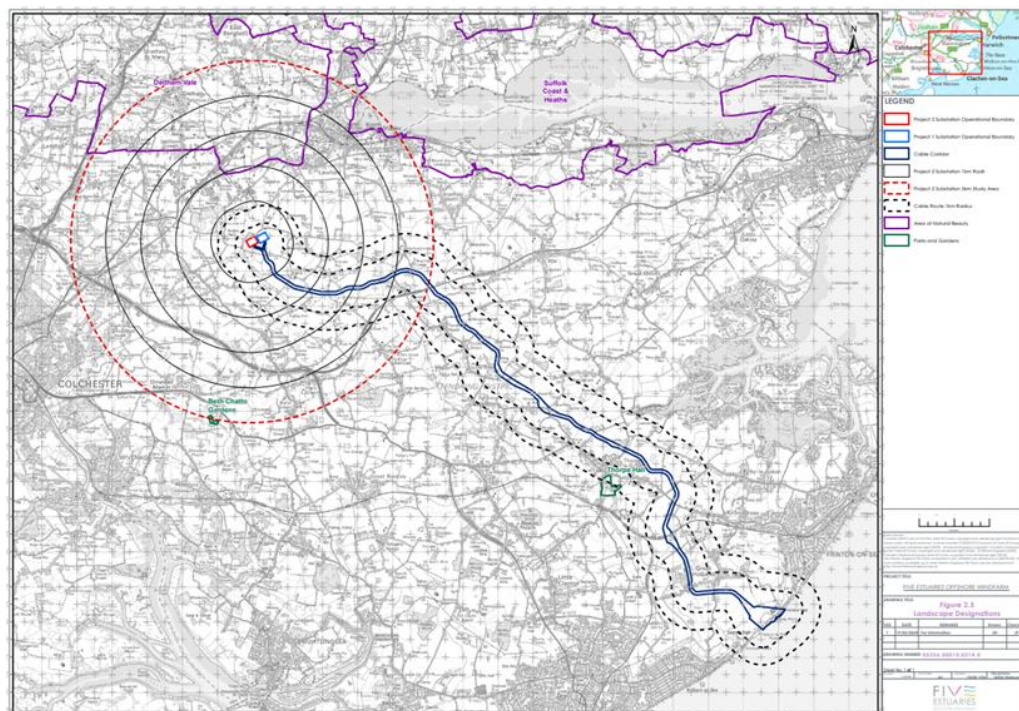
- 5.2.10. The LVIA [APP-084] identifies the proposed development as being within or adjoining the following National Landscape Character Areas (NLCA):
- NLCA 81 - Greater Thames Estuary for the landfill area
 - NLCA 11 - Northern Thames Basin for the OnECC and OnSS
 - NLCA 86 - South Suffolk and North Essex Clayland
 - NLCA 82 - Suffolk Coast and Heaths.
- 5.2.11. LVIA's more detailed assessment is informed by TDC's Landscape Character Assessment of 2001 (LCA) [paragraph 2.7.15 in APP-084]. The LCA has therefore largely informed the proposed development's baseline assessment, with regard also being paid to the Joint Babergh and Mid Suffolk District Council Landscape Guidance (2015), the Colchester Borough Landscape Character Assessment (2005) and the applicant's site survey.
- 5.2.12. Figures 2.3 to 2.5 in [APP-180] show the landscape types, character areas and designations relating to the proposed OnSS, while Figure 2.6 in [APP-180] identifies the principal visual receptors including residents, road users and users of the public rights of way (PROW) and cycle routes.
- 5.2.13. The proposed OnSS would be sited in an area that is characterised by flat arable farmland, with sporadic farmsteads or small clusters of dwellings. Within the immediate vicinity of the proposed OnSS the most notable built development is the house and buildings comprising the Normans Farm farmstead and the existing Lawton substation (a district network operator's substation). The landscape is largely open with occasional groups of trees, hedgerows and clumps of hedge planting. There are long distance views across the landscape from a number of the identified visual receptors within the OnSS area.

- 5.2.14. Under the proposed development's construction Scenario 1⁸ for the landfall area and the OnECC, the applicant considers there would be limited changes to the landscape and generally limited changes for the visual amenity of receptors. However, it is predicted that in some instances significant effects would arise where temporary construction compounds or the construction works would be close to residents, walkers and road users [paragraphs 2.12.3 and Table 2.10 in [APP-084](#)].
- 5.2.15. For the proposed development's OnSS, the applicant has assessed the baseline, magnitude of change and the significance of effect for receptors at a number of the more sensitive viewpoints. Although a medium to high sensitivity and a medium to high magnitude of change during construction and operation has been identified, the applicant has concluded that the magnitude of change after around 15 years of the proposed development's operation would be low to negligible, taking into account the screen planting that is being proposed. Accordingly, after 15 years the applicant considers that all of the OnSS's significant effects would be reduced to not significant [APP-084].
- 5.2.16. As well as the assessment for the proposed development alone, Table 2.12 in [APP-084] considers cumulative effects with existing and proposed developments. With respect to the other proposed developments included in the cumulative effects assessment, tiers ranging between one and three (classed as Tier 1, Tier 2 and Tier 3) have been applied, with Tier 1 being the most likely to be implemented and Tier 3 the least likely. Applying that tiering, the applicant considers the following projects either within the vicinity of the proposed OnSS or OnECC would be likely to have cumulative effects:
- a 50 megawatt battery electricity storage system at Ardleigh Road
 - the proposed East Anglia Connection Node (EACN) substation
 - the OnSS for the proposed North Falls Offshore Wind Farm (NFOWF)
 - an industrial development at Horsley Cross
 - the Lodge Road Solar Farm at Thorpe le Soken
- 5.2.17. The LVIA [APP-084] goes on to carry out a detailed cumulative effects assessment (CEA), which concludes that significant cumulative effects would arise in relation to the following viewpoints:
- Viewpoint 1 – Ardleigh Road near Normans Farm
 - Viewpoint 2 – Barn Lodge PRow/bridleway
 - Viewpoint 3 – Grange Road PRow
 - Viewpoint 4 – Ardleigh Road near Jennings' Farm
 - Viewpoint 5 – Barlon Road near Little Bromley
 - Viewpoint 8 – Lilley's Farm
- 5.2.18. The applicant has concluded that, in relation to the landscape and visual considerations, significant effects would arise from the proposed OnSS within the landscape character type (LCT) 7A Bromley Heaths which is a subset of the Heathland Plateaux LCT, but that those effects would be localised around only the OnSS. Those effects would be adverse, short term and reversible. The undertaking of planting would serve to reduce the adverse effects around 15 years following construction. Tables 2.14, 2.15 and 2.16 in the LVIA [\[APP-084\]](#) provide a summary of the effects identified, both in terms of standalone effects and cumulative effects.

⁸ The applicant undertakes works required for its development and also installs cable ducting and undertakes some OnSS works for the proposed NFOWF

- 5.2.19. In addition to the above LCTs there are also two national landscape designations forming part of the OnSS study area, namely the DVAONB and the SCHAONB. Those AONB overlap the OnSS study area, with the DVAONB to the north-west and the SCHAONB to the north-east, as shown in the following figure. The proposed OnSS would be sited approximately 2km from the boundary of the DVAONB and the nearest proposed turbine to the SCHAONB would be at least 37km away.

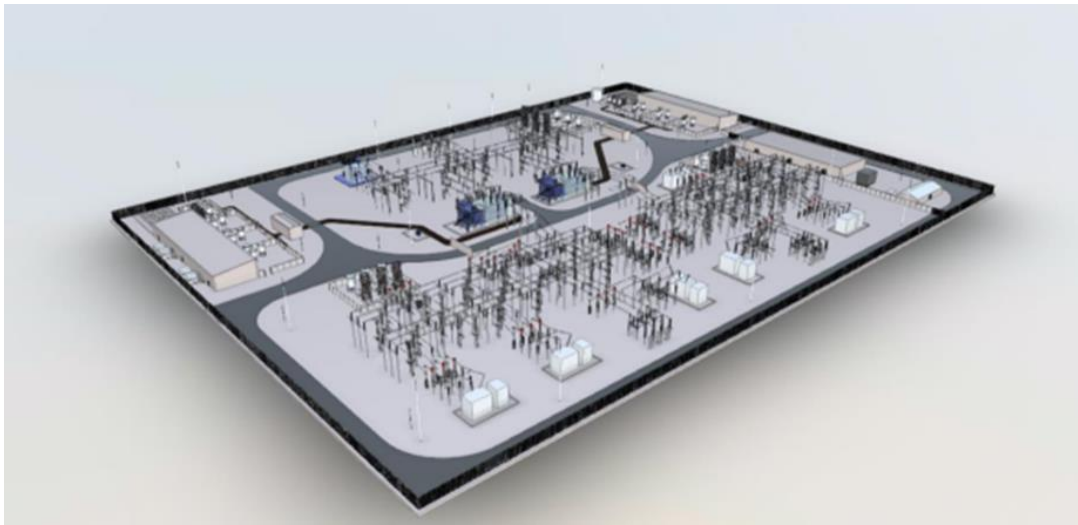
Figure 5.2 Proximity of the proposed OnSS to the DVAONB and SCHAONB [Figure 2.5 in APP-180]



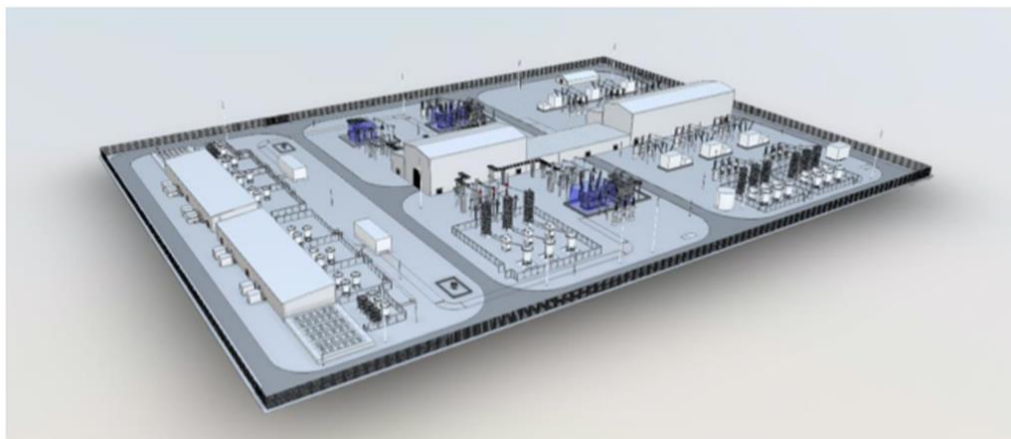
- 5.2.20. There is currently no detailed design for the proposed OnSS, with the applicant seeking flexibility at the application stage. That includes no decision having been made by applicant as to whether the OnSS would have air insulated switchgear (AIS) or gas insulated switchgear (GIS). The following image provides an indication of the appearance of AIS and GIS substations.

Figure 5.3 Comparison between AIS and GIS substations [Figures 1.16 and 1.17 in AS-041]

AIS Substation



GIS Substation



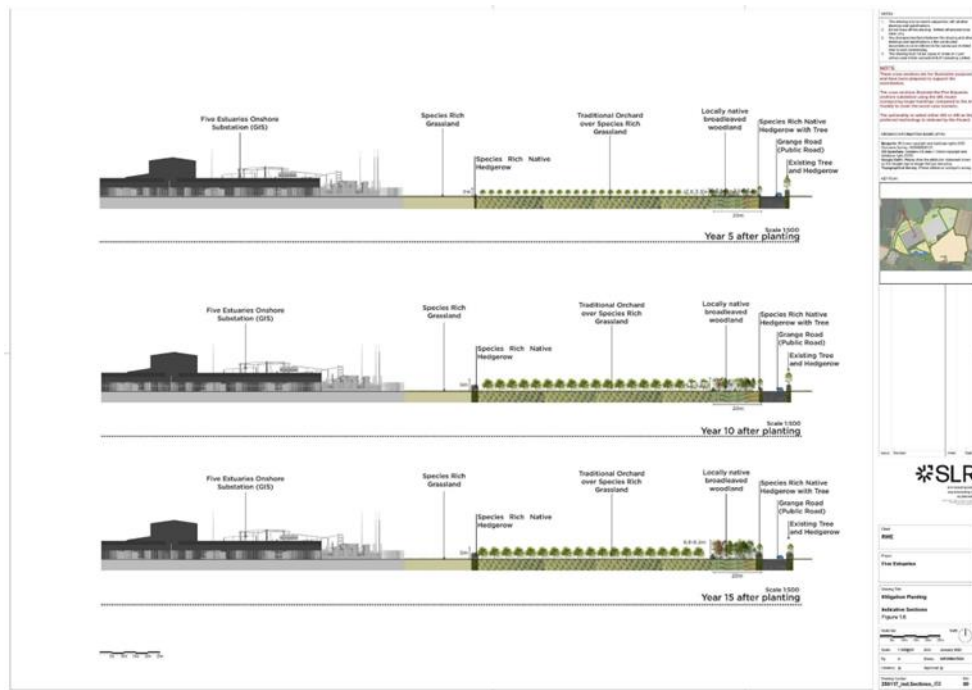
- 5.2.21. If the OnSS was to be a GIS type, it would have a footprint of around 45,000 square metres (sq.m) and a maximum height of approximately 15 metres (m) for the buildings and other substation infrastructure, excluding any lightning masts and land raising. An AIS type OnSS would require a footprint of around 58,800 sq.m and the maximum height for its buildings would be 7m, while the maximum height of its other infrastructure would be 15m [paragraphs 2.6.3 and 2.6.4 in [APP-084](#)]. The maximum design scenario (MDS) for the proposed development takes into account the largest required footprint (for an AIS OnSS) along with the maximum heights (for a GIS OnSS), enabling a 'worst-case scenario' approach to be used in assessing the proposed development's landscape and visual impacts.
- 5.2.22. The applicant has proposed screen planting mitigation for the OnSS in the form of traditional orchard planting, species rich native hedgerows and tree planting and locally native broadleaved woodland, as shown on Drawing Number 1 in the oLEMP [[REP8A-017](#)] and shown below.

Figure 5.4 Outline Landscape and Ecological Management Plan Drawing Number 1 [REP8A-017]



- 5.2.23. In addition to the paragraphs 2.10.25 to 2.10.50 in [APP-084], the applicant has provided an Arboricultural Report [REP8-026] and a series of Tree Preservation Order and Hedgerow Plans [AS-025] for along the OnECC route, the temporary construction compounds (TCC) and the OnSS site. The Arboricultural Feasibility Report has carried out surveys across all areas within the proposed Order Limits plus an additional 15m buffer to account for trees adjacent to the site which have potential for their root protection areas (RPA) to be affected by any of the proposed works.
- 5.2.24. Table D of the Arboricultural Report [REP8-026] identifies the Tree Preservation Orders (TPOs) on trees, tree groups and woodland located within the survey area. There are no areas of Ancient Woodland identified within the survey area or Order Limits, however 30 trees were identified as having veteran features.
- 5.2.25. The LVIA [APP-084] identifies the baseline, sensitivity, magnitude of change and the significance of the effect for hedgerows, taller hedgerows, hedgerow trees and trees. The applicant has submitted that the removal or reduction of trees will be kept to a minimum and only carried out where necessary. The Code of Construction Practice (CoCP) and the LEMP would control the methods used when carrying out works to any of the trees within the area. This will ensure that suitable mitigation measures are applied.
- 5.2.26. Visualisations and cross sections have been provided to show the indicative planting and its screening effects up to 15 years (one of which is shown below) The full details of the planting and screening methods would be secured in a final Landscape and Ecological Management Plan (LEMP) to be submitted and approved via Requirement 5 in the draft Development Consent Order (dCO) [REP8A-004].

Figure 5.5: Indicative section showing mitigation planting [Source REP8A-017]



ISSUES CONSIDERED DURING THE EXAMINATION

- 5.2.27. The main onshore landscape and visual issues considered by us during the examination were:
- the design and appearance of the proposed OnSS, including its scale and location
 - the cumulative effects of the proposed development's OnSS and the OnSS for the proposed NFOWF
 - the effectiveness of the proposed landscaping mitigation

Design and Appearance of the proposed OnSS

Parties' cases

- 5.2.28. During the examination, SCC raised concerns about the potential visual receptor locations within the DVAONB and SCHAONB and the cumulative effects with other projects [REP2-046]. ECC and TDC had concerns relating to the proposed landscaping and planting and the overall design of the OnSS. At the close of the examination, the position between the applicant and ECC and TDC is detailed in their SoCG [REP8A-027] and they remained concerned over the effectiveness of the proposed screening and landscaping, as per [REP8A-044].

- 5.2.29. The Suffolk & Essex Coast & Heaths National Landscape Partnership is interested in the impacts of the onshore proposals for the DVAONB. These matters were considered during the examination and at the examination's close the impact on the SCHAONB from the onshore substation during operation and the impacts on the DVAONB defined indicators, relative tranquillity and relative wildness during construction of the onshore infrastructure remained as ongoing areas of concern. Nevertheless, in the statement of common ground (SoCG) between the applicant and the Suffolk and Essex Coast and Heaths National Landscape Partnership records that the partnership considers that the proposed OnSS would be unlikely to

have an impact on the SCHAONB and welcomed the lack of lighting during the operational phase of the OnSS [\[REP5-049\]](#).

Applicant's Case

- 5.2.30. The applicant advised in section 2.4 of its update of the Onshore Substation Design Principles Document [\[REP6-018\]](#) that the Design Council had been commissioned to undertake an independent design review of the OnSS proposals for both the proposed development and the proposed NFOWF. That involvement of the Design Council had not been readily apparent either in the application documents or in any examination submissions predating Deadline 6. It appeared to us from what was stated in [\[REP6-018\]](#) that the timing of the Design Council's design review could not have fully informed the design for the proposed development's OnSS at the time of the application's submission, with only one of the three stages of the Design Council's review predating the application's submission. To assist our understanding of what the Design Council had been commissioned to do and how its advice had been used to formulate the proposals for the OnSS we requested the applicant submit clarifying information [\[PD-030\]](#).
- 5.2.31. The applicant in [\[REP6A-003\]](#) provided copies of the Design Council's three advisory letters, dated 18 December 2023, 10 April 2024 and 21 June 2024. That information confirmed that it was only the advice in the Design Council's first letter that was available to the applicant when the application was submitted. Further to the discussion about the approach to finalising the design for the proposed OnSS that had taken place during issue specific hearing (ISH) 6 the applicant further advised in [\[REP6A-003\]](#), paragraph 1.5.2 in [\[REP6-045\]](#) and paragraph 3.13.12 in [\[REP8A-038\]](#) that it would develop a design guide jointly with the proposed NFOWF, informed by the OnSS design principles design document [\[REP6-018\]](#). In that regard Requirement 5(2) of the dDCO [\[REP8A-004\]](#) requires the details of the OnSS submitted for approval to be substantially in accordance with the provisions of [\[REP6-018\]](#).
- 5.2.32. In relation to the impacts on the DVAONB and the SCHAONB, the applicant has assessed the impacts on the natural beauty and special qualities of the SCHAONB in the LVIA [\[APP-084\]](#) and has concluded that the statutory purpose for the designation would not be compromised. Due to the distance of the onshore construction activities from the DVAONB, the applicant considers that there would not be an adverse impact from construction activities including noise and lighting. The Code of Construction Practice (CoCP) [\[REP8A-015\]](#) would also apply controls to ensure that there would be no adverse impacts in this regard, which would be secured under Requirement 6 of the dDCO [\[REP8A-004\]](#).

ExA Considerations

- 5.2.33. Based on the submissions from the applicant and IPs, we are content that the applicant's assessment of the baseline and the effects on the landscape character and the sensitivity of the area to accept change are reasonable and robust.
- 5.2.34. In terms of the location and effect of the OnSS, visualisations have been provided [\[APP-181\]](#) to [APP-196](#) and [REP5-075](#) to [REP5-086](#). It is apparent that the introduction of the proposed OnSS, whether it would have AIS or GIS, would fundamentally alter the landscape and visual character of the surrounding area. Although the proposed OnSS would be close to the Lawton substation, the existing character of this area is predominantly rural, flat and open with little vegetation or built development, to break up the area's generally open character. The introduction of the OnSS would insert a large, industrial type facility into the landscape.

- 5.2.35. The OnSS element of the proposed development would give rise to some localised significant effects for the area's landscape character and nearby visual receptors during the proposed development's construction and operational phases. Those effects would be most apparent following the completion of the construction works throughout the period when the proposed screen planting was becoming fully established. The height and nature of the OnSS structures would result in an alien feature being introduced into the rural landscape, where trees and hedgerows characteristically have a sporadic presence, with the area within which the proposed OnSS would be located being flat and generally free from large scale built development. A notable uncharacteristic form of built development in the area is the Lawford substation, a district network operator substation, located on the southern side of Ardeigh Road opposite that road's junction with Grange Road. The Lawford substation is largely screened from public view by the mature screen planting enclosing its boundaries.
- 5.2.36. The proposed planting would, at best, take time to become established and it would be unlikely to completely screen the proposed OnSS, given its scale. However, that planting mitigation, as shown in the submitted visualisations and cross sections [APP-181 to APP-196 inclusive and REP8A-017], would serve to soften and reduce the proposed OnSS's visual impact and we are content that at 15 years following the OnSS's construction its visual impact would be likely to have been reduced. In that regard we take some comfort from the effectiveness of the planting enclosing the established Lawford substation, albeit that is site perimeter planting, while a lot of the proposed OnSS's screen planting would be divorced from its compounded area.
- 5.2.37. We welcome the applicant's commitment to developing a design guide to further inform the detailed design process for the proposed OnSS, as referred to in [REP6-018 and REP8-037], secured via Requirement 5(2) in the dDCO [REP8A-004]. We consider it particularly important that the detailed design work for the OnSS should be guided robustly. That is because of the intended reliance on seeking to hide the OnSS from view rather than designing the OnSS as a high quality facility, deserving of being viewed in its own right within its surroundings.
- 5.2.38. With regards to the impacts on the SCHAONB and the DVAONB, we are content that, as a result of the distance between the OnSS and those highly valued landscape areas and the mitigation proposed, there would be no harm arising or adverse impacts relating to the statutory purposes for designating those AONBs.

Coordination and Cumulative Effects with the proposed NFOWF

- 5.2.39. During the examination, we explored the coordination between the proposed OnSS for NFOWF and the proposed development's OnSS, particularly the type of OnSS to be used and the landscaping proposals, which differ between the proposed developments. This is also considered in Section 6.1, Good Design.

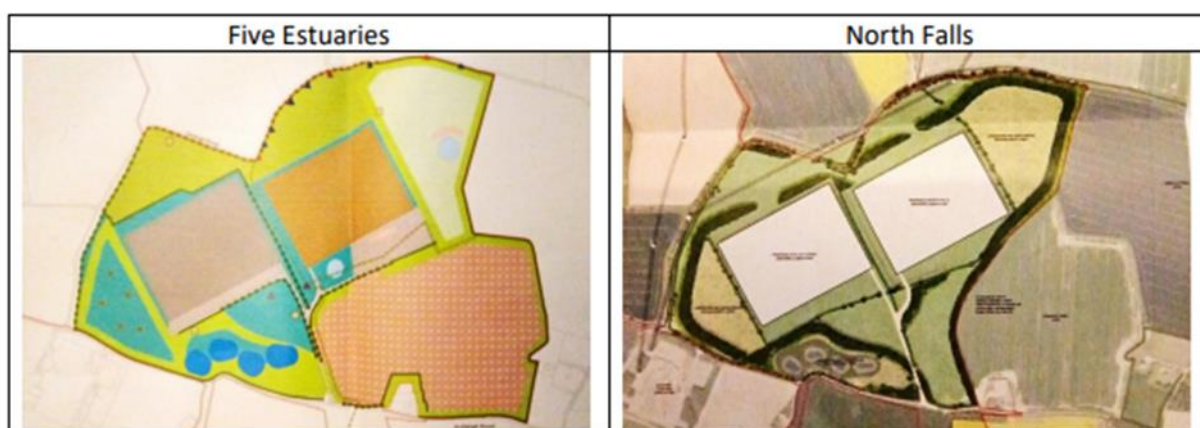
Applicant's Case

- 5.2.40. The applicant has provided a Coordination Document outlining its collaboration with the proposed NFOWF [REP8-029]. Three build scenarios have been considered for the proposed development and the proposed NFOWF, as explained in section 3.1.2 of [REP8-029].
- 5.2.41. The proposed siting of the OnSS and OnECC has been influenced by a number of factors, including the need to allow for future coordination with the proposed NFOWF and the proposed EACN substation. In that regard both of the proposed

offshore wind farms have secured grid connections from National Grid Electricity Transmission PLC. Implementing those grid connections would be dependent on the availability of the proposed EACN substation. The consideration of the overall land take and siting for the proposed development's OnSS are considered further in section 6.5 in Chapter 6 (Good Design) and Chapter 9 (Land Rights) of our recommendation.

- 5.2.42. The LVIA [APP-084] includes a cumulative assessment for the proposed development's OnSS together with the proposed co-located substations for the NFOWF and the EACN. There are some differences between the approaches being taken to the landscaping and screening for the OnSSs by the applicants for each of the proposed wind farms in what would, in effect, be a shared OnSS zone, as shown below. The comparison figure below was submitted by one of the landowners at a relatively early stage in the examination. It is to be noted that by the examination's close the applicant had made some revisions to its indicative screen planting proposals, further to discussions it had been having with the landowner. Those revisions to the indicative screen planting proposals are shown in the figures included in the latest version of the oLEMP [REP8A-017], as shown in Figure 5.4 above.

Figure 5.6 Comparison between the OnSS proposals for the proposed development and the proposed NFOWF [included in REP2-095]



ExA Considerations

- 5.2.43. Having regard to the MDS for the proposed development and the applicant's explanations for that, we consider there are still some unresolved matters relating to why the OnSS zone's indicative landscaping and screen planting mitigation proposals differ between the two offshore wind farm projects. In that regard, and as shown in the figure above, the applicant favours screen planting, which in a number of instances would be divorced from the compounds for the proposed OnSSs. For example hedgerow and woodland strip planting on the northern side of Ardleigh Road to the east of the Normans Farm farmstead in the case of the proposed development.
- 5.2.44. By contrast the approach being taken by the applicant for proposed the NFOWF relies on screen planting located much closer to each of the proposed OnSSs, for example the undertaking of planting entirely to the west of the Normans Farm farmstead. That would leave all of the land to the east of the Normans Farm farmstead unaffected by works associated with either of the wind farm projects.

Furthermore, the applicant for the proposed NFOWF appears to have committed to an AIS substation, while at this stage the applicant for the proposed development has not committed to either an AIS or GIS substation.

- 5.2.45. The applicant's landscape and visual impact assessment has treated the construction of the proposed development's OnSS and NFOWF's OnSS in parallel, as the MDS. In addition, we recognise that the applicant has confirmed its intention to work with the NFOWF project to develop a Design Guide as the projects advance. Nevertheless, we are concerned that the two applicants for the offshore wind farms are promoting different indicative screen planting proposals for the OnSS zone in their respective applications when the applicant has submitted both projects are working on a coordinated basis, see for example [\[REP8-029\]](#).

Mitigation

- 5.2.46. ECC and TDC has raised concerns about the effectiveness of the proposed landscaping, as visual mitigation for the proposed OnSS [\[REP8A-027\]](#). During the examination, they requested additional viewpoints which were provided by the applicant [\[REP5-082 to REP5-086\]](#). At the close of the examination, TDC's and ECC's remaining concerns relate to the effectiveness of the landscape framework in screening the OnSS and that it would not sufficiently reduce the impacts of the structures.

Applicant's Case

- 5.2.47. The effects of the onshore elements of the proposed development relate mainly to the OnSS. Accordingly, the proposed planting and screening has evolved throughout the examination, following discussions between the applicant and ECC and culminating in the indicative planting types and positioning detailed in the oLEMP [\[REP8A-017\]](#) and indicated in the submitted visualisations [\[APP-181 to APP-196\]](#). The use of orchard planting, interspersed with woodland planting, for part of the screening has been proposed because the smaller stature of the trees would be compatible with the burial of cables and the presence of overhead lines. The combination of that planting with the other types in and around the OnSS site would serve to provide some degree of softening of the overall visual effect. The positioning of landscaping belts along the roadsides would also add a layer of screening that would reduce the visual impact for users of the local roads around the OnSS site. The effects of this mitigation have been shown at Year zero, the position immediately following construction and for up to Year 15. Overall, the applicant considers the indicative woodland mix would form a robust screen for the proposed OnSS, as well as an attractive landscape feature and the final detailed scheme would be designed to ensure that it was resilient to pests, disease and climate change as possible.
- 5.2.48. There would also be a strip of planting shown immediately North of Normans Farm which the ExA queried with the applicant. The applicant has clarified in [\[REP8A-039\]](#) that this area of planting has been included to ensure a continuous screen from along Ardleigh Road, taking into account the potential for the removal of a farm shed in future years. The landscaping scheme is indicative at this stage and full details would be developed post consent.

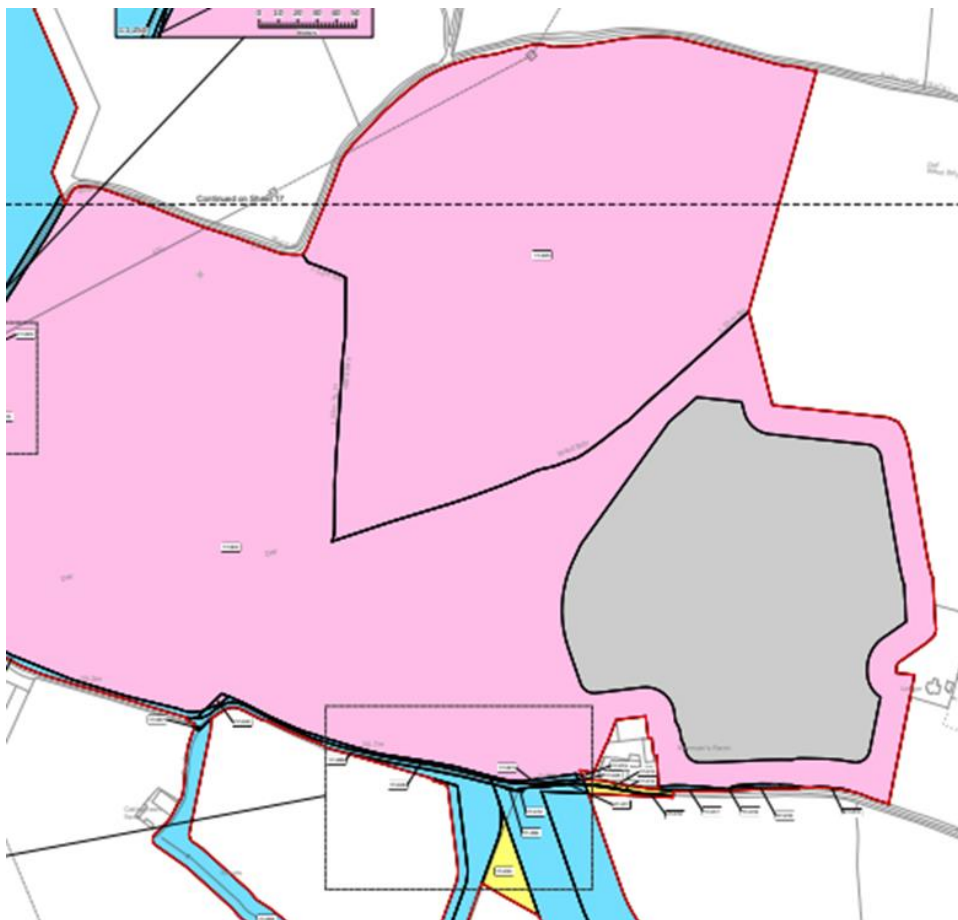
ExA Considerations

- 5.2.49. Having regard to the indicative sections for planting over 5, 10 and 15 years, we consider that although the planting would take some time to mature and would not fully screen the OnSS, it has been demonstrated that the proposed planting would

reduce the localised effects in accordance with the applicant's assessments. The applicant has provided reasons for their choice of orchard planting. Accordingly, whilst ECC's concerns are noted, we accept the OnSS would introduce an industrial feature into the landscape, particularly when seen in conjunction with the other nearby proposed substations and would therefore fundamentally alter the character of the localised environment. However, the applicant's working with ECC to finalise the OnSS's design, including its landscaping, would be secured through Requirement 5(2) of the dDCO [REP8A-004]. Providing screen planting, as mitigation, would go some way to reducing the proposed OnSS's visual impacts.

- 5.2.50. The ExA has also considered the implications of the effectiveness of the proposed indicative landscaping in the event of land to the east of Normans Farm, part of Plot 17-024 [in REP7-004], being excluded from the compulsory acquisition powers (CA) sought by the applicant. The exclusion of CA powers authorised in any made DCO for the proposed development, along those lines, would be more aligned with what is being sought in connection with the proposed NFOWF. The extract from Sheet 18 of the Onshore Land Plans [REP7-004] below shows the land in question and would affect the pink shaded land encircling the grey shade land. The possible exclusion of part of Plot 17-024 from the CA powers sought by the applicant is a matter we have considered in Chapter 9 (Land Rights) of this recommendation. It should be noted that such an exclusion of CA powers is something favoured by the owners of Plot 17-024, who farm and live here and the occupiers of the house at Normans Farm would be amongst the visual receptors most affected by the OnSS zone proposals.

Figure 5.7 Extract from Sheet 18 of the Onshore Land Plans [REP7-004]



- 5.2.51. Excluding part of Plot 17-024 from the CA powers sought would potentially affect the amount of land available where screen planting for the OnSS zone could be undertaken. Nevertheless, we consider that the remaining area of land subject to any CA powers authorised in any made DCO for the proposed development would still be sufficient to provide effective screening for the proposed OnSS zone.

OVERALL CONCLUSIONS ON LANDSCAPE AND VISUAL EFFECTS

- 5.2.52. The ExA visited the area on a number of occasions to view the onshore sites for the proposed development including the site for the OnSS. Details of these visits can be seen in the site inspection notes [[EV5-001](#) – [EV5-005](#)].
- 5.2.53. It is acknowledged within NPS EN-1 and NPS EN-5 that virtually all nationally significant energy infrastructure projects will have effects on the landscape and that new substations can give rise to the landscape and visual impacts. The scale of energy projects means that they will often be visible across a very wide area and therefore this aspect should be balanced against the benefits of the project. The applicant has undertaken appropriate landscape and visual assessments and considered the effects of the proposed development for landscape and visual receptors.
- 5.2.54. The ExA in taking all of the above matters into consideration, finds that the proposed development would result in unavoidable harm to the landscape and visual receptors because of the scale of the OnSS and its positioning within a relatively open landscape. However, it has been demonstrated that the adverse effects would be at a localised level. In terms of the SCHAONB and the DVAONB and their settings, the proposed OnSS would not give rise to significant harmful effects or interfere with the statutory purpose for those areas' designation. We therefore consider that there would be no conflict with the requirements of the CRoW2000, as amended, and the NPSs, including paragraph 5.10.8 of NPS EN-1.
- 5.2.55. Furthermore, we consider the difference between the landscaping proposals being pursued by the applicant and the applicant for the proposed NFOWF requires further exploration, with a fully coordinated not have been demonstrated via the scheme we have examined. However, it is noted that the applicant would continue to develop the detailed design for the proposed development and refine the final mitigation plans in consultation with ECC as detailed in Section 2.3 of 9.4 Onshore Substation Principles Document [[REP8-020](#)] as part of discharging Requirement 5 of the dDCO [[REP8A-004](#)].
- 5.2.56. Based on the information provided by the applicant and the relevant parties, we are content that proportionate and accurate investigations have been carried out in relation to any protected and/or affected trees and hedgerows and the significance of effects have been identified. As such, we are content that the proposed works would be proportionate and necessary and there would be no harm in this regard. This therefore carried neutral weight in the overall balance.
- 5.2.57. The ExA considers that the applicant has worked to achieve general compliance with the requirements of NPS EN-1, NPS EN-3 and NPS EN-5 in terms of assessing and addressing landscape and visual effects. Furthermore, because the adverse effects would be localised and limited over a period of time, given the proposed mitigation planting would be subject to further detail consideration, we attach a little negative weight to the landscape and visual effects of the proposed development in the overall planning balance.

5.3. FARMING

INTRODUCTION

- 5.3.1. In this section consideration is given to the proposed development's effects on farming and farming practices, with particular regard:
- To the land required for the construction of the proposed OnSS
 - The construction and maintenance of the proposed OnECC, the ancillary uses relating to those phases and decommissioning.
- 5.3.2. Effects of the proposed development with links to farming, but principally relating to onshore ecology, hydrology, hydrogeology and flood risk are considered in later sections of Chapter 5 of our recommendation.
- 5.3.3. Work Nos. 6 to 16 inclusive would affect farmland, as illustrated in Onshore Works Plans [\[REP6-005\]](#) and in Schedule 1 of the draft Development Consent Order (dDCO) [\[REP8A-004\]](#). As explained in Chapter 1 of this recommendation, three scenarios have been put forward to deliver the proposed development. Under Scenario 1 Work Nos. 5A, 6A, 7A, 8A, 9A, 10A, 11A, 12A and 14A would involve the installation of cable ducting for the proposed NFOWF and Work Nos. 15A and 15E concern the proposed OnSS zone for both of the proposed wind farms.

POLICY BACKGROUND

- 5.3.4. The Environment Act 2021 sets out the new UK framework for environmental protection including waste reduction. The relevance for the proposed development being the removal of topsoil from the site of the OnSS.

NPS

- 5.3.5. NPS EN-1 overarching matters relating to farming are in the following paragraphs:
- 4.3.11, 4.3.12, 4.3.15, 4.11.7, 4.12.6, 5.11.12 to 5.11.14, 5.15.9 and 5.16.7 - applicant's assessment and factors influencing site selection and design
 - 5.11.4 - impacts
 - 5.11.23, 5.11.29 and 5.11.31 - mitigation
 - 4.3.19, 4.11.11, 4.12.10, 5.11.34 and 5.15.15 - SoSESNZ's decision making with respect to impacts
- 5.3.6. NPS EN-3 matters relating to farming are in the following paragraphs:
- 2.8.34 to 2.8.37, 2.8.59, 2.8.67, 2.8.68 and 2.8.72 - applicant's assessment and factors influencing site selection and design
 - 2.8.289 - SoSESNZ's decision making with respect to network connections
- 5.3.7. 1.1.7 NPS EN-5 matters relating to farming are in the following paragraphs:
- 2.9.1, 2.9.2, 2.12.6 and 2.13.3 - applicant's assessment and factors influencing site selection and design
 - 2.9.1, 2.13.15 to 2.13.20 - impacts
 - 2.10.1 - mitigation
 - 2.9.24 and 2.9.25, 2.11.20 to 2.11.25 and 2.15.1 - SoSESNZ's decision making with respect to impacts

Other national policy and guidance

- 5.3.8. [National Planning Policy Framework](#) (December 2024, as corrected in February 2025) (the NPPF) does not contain specific policies relating to Nationally Significant Infrastructure Projects. However, we consider paragraphs 180 and 187b) are of relevance to the consideration of the proposed development's effects on farming.
- 5.3.9. We also consider the following guidance contained in the Department for the Environment, Food and Rural Affairs (Defra) [Guide to assessing development proposals on agricultural land](#) (February 2021) is important and relevant:
- Section 1 – *"Policies to protect agricultural land and soil"*
 - Section 4 – *"About ALC grades"*
 - Section 6 – *"Use ALC to support your planning decisions"*
 - Section 7 – *"Developers: check if your proposal affects agricultural land"*

THE APPLICATION

- 5.3.10. The ES assesses agricultural/farming matters in the Ground Conditions and Land Use chapter [\[APP-087\]](#). In [\[APP-087\]](#) the proposed OnECC's route sections and the site for the OnSS are illustrated in Figure 5.1 and Table 5.7 of [\[APP-087\]](#) provides a description of each route section.
- 5.3.11. AS explained in Chapter of our recommendation, the location for the proposed OnSS has been determined by making a connection with the EACN. The choice of the route for the proposed OnECC has been constrained by a number of factors such as settlement boundaries and designated sites. The applicant has identified a MDS for the proposed development and for farming the approach taken is set out in Table 5.12 in [\[APP-087\]](#).
- 5.3.12. A form of embedded mitigation for effects on farming identified in the CoCP [\[REP8A-015\]](#) would be the appointment of an Agricultural Liaison Officer (ALO) to coordinate with landowners.

PERMANENT AND TEMPORARY LOSS OF BEST AND MOST VERSATILE (BMV) AGRICULTURAL LAND

- 5.3.13. The applicant's assessments of the effects on agricultural land has been informed by data collected through detailed desktop reviews of literature and one site walkover "truthing" survey. The applicant proposes to carry out physical soil surveys and ground water monitoring, in preparation for construction following the making of any DCO for the proposed development.
- 5.3.14. The ES sets out the scope, assessment methodology and baseline conditions for the proposed onshore development and its surroundings in section 5.4 of [\[APP-087\]](#). The criteria for assessing the sensitivity/importance of the environment and potential significant environmental effects are set out in section 5.5 of [\[APP-087\]](#). The baseline conditions are set out at section 5.7 of [\[APP-087\]](#). Mitigation measures required to prevent, reduce or offset any significant adverse effects are set out at section 5.10 of [\[APP-087\]](#). Residual effects are quantified in relation to each impact as assessed.
- 5.3.15. Soil type considered best and most versatile (BMV) is defined through agricultural land classification (ALC) as being Grade 1, Grade 2 and Grade 3a (hereafter referred to as Grades 1, 2 and 3a land) and suitable for growing a wide variety of crops including cereal and vegetables, a full description of which can be found in Defra's [Guide to assessing development proposals on agricultural land](#).

- 5.3.16. The applicant has provided a breakdown of the hectares (ha) percentage by grade, for the farmland impacted by the proposed development in Table 5.8 in [\[APP-087\]](#). The applicant has not sought to differentiate Grades 3a and 3b land, the latter not being BMV. Paragraph 5.7.14 in [\[APP-087\]](#) identifies the extent of the land within the Order Limits subject to agri-environmental stewardship schemes. Table 5.9 of [\[APP-087\]](#) presents the percentages of Grade 1, 2 and 3 land within the Order Limits, as well as for the whole of Essex.
- 5.3.17. Approximately 273ha of land within the Order Limits has been identified as BMV [Table 5.8 of [APP-087](#)]. Of that land, the proposed OnSS Zone (the OnSS site proposed for both of the wind farm projects) would account for 39.82ha of Grade 1 land being lost as illustrated (pink) in figure 5.?? of section 5.1. The installation of up to 196 link box chambers, along the OnECC, would equate to a further loss of 0.19ha of BMV [paragraphs 1.4.23 and 1.4.24 in [AS-041](#)].
- 5.3.18. The construction of the OnSS and OnECC would also result in a temporary loss of approximately 132ha of BMV. The extent of temporary loss does not include up to 12 temporary construction compounds (TCC) and additional land necessary to carry out horizontal directional drilling (HDD) but does include haul roads.
- 5.3.19. The applicant sets out that the management of soils arising from the temporary operations associated with the proposed OnECC would be subject to a bespoke Soil Management Plan (SMP), secured through Requirement 11 in the dDCO [\[REP8A-004\]](#).
- 5.3.20. Soils arising from the construction of the proposed OnSS and ancillary development would be surplus. Where not distributed to adjacent agricultural land, up to 32,000 tonnes of surplus soils [Table 1.14 in [AS-041](#)] would be removed from site and managed, as set out in Section 3.13 of the CoCP [\[REP8A-015\]](#).

TEMPORAL IMPACTS ON FARMING ACTIVITY DURING CONSTRUCTION

- 5.3.21. The applicant has identified in Table 1.2 in [\[AS-041\]](#) a period of construction of between 18 to 27 months for the proposed OnECC and as indicated in paragraph 1.5.17 in [\[AS-041\]](#) a period of approximately 24 months to construct the proposed OnSS. That would be followed by a period of commissioning ahead of restoration along the proposed OnECC [paragraph 1.4.47 in [\[AS-041\]](#)]. Screen planting, replanting and reinstatement of fences and land drains would generally be carried out post installation [paragraphs 1.4.47 and 1.5.25 in [AS-041](#)].
- 5.3.22. As a consequence of the proposed construction works the affected land could be unavailable to farm for 27 months, in any discrete OnECC route section.

DEPTH OF BURIAL OF THE SUBSURFACE INFRASTRUCTURE

- 5.3.23. As embedded mitigation the applicant is proposing to bury the cable ducts to a depth of 1.2m below ground level with a minimum soil cover of 0.9m [paragraph 4.2.5 in [\[REP8A-015\]](#)]. That would allow typical agricultural operations, including drainage maintenance, to be carried while protecting the cables from accidental exposure.

Summary of effects

- 5.3.24. The applicant has summarised the significance of effects of the MDS on farming cumulatively with the proposed NFOWF (only in relation to the OnECC), as set out in Table 5.17 of [\[APP-087\]](#). The applicant has indicated that in respect of soils the

magnitude of effects would range from high to negligible, depending on whether there would be permanent or temporary impacts. The applicant considers the overall effect on BMV land would be minor adverse, which would not be significant in environmental impact assessment (EIA) terms.

- 5.3.25. The summary of significance of effects for the MDS on surface water drainage infrastructure and abstraction with three identified licenses scoped into the assessment are set out in Table 4.1 in [\[REP8-018\]](#) and Table 6.15 in [\[APP-088\]](#). The applicant considers potential for damage to the surface water infrastructure to be negligible, with negligible residual effects. Regarding disruption of flow to groundwater [section 5.0 in [REP8-018](#)], effects have been assessed as low to moderate, which is not significant in EIA terms. Mitigation in respect of both water environment matters is addressed within the CoCP [\[REP8A-015\]](#). However, it is noted that in section 2.7 of the Outline Ground Water Management Plan [\[REP8-039\]](#) the mitigation would be for potable water supplies and not irrigation.

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.3.26. Based on the relevant representations and written and oral submissions made by the farming community during the examination, we consider the key farming issues are:
- permanent and temporary loss of BMV agricultural land
 - temporal impacts on farming activity during construction
 - haul roads
 - depth of burial of the subsurface infrastructure
 - agricultural drainage and irrigation infrastructure

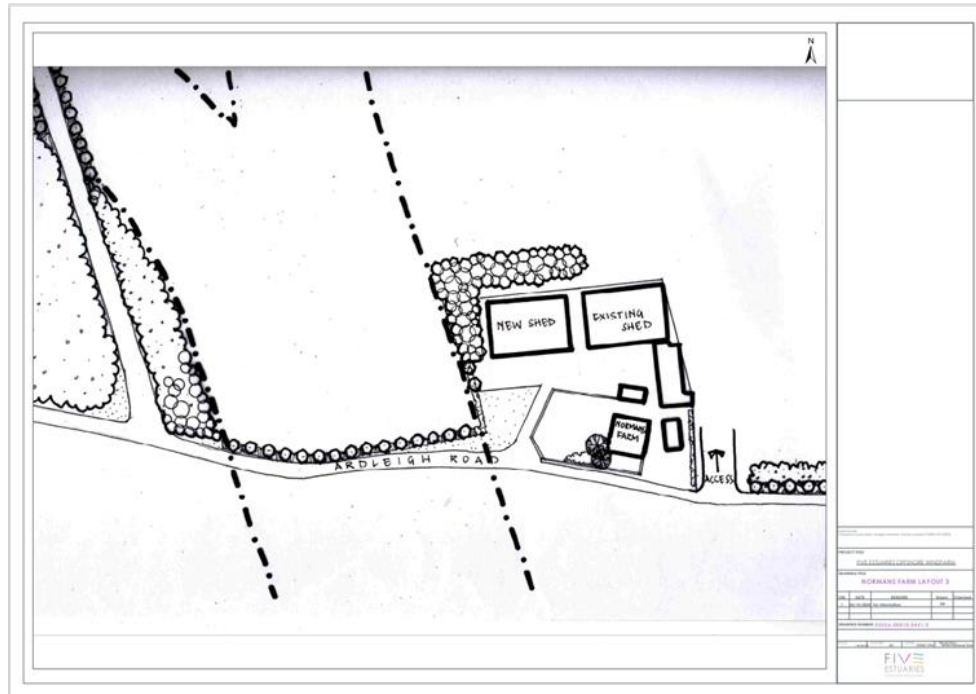
PERMANENT AND TEMPORARY LOSS OF BMV AGRICULTURAL LAND

- 5.3.27. Most of the land, along the proposed OnECC, is actively farmed and in common with the land within the proposed OnSS zone is predominately used for food production. The proposed development would be likely to prevent, either permanently or temporarily, farming operations from utilising the full potential of the affected BMV agricultural land. During the examination, farmers and their representatives provided information to illustrate the extent to which the proposed development would affect productivity.
- 5.3.28. 'Fairley Farms'⁹ who own and farm Normans Farm, the site for much of the proposed OnSS and other land impacted by the OnECC, submitted an alternative screen planting proposal that is being promoted by NFOWF's applicant [top of page 2 in [REP2-095](#)]. Another landowner, the Executors of the Estate of Mr Charles Tabor, also affected by the proposed OnSS submitted the NFOWF screen planting proposal [Appendix E in [REP2-081](#)].
- 5.3.29. During ISH3 the applicant did not wish to comment on the NFOWF proposal but agreed to engage further with Fairley Farms to endeavour to provide an acceptable screen planting proposal to minimise effects on BMV agricultural land. The figure below was submitted as one of three possible layouts. In expressing a preference for that layout, Fairley Farms in [\[REP6-077\]](#) maintained that this matter remains unresolved. Fairley Farms proposed alternative mitigation and provided reasons why the proposed screen planting to the west, north and east of Normans Farm

⁹ T Fairley and Sons Limited, Robert Fairley Limited and T and R Fairley Farming Partnerships

buildings would, in its view, have negative impacts on the effective cultivation of its land and farming operations, given the size of machinery and shading of soils by the screen planting north of Ardleigh Road.

Figure 5.8: Normans Farm layout 3 [Deadline 4 [REP4-038]



- 5.3.30. Strutt and Parker (Farms) Ltd and Liana Enterprises Ltd (SPFL) submitted joint written representations, making reference to the extent of land being sought for the proposed OnECC stating at paragraph 1.5 in [\[REP2-086\]](#) *“The applicant is seeking a very large cable corridor to give them flexibility ... as they state that they are not at a stage that they can decide where to place it.”* SPFL suggested that to minimise disruption for the farming activities that easements should be located to the field boundaries. This interested party (IP) identified alternative routes considered to be less impactful for cultivation [paragraphs 1.6 and 1.9 of [\[REP2-086\]](#)].
- 5.3.31. Fairley Farms identified during the hearings and in response to question ExQ1 LU.1.08 of EXQ1 a minimum requirement of 2m from a field boundary and allowance for headlands of between 24m and 40m (depending on crop) to accommodate large machinery turning [page 7 of [\[REP2-095\]](#)]. This need for room to manoeuvre was supported by a submission made by James Fairley and Sons (Farms) Limited in [\[REP2-083\]](#).
- 5.3.32. We requested a technical note from the applicant during CAH1 [\[EV2-006\]](#) seeking clarity on the amount of land required if the proposed development was constructed ‘had the NFOWF proposal not existed’. The applicant response [paragraph 3.1.3 in [\[REP2-030\]](#)] set out that the parameters for the proposed routing corridor was the Order Limits, stating that *“it has an allowance for micro routing”*. The applicant also pointed out that the *“Working Corridor will be defined post the detailed design surveys”*. Table 1 in [\[REP2-030\]](#) provides a summary of comparative widths for the trenched sections of the onshore cable installation Scenario 1 and Scenarios 2/3 (without the proposed NFOWF).
- 5.3.33. To minimise permanent loss of BMV agricultural land along the proposed OnECC the applicant has advised that most distances between field boundaries would

accommodate the length of a single cable drum (approximately 500m to 700m in length) and that there would be a preference to locate link boxes/joint bays to the edges of fields [paragraphs 1.3.3 to 1.3.7 in [REP1-059](#)].

- 5.3.34. In respect of the fertility and biota of soils, and the preservation of these during construction, the correct management of soil is essential. The segregation of soils is critical to ensure, that on their replacement, the land for agricultural cultivation would be of the same condition or better than before construction commenced. IPs expressed concerns on this matter, particularly the prospect of soils being excavated, stored, replaced and then removed again to accommodate the works for the proposed NFOWL, as set out by SPFL [paragraphs 1.8 and 1.10 in [REP2-086](#)]. That was supported by photographic evidence from Fairley Farms in [[REP2-095](#)] to illustrate the outcome of poor soil management, which arose as a consequence of the applicants pre-application surveys.
- 5.3.35. The ExA considers that the CoCP commitment to the appointment of an ALO would be beneficial. The oLEMP and SMP, secured by dDCO requirements, would both contribute to securing satisfactory re-instatement of soils post-construction.
- 5.3.36. The ExA does not agree with the applicant's contention that the overall effect of the loss of BMV land would be minor adverse. The applicant has only considered the footprint of its proposed OnSS (5.88ha) but the OnSS Zone would equate to a 100% loss of 39.82ha of Grade 1 land. Using the applicant's Table 5.5 in [[APP-087](#)] the magnitude of impact for that permanent loss of Grade 1 land would be high for a high sensitivity receptor, the significance of effect for permanent agricultural land loss is predicted to be major adverse, which would be significant in EIA terms.
- 5.3.37. We have reservations about the proposed land take for screen planting to the east of Normans Farm, together with the justification for land identified for habitat creation and that alternative layouts could be considered, utilising land elsewhere within the Order Limits, including providing landscape planting closer to the OnSS, or in the case of land for biodiversity net gain (BNG), making provision for that off site. The planting further to the east of Normans Farm and north of Ardleigh Road appears to be proposed to screen NFOWF. The comparison for the differing OnSS proposals being pursued by the applicant and the applicant for the NFOWF [included in [REP2-095](#)], for example, suggests an alternative would be available, that would reduce the loss of Grade 1 land.

TEMPORAL IMPACTS ON FARMING ACTIVITY DURING CONSTRUCTION

- 5.3.38. The temporal impact would principally relate to the proposed OnECC, specifically where soils would not be replaced over cable ducts and joint bays until the completion of cable pulling and commissioning. These temporal impacts would also apply to the ancillary land uses, with the retention TCCs and haul roads.
- 5.3.39. To better understand the farming operations from the perspective of crops and crop rotation likely to be affected by periods of construction, we sought information from the farming community. Fairley Farms in its responses to ExQ1 LU1.06 submitted in [[REP2-095](#)] a projection for a possible five year crop rotation, based on the previous five years of cropping and a breakdown of cultivation operations in any year.
- 5.3.40. SPFL at section 1.2 of their written summary for CAH1 [[REP2-093](#)] sought to ensure that both the proposed development and those elements proposed for NFOWF should be constructed concurrently. SPFL cited examples where that had been done to good effect.

- 5.3.41. During the examination, the applicant was required to clarify whether route sections would be working for example consecutively or concurrently. Also, to quantify any additional timescales for construction elements, such as cable pulling, likely to extend the period for reinstatement of the agricultural land. The applicant provided time periods to carry out specific tasks [paragraph 2.1.2 in [REP2-030](#)]. The applicant indicated [paragraph 3.1.11 in REP2-030] that the works within each route section would not be continuous. In [paragraph 3.1.14 of REP2-030] the applicant identified other factors including, for example, ground conditions that could affect works sequencing.
- 5.3.42. The period for constructing the proposed OnECC would be between 18 and 27 months, with a 24 month period for constructing the proposed OnSS. Notwithstanding, the role of the ALO is essential to ensure that farmers and landowners would be kept informed in advance of the works. This would enable farmers to plan their crop rotation and minimise the period where land cannot be effectively cultivated. We consider the CoCP should be comprehensive and ensure that those affected by the proposed works would be adequately informed when and for how long the works would take place.

HAUL ROADS

- 5.3.43. Haul roads are integral to construction and could, if inadequately designed, give rise to damage to soils and sterilisation of land for cultivation.
- 5.3.44. Fairley Farms made reference to a section of “*Haul road immediately south of Ardleigh Road opposite Normans Farm*”, relating to land plots 16-022 and 17-005 [\[REP2-095\]](#), drawing our attention to the difference between the applicant’s land take proposals here, as compared with the NFOWF’s proposals, in traversing the same part of the OnECC.
- 5.3.45. In common with comments received relating to the land required for the proposed OnECC, several IPs highlighted what they considered to be the excessive width of haul roads. The width of routes for haul roads so as to avoid obstacles and the use of existing farm accesses were identified by IPs as barriers to normal farming practice. SPFL expressed concern [\[REP2-086\]](#) that those diversions to avoid obstacles, in that instance protected species, were excessive and liable to reduce cultivatable land and obstruct agricultural operations.
- 5.3.46. The applicant explained during CAH2 that the diversions for avoiding protected species would only be used following confirmation that such species were present [paragraphs 1.2.17 and 1.2.18 in [REP3-022](#)]. Pre-construction surveys in respect of both the proposed OnSS and the OnECC would be carried out as set out in section 4.5 of the CoCP [\[REP8A-015\]](#).
- 5.3.47. SPFL sought confirmation that the haul roads would be properly engineered [paragraph 1.10 [REP2-086](#)]. Further comment was made with regards to the proposed management of abnormal indivisible loads (AIL) where they would traverse agricultural land. Fairley Farms in [\[REP2-095\]](#) expressed concern at the lack of information as to where the access to the proposed development, NFOWF and EACN would converge.
- 5.3.48. We requested during ISH3 [\[EV6-016\]](#) the applicant to provide further information relating to haul roads and their construction. The applicant submitted a technical note [\[REP4-036\]](#), supplementing the information provided in [\[AS-041\]](#). The

construction of the haul roads would for the most part involve the removal of top soils and the laying of hardcore surfaces, as described in section 2.2 of [\[REP4-036\]](#).

5.3.49. For AIL the applicant identified the following options [paragraph 2.2.2 in [REP4-036](#)]:

- Protective matting
- Temporary metal road
- Permeable hardcore aggregate
- Specialist trackway

5.3.50. We understand the need for haul roads to be constructed to reduce impacts on the public highway and to deliver machinery and materials to the works sites. During the examination, the applicant provided clarity with respect to the potential for the diversion of haul roads away from the direct line of the OnECC. The applicant advised in the case of dormice, pre-construction surveys would be undertaken to identify the presence/absence of this protected species, for which HDD would be adopted to minimise disturbance. If dormice were not present, then the default would be to maintain a direct haul road on the line of the proposed OnECC.

5.3.51. We recognise the applicant's commitment to appointing an ALO who would engage with farmers and landowners to accommodate works access to affected land. The duties of the ALO would include: preparing land condition records for the land at an early stage; and assessing ground conditions to inform the design of haul roads best suited to their purpose. We consider the proposed haul routes' (with one exception) construction, use and reinstatement, being a temporary need, would be acceptable.

5.3.52. We have reservations about the need for proposed haul road affecting land plots 16-022 and 17-005 [Sheet 17 in [REP7-004](#)]. The applicant has not provided sufficient justification for proposing a route that diverges from the OnECC route, given that the applicant for the NFOWF is not seeking this route. This is a matter we consider in more detail in Chapter 9 (Land Rights).

DEPTH OF BURIAL OF THE SUBSURFACE INFRASTRUCTURE

5.3.53. The depth of burial of the subsurface infrastructure for the OnECC, if not sufficiently deep, could result in farming operations being unable to return to pre-construction cropping regimes and cultivation. The burial depth for cable ducting should be sufficient to allow: the unhindered use of large farm machinery; undertake field drain maintenance; and ploughing to depths of 0.6m or more. At examination Deadline 4, six responses to ExQ2 LU.2.01 [ExQ2 [PD-014](#)] from farmers sought a minimum cable burial depth of 1.2m was essential, an example being received from James Clachan [\[REP4-075\]](#) stating "*Wheat and Oilseed Crops root at least a metre....Movement of soil for certain crops like potatoes lead to machinery operating at greater depths...*"

5.3.54. During ISH6 [\[EV10-006\]](#) farmers provided anecdotal evidence, based on experience of farming the land for up to 40 years, indicating that there were unlikely to be any subsurface obstacles of an extreme size preventing the applicant from achieving burial depths of 1.2m. Those oral submissions appear to confirm the findings of the applicant, as summarised in Table 5.10 and paragraph 5.7.30 in [\[APP-087\]](#) identifying the underlying geology as being Thames Group (clay, silt and sands) and therefore unlikely to host rocks of a size preventing burial at depths less than 1.2m.

- 5.3.55. The applicant provided reasoning why there may be factors preventing achieving a burial depth of 1.2m in response to the ExA request in ISH6 for a technical note and at paragraph 1.2.2 [\[REP6-039\]](#) gave an example of the presence of large rocks. However, at paragraph 1.2.5 in [\[REP6-039\]](#) the applicant made reference to section 4 of its Minerals Resource Assessment [\[APP-235\]](#), stating that the geology along the cable route is unlikely to contain immovable rocks.
- 5.3.56. We consider it is reasonable to expect a burial depth of 1.2m would be achievable, as submitted by the applicant, with there being rare exceptions when that depth could not be achieved. In addition, the applicant has embedded the role of the ALO into the CoCP [\[REP8A-015\]](#), who would have the task of notifying those carrying out farming activities where the buried cable ducting would be less than 1.2m deep.

AGRICULTURAL DRAINAGE AND IRRIGATION INFRASTRUCTURE

- 5.3.57. Agricultural drainage and irrigation infrastructure is extensively in use across the farmland affected by the proposed development. There are networks of field drains at varying depths of burial from 0.5m to 2.0m, discharging to perimeter drains and watercourses [see plans included in [REP3-023](#)]. Irrigation infrastructure transports water from either boreholes or reservoirs, some of which lie within the Order Limits. Both forms of agricultural infrastructure are necessary to maintain the productivity of the land.
- 5.3.58. Fairley Farms in [\[REP4-077\]](#) provided an explanation of the necessity of drainage and the impacts of poor drainage on cultivation and yields. Further comment on the effects of poor drainage were submitted by James Clachan in [\[REP4-075\]](#) identifying that it is not uncommon for machinery to become bogged down or for land drains becoming blocked by root fibre.
- 5.3.59. We are content that the applicant has embedded sufficient safeguards within the CoCP, including the appointment of an ALO, to ensure that agricultural drainage and irrigation would not be compromised during and after construction of the OnECC.

CONCLUSIONS

- 5.3.60. The landowners and farmers who are affected by the proposed development do not dispute the need for renewable energy. However, at the close of examination there were a number of outstanding matters, not fully resolved, in respect of the extent of the Order Limits, the reliance by the applicant on post-decision approval for design elements and the depth of cable burial.
- 5.3.61. In taking all the above issues into consideration, we consider the proposed development would result in unavoidable effects for BMV agricultural land with the total loss of at least 39.82ha Grade 1 land. NPS EN-1 and NPS EN-5 emphasises that applicants should seek to minimise impacts on BMV agricultural land, soil health and soil quality.
- 5.3.62. Where Grade 1 topsoil would be surplus to needs in constructing the proposed OnSS/OnECC and would not be required for distribution to adjacent agricultural land, ECC responded positively to the applicant's response to ExQ CC.2.03 [\[REP5-092\]](#) that the applicant would seek to engage with it as to finding the best use of the soils in projects within Essex.
- 5.3.63. However, the ExA does not consider that the applicant has fully justified the need to secure the extent of Grade 1 land proposed for the OnSS Zone. This matter is

further addressed in the Landscape and Visual Effects section in this chapter and in Chapter 9 of our recommendation.

- 5.3.64. Where BMV agricultural land along the OnECC would be returned to agricultural use, we consider the applicant's proposals to be generally acceptable. Although as explained in Chapter 10 we consider the submitted CoCP [\[REP8A-015\]](#) should not be treated as a final version and should instead be subject to a final approval, pursuant to the recommended change we have made to Requirement 6 in our recommended DCO (Appendix E).
- 5.3.65. The applicant has committed to appointing an ALO to work with farmers prior to construction and throughout the construction phase [section 4.2 in the CoCP [REP8A-015](#)]. We support the applicant's intention to appoint an ALO.
- 5.3.66. The applicant and the applicant for the proposed NFOWF have in line with NPS EN-1 and NPS EN-5 sought to coordinate and collaborate their projects, to reduce the effects of both developments, through the sharing of the OnECC. This includes haul roads and TCCs. However, we have reservations about the need for all of the land the applicant is seeking to use in relation to its proposals for the OnSS zone, given the proposals for the NFOWF would involve less land take. In Chapter 9 of our recommendation, we consider this issue in greater detail.
- 5.3.67. The ExA consider that the applicant has worked to achieve general compliance with the requirements of NPS EN-1 and NPS EN-5 in terms of assessing and addressing farming effects. Excepting the total loss of Grade 1 land, the adverse effects, primarily arising from the proposed OnECC, would be major during construction and negligible during the operational phase. We consider that would result in a minor residual harm in the overall balance.
- 5.3.68. The loss of Grade 1 land in the OnSS zone would be localised but in combination with the proposed NFOWF remains, in our view, a major adverse effect, although tempered by the county wide distribution of BMV agricultural land. Accordingly, we give moderate negative weight to the residual harm arising in relation to these matters in the overall balance.

5.4. TRAFFIC AND TRANSPORT

INTRODUCTION

- 5.4.1. This section considers the effects of the construction, operation and decommissioning of the onshore elements of the proposed development upon traffic and transport.
- 5.4.2. Given the location of the OnSS west of Little Bromley and an OnECC of approximately 22km the onshore works would intersect with a number of transport-related features along its route.
- 5.4.3. The OnECC would cross the A120, a major A-road road maintained by National Highways (NH) as part of the Strategic Road Network (SRN) which links the town of Harwich and Harwich International Port at its eastern extent to Colchester and the A12 and ultimately the M11 and A10 to the west. The OnECC would also cross a number of minor roads along its 22km route.
- 5.4.4. The OnECC would also cross the Great Eastern Mainline spur railway line at a point between Thorpe-le-Soken and Kirby Cross stations. This railway line is known as

the “*Sunshine Coast Line*”, connecting Colchester to Frinton-on-Sea and Walton-on-the-Naze.

5.4.5. There are a number of public rights of way (PRoW) that would be affected by the OnECC along its 22km route from the substation to landfall.

5.4.6. Accordingly, the following IPs actively engaged with the examination in relation to traffic and transportation matters: NH, ECC/TDC, SCC and Network Rail (NR).

5.4.7. Below, consideration is given to:

- Policy, legislation and guidance relevant to traffic and transport;
- The application proposals; and
- Issues considered during the examination.

LEGISLATION, POLICY AND GUIDANCE

5.4.8. The following legislation is relevant:

- Highways Act 1980
- New Roads and Street Works Act 1991

5.4.9. The following policy and guidance is relevant:

- Paragraphs 5.14.5 to 5.14.21 of NPS EN-1
- Paragraphs 115 and 117 of the NPPF
- Essex Local Transport Plan 2011
- Essex Walking Strategy 2021
- Tendring District Local Plan 2013-2033
- DLUHC Planning Practice Guidance - Overarching Principles on Travel Plans, Transport Assessments and Statements 2014
- Institute of Environmental Management and Assessment (IEMA) Guidelines for Environmental Assessment of Road Traffic (GEART) 1993
- IEMA Guidelines: (2023), Environmental Assessment of Traffic and Movement (GEATM)
- NH - Design Manual for Roads and Bridges (DMRB)

THE APPLICATION

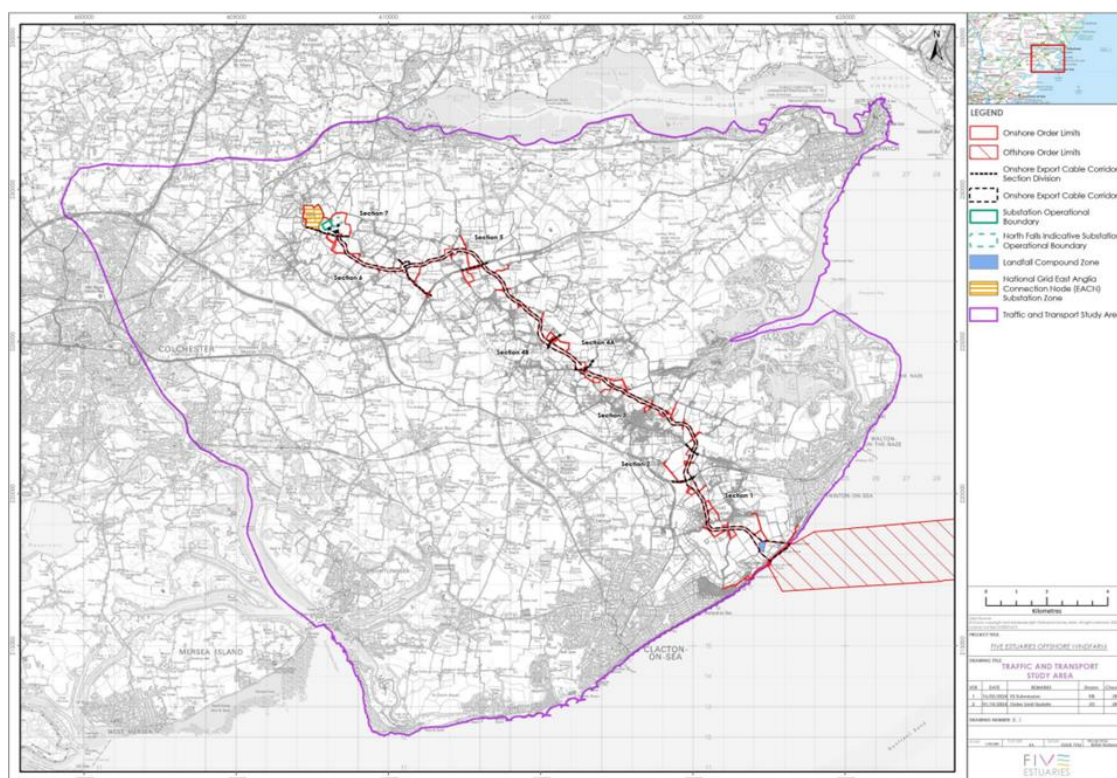
5.4.10. The applicant considered the impacts of the onshore elements of the proposed development on terrestrial traffic and transport in ES Part 3, Chapter 8 [[APP-090](#), superseded by [REP7-031](#)]. This chapter of the ES has been informed by a Traffic and Transport Baseline Report [[APP-172](#) and [APP-173](#), superseded by [REP7-035](#), [REP1-028](#), [REP1-029](#), [REP1-030](#), [REP1-031](#) and [REP7-037](#)].

5.4.11. The ES in [[REP7-031](#)] addresses the following matters:

- Section 8.4 sets out the scope, assessment methodology and the baseline
- Section 8.7 sets out the conditions existing at the site for the proposed development and its surroundings.
- Sections 8.10 and 8.11 consider any potential significant environmental effects the proposed development would have on this baseline environment
- Section 8.9 identifies the mitigation measures required to prevent, reduce or offset any significant adverse effects
- In section 8.12 consideration is given to cumulative effects
- In section 8.16 any residual effects following mitigation are identified

- 5.4.12. The ES in [REP7-031] notes that the construction phase for the proposed onshore development is identified as generating higher levels of traffic than the decommissioning phase, with traffic being substantially reduced during the operational phase. Accordingly, the assessment undertaken was primarily based on anticipated construction traffic volumes and routing as the worst-case parameters. The onshore study area is defined in the figure below was informed by determining the most likely routes for traffic, for both the movement of construction materials and construction workers.

Figure 5.9: The applicant's traffic and transport study area (taken from ES Part 3, Chapter 8 [REP7-031])



- 5.4.13. The assessment undertaken followed the methodologies set out in GEART, GEATM and DMRB and assessed the potential impacts from the increase in vehicle movements, particularly during the construction period, leading to driver delay and severance. Other impacts assessed include the delivery of abnormal indivisible loads (AILs) to site, impacts upon users of public rights of way, vulnerable road users and road safety.
- 5.4.14. The applicant's assessment was of the effects of construction of the onshore elements of the proposed development on traffic and transport only. In table 8.2 in [REP7-031] the applicant states that: *"The preferred base port(s) for the offshore construction and operation and maintenance activities of VE is not known as this would be decided post-consent. Port activity would be within the envelope assessed when the existing approvals for the Port were considered. Therefore, an assessment of these vehicle movements does not form part of this chapter."*
- 5.4.15. The applicant highlighted that a key mitigation to reduce the impact of construction traffic upon local communities would be by using a haul road within the working corridor of the OnECC to remove as much heavy goods vehicle (HGV) traffic from the local highway network as possible and to minimise the number of HGV

construction access points. The applicant has also committed to using trenchless techniques, such as horizontal directional drilling, to cross under most roads and therefore avoid road closures wherever possible.

- 5.4.16. Sections of Bentley Road, including the junction with the A120, would require widening to facilitate HGV access during construction. The proposed works may also include a segregated walkers, cyclists and horse-riders path, and the proposed Order Limits include land to facilitate this, should it be deemed necessary.
- 5.4.17. Temporary speed limit reductions would also be employed on a section of Bentley Road and on the B1035 Thorpe Road/Tendring Road during construction as a safety mitigation measure. A Temporary Speed Reduction Plan accompanied the application [[APP-023](#)], which was superseded by [[REP5-006](#)].
- 5.4.18. The applicant has sought to co-ordinate design and delivery of the onshore elements of the proposed development with the adjacent proposed NFOWF, as described in the Onshore Project Description [[AS-041](#)]. This includes the potential for sharing of, or reuse of, the site accesses, haul roads and temporary construction compounds (TCC). The applicant's assessment of effects in [[REP7-031](#)] includes the cumulative effects of the proposed NF OWF, the proposed EACN, other consented and proposed nationally significant infrastructure projects (NSIP) and other major consented development.
- 5.4.19. The applicant submitted additional transport related mitigation measures that are included in Schedule 15 of the dDCO for certification [[REP8A-004](#)]. The Outline Construction Traffic Management Plan (oCTMP) [[APP-257](#), superseded by [REP8A-019](#)] sets out key measures and principles to manage construction traffic effectively. The Outline Public Access Management Plan (oPAMP) [[APP-258](#), superseded by [REP8A-021](#)] describes how access would be maintained and managed to PRoW. The Outline Workforce Travel Plan (oWTP) [[APP-259](#), superseded by [REP7-056](#)] seeks to ensure movements associated with construction workers would be undertaken sustainably to minimise traffic volumes.
- 5.4.20. The ES in [[REP7-031](#)] concludes that there would be no significant effects arising from construction of the proposed development on traffic and transport. By employing the mitigation measures set out in the oCTMP, oPAMP and oWTP (final versions of which would be secured under Requirement 7 of Schedule 2 of the dDCO [[REP8A-004](#)]), residual effects likely to arise from changes in traffic movements would be reduced to negligible to minor adverse (table 8.55 in [[REP7-031](#)]).

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.4.21. During ISH1, we questioned the applicant on the exclusion in their ES assessment of any onshore port and transportation impacts arising from servicing the offshore works (table 8.2 in [[REP7-031](#)]). The applicant responded by confirming that the large WTG components would be transported by sea and not by road (section 2.7 in [[REP1-059](#)]). Whilst the offshore construction and operation would generate onshore vehicle movements, the applicant maintained that any activity at a port or ports generated by the proposed development would be within the envelope assessed when the existing approvals for a port were considered.
- 5.4.22. We also questioned the applicant on the use of AILs during construction activities in ISH1. In response the applicant submitted a technical note [[REP2-029](#)]. This provided us with further detail on the different categories of AILs that would be

involved during construction. It also contained at annex 2 an access report demonstrating how the largest category AIL could access the proposed OnSS zone from Harwich International Port via the A120.

- 5.4.23. The applicant had engaged with the East of England Ambulance Service Trust (EEAST), Essex County Fire and Rescue and Essex Police regarding emergency planning and impacts of the proposed development on the transport network. All matters with those parties were agreed, as confirmed in the SoCGs with EEAST [\[REP1-053\]](#), Essex County Fire and Rescue [\[REP5-055\]](#) and Essex Police [\[REP4-031\]](#).
- 5.4.24. The following sub-sections summarise the matters raised during the examination by NH, ECC/TDC, SCC and NR and any issues still outstanding at the close of the examination.

NATIONAL HIGHWAYS

- 5.4.25. At the outset of the examination, in responding to ExQ1 NH in [\[REP2-062\]](#) set out a number of concerns in relation to the applicant's assessment of onshore traffic and transport impacts, which it considered critical and required resolution for NH to be satisfied that the construction impact on the SRN had been assessed adequately and that the proposed arrangements would be acceptable.
- 5.4.26. During ISH1, NH highlighted a key concern in relation to the routing of AILs from Harwich International Port via the A120 and Bentley Road, to the site (section 4 of [\[REP1-066\]](#)). Part of the A120 (the Wix Bypass) is a concrete road surface which NH identified has reached the end of its design life and that particularly large AILs could potentially cause severe damage. The applicant undertook to work with NH to prepare a study to investigate potential mitigation solutions prior to the close of the examination (section 10 of [\[REP4-040\]](#)).
- 5.4.27. The applicant undertook a road safety audit (RSA) in relation to the A120/Bentley Road junction works, which was attended by NH and with the audit report subsequently submitted to and approved by NH, as stated within the signed SoCG [\[REP8A-033\]](#).
- 5.4.28. At the final examination deadline (DL) NH confirmed that all matters relating to the SRN were agreed and therefore withdrew its objection to this application [\[REP8A-048\]](#). The signed SoCG [\[REP8A-033\]](#) confirms all matters were agreed between the parties. The applicant provided a report to NH containing potential measures that could be deployed on the A120 Wix Bypass to mitigate the risk of damage to the road surface caused by AILs, which provided the assurance that NH was seeking.
- 5.4.29. NH confirmed in [\[REP8A-048\]](#) that it was satisfied with the additional modelling undertaken on A120 junctions and that no adverse impacts are forecast. NH was also content that the amended oCTMP [\[REP8A-019\]](#) provides sufficient protection in respect of the volume of HGVs and workforce traffic on the A120. NH agreed protective provisions with the applicant and was content that the SRN would be sufficiently protected by those provisions in combination with a side agreement.

ESSEX COUNTY COUNCIL/TENDRING DISTRICT COUNCIL

- 5.4.30. In the joint LIR in section 11 of [\[REP2-043\]](#) ECC/TDC set out what were considered to be the likely negative transport and traffic impacts, including cumulatively, of the proposed development on the local highway network.

- 5.4.31. ECC/TDC raised concerns relating to the sufficiency of measures and controls in the oCTMP, oWTP and oPAMP. These were updated by the applicant to address the points raised ([[REP5-035](#)], [[REP5-039](#)] and [[REP5-037](#)] respectively) and submitted at DL5, supported by a revised Temporary Speed Reduction Plan [[REP5-006](#)]. The dDCO was also updated at DL5 (Part 4 of Schedule 4 in [[REP5-007](#)]) to align with the temporary speed limits that were requested by ECC during the examination.
- 5.4.32. ECC also raised concerns during the examination regarding cumulative impacts and the applicant accordingly provided further information in the Cumulative Effects Assessment Methodology [[REP4-009](#)] and included within the updated [[REP7-031](#)]. The cumulative impacts identified were assessed to not be severe.
- 5.4.33. The final joint SoCG between the applicant and ECC/TDC [[REP8A-027](#)] confirmed that all traffic and transportation matters had been agreed by the examination's close.

SUFFOLK COUNTY COUNCIL

- 5.4.34. SCC in its LIR (section 8 of [[REP2-046](#)]) highlighted potential negative impacts on Suffolk's local transport network and communities due to additional traffic arising from construction activities and potential AIL movements from Suffolk ports to the site of the proposed development.
- 5.4.35. SCC set out concerns in [[REP2-046](#)] regarding the cumulative impact of AIL movements resulting from consented and proposed NSIPs and other major developments within Suffolk and from Suffolk ports to development sites outside the county. SCC and Suffolk Constabulary are at capacity in terms of resources in managing AIL movements. The applicant made changes to the oCTMP [[REP8A-019](#)] committing to early engagement with the relevant authorities on AIL movements. SCC in [[REP6-073](#)] noted it was prepared to accept use of the oCTMP to supplement the statutory controls for AILs.
- 5.4.36. In relation to any works at Orford Ness for Lesser Black Backed Gull compensation, SCC raised concerns in its LIR [[REP2-046](#)] that, whilst a low duration and intensity of work would be expected, it was not secured by control documents. As part of its joint SoCG with the applicant, SCC confirmed [[REP5-064](#)] that the construction method statement referenced in Requirement 18 of the dDCO [[REP8A-004](#)] would be sufficient to deal with its concerns. SCC wanted to be the discharging authority for the construction method statement specifically in relation to any works at Orford Ness, rather than this sitting with the relevant local planning authority as drafted in Requirement 18. However, we do not consider such change to be necessary due to the limited nature of any such works and the high likelihood that the local planning authority would consult with SCC as highway authority in any event to seek views on the works.
- 5.4.37. SCC and the applicant remained in disagreement at the close of the examination regarding the need for a Port Construction Management Plan. SCC argued that the applicant should submit one similar to those required for the East Anglia ONE North and East Anglia TWO OWFs [[REP1-071](#)].
- 5.4.38. In response, the applicant submitted a Technical Note: Use of Ports for Construction [[REP5-072](#)] which notes that recent OWF DCOs off the East Coast of England, including the Hornsea 4 project and the Sheringham Shoal and Dudgeon extension

project, do not include requirements for the submission of a Port Construction Management Plan or equivalent.

- 5.4.39. The Technical Note also contended that the requirement to produce such a plan has proved difficult to implement on other schemes. The applicant noted that an OWF project is likely to make use of multiple ports, therefore requiring a number of different local authorities to approve the plan. Some of these authorities may be unaware of the proposed development and may be unclear as to the purpose of such a request, as this is not a requirement for any other type of project that uses the port. The applicant argued that there was no reason why project related traffic should be considered any differently or cumulatively to any other user of an existing port.
- 5.4.40. We notes that ECC made a similar request for an Operation and Maintenance Port Management Plan (response to ExQ TT.1.07 in [\[REP2-045\]](#)). However, ECC withdrew that request having accepted the applicant's position set out in its Technical Note (item 5 of [\[REP6-046\]](#)).
- 5.4.41. Having considered the points made by SCC and the applicant on this matter, we are persuaded by the case made by the applicant in [\[REP5-072\]](#) and we do not consider it necessary to include a requirement in any made DCO requiring the submission of a Port Construction Management Plan.

NETWORK RAIL

- 5.4.42. At the close of the examination, whilst the applicant and NR had agreed a substantial proportion of the protective provisions in Part 5 of Schedule 9 in the dDCO [\[REP8A-004\]](#), there remained a matter which the parties had been unable to reach agreement on. NR therefore maintained its objection to the making of the DCO [\[REP8A-055\]](#).
- 5.4.43. The outstanding issue related to the inclusion or otherwise of a restriction in the protective provisions requiring the applicant to seek NR's consent prior to the exercise of compulsory acquisition powers in respect of railway property. Our consideration of NR's protective provisions request is included in chapter 10 of this recommendation.

CONCLUSIONS ON TRAFFIC AND TRANSPORT

- 5.4.44. We concur with the applicant that the significance of effect from the proposed development on traffic and transportation would be negligible to minor adverse, and thus not significant, resulting from the construction activities. We are content that effects during operation and decommissioning would be less than during the construction phase. The cumulative assessment predicted no significant cumulative effects, which we agree with.
- 5.4.45. We are content that the applicant has demonstrated that negative impacts associated with the proposed development can be satisfactorily mitigated and managed. Appropriate mitigation would be secured by Requirement 7 (Traffic and access plans), Requirement 8 (Permanent highway accesses), the oCTMP [\[REP8A-019\]](#), the oWTP [\[REP7-056\]](#), and the oPAMP [\[REP8A-021\]](#), final versions of which would be secured under Requirement 7 of the dDCO.
- 5.4.46. NPS EN-1 at paragraph 5.14.5 requires an applicant's ES to include a transport appraisal where a project is likely to have significant transport implications. The ES in [\[REP7-031\]](#) addresses that requirement. Table 8.19 in [\[REP7-031\]](#) addresses

paragraph 5.15.7 of NPS EN-1 by outlining mitigation measures during construction, including demand management measures to be adopted.

- 5.4.47. Paragraph 5.14.21 of NPS EN-1 states that the SoSESNZ should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision. The ES concludes that there would be no significant road safety effects and impacts on the road network would not be severe during construction.
- 5.4.48. We are therefore content that the proposed development accords with the requirements of NPS EN-1 and the NPPF, as well as local policies and strategies and other relevant legislation and guidance and there are no other important or relevant considerations.
- 5.4.49. The ExA attaches a little negative weight to the traffic and transport effects of the proposed development in the planning balance.

5.5. AIR QUALITY AND AIRBORNE NOISE AND VIBRATION

INTRODUCTION

- 5.5.1. This section addresses air quality and airborne noise and vibration. This subsection covers matters affecting human receptors, while those affecting ecological receptors are considered at in section 5.5 later in this chapter.

LEGISLATION, POLICY AND GUIDANCE

- 5.5.2. In its consideration of air quality and airborne noise and vibration, we have had regard to:
- The Control of Pollution Act 1974 (CoPA1974)
 - The Environmental Protection Act 1990 (EPA)
 - NPS EN-1 - sections 5.2 (Air Quality and Emissions) and 5.12 (Noise and Vibration)
 - NPS EN-5 - paragraphs 2.9.37 to 2.9.39 and 2.9.43 (Noise and Vibration)
 - Noise Policy Statement for England (NPSE)
 - The Clean Air Strategy (CAS)
 - The Environment Improvement Plan 2023 (EIP)
 - Local Impact Reports, to the extent that they are relevant to the topics
 - Any matters prescribed in relation to the proposed development
 - Any other important and relevant matters, including Planning Practice Guidance.

THE APPLICATION

Air Quality

- 5.5.3. The ES in [\[APP-092\]](#) considers air quality. Amongst other things, the applicant's assessment in this regard should be read in conjunction with its Construction Dust Assessment Methodology [\[APP-176\]](#), the Non-Road Mobile Machinery Emissions Assessment [\[APP-177\]](#), the Offshore Activities Assessment [\[APP-178\]](#) and the Road Traffic Dispersion Modelling [\[APP-179\]](#).
- 5.5.4. The study area for construction dust was defined using the Institute of Air Quality Management's guidance. It included human receptors within 250m of the Order Limits and those within 50m if routes used by construction vehicles would be on the public highway up to 250m from the Order Limits. In terms of the road traffic assessment, human receptors within 200m of roads expected to experience increases in traffic flows as a result of the proposed development have been assessed. Turning to non-road mobile machinery, human receptors within 50m of the use of such machinery have been assessed. Onshore human receptors within 1km of vessel movements generated by the proposed development have also been assessed.
- 5.5.5. The applicant's assessment considered the proposed development's effects during its construction, operation and decommissioning phases alone and cumulatively with other developments. Those effects include from emissions as a result of road traffic, dust, offshore activity (such as vessel movements) and non-road mobile machinery.
- 5.5.6. Most impacts have been assessed to be of negligible magnitude. That said, dust and PM₁₀ impacts have the potential to be of high magnitude during construction and in cumulative terms. Measures to mitigate effects on air quality are set out in the applicant's CoCP [\[REP8A-015\]](#) and include using best practice controls to dampen dusty activities, the planning of site layouts to avoid dust disturbance to sensitive receptors and a monitoring and communication framework.
- 5.5.7. Subject to mitigation, the applicant's assessment concluded that effects on sensitive human receptors would be minimised, negligible or completely removed. Overall, the applicant considered that the proposed development's residual effects on air quality would not be significant in EIA terms.

Airborne Noise and Vibration

- 5.5.8. The applicant's assessment of noise and vibration impacts on residential living conditions is set out in the ES in [\[APP-091\]](#). That should be read in conjunction with the Onshore Airborne Noise Baseline Noise Survey [\[APP-174\]](#), the Onshore Airborne Construction Sound Power Details [\[APP-175\]](#) and the traffic and transport chapter of the ES [\[REP7-031\]](#).
- 5.5.9. The study area for the noise and vibration assessment was 650m for construction noise, 100m for construction vibration, and 1km for operational noise. Noise effects were assessed in four separate areas consisting of the proposed: landfall; OnECC; OnSS; and widening of Bentley Road and improvements to the A120 junction with Bentley Road. These areas are discussed in detail in Section 9.4 in [\[APP-091\]](#).
- 5.5.10. Potential impacts scoped into the assessment during construction and operation, as well as cumulatively, are shown in Table 9.10 in [\[APP-091\]](#). Developments assessed within the cumulative assessment included substations associated with

the proposed EACN and NFOWF which would be close to the proposed development's OnSS.

- 5.5.11. Landfall construction noise would have a major adverse effect. However, with mitigation embedded in the CoCP [REP8A-015], the residual effects would not be significant. This would also be true for impacts relating to the construction of the proposed OnECC, the widening of Bentley Road, construction vehicular noise, the operation of the OnSS and cumulative construction vehicular noise. All other effects are assessed at minor or negligible levels.
- 5.5.12. Amongst other things, the CoCP would secure the use of quieter equipment and enclosures for plant machinery. Furthermore, the proposed OnSS would be sited more than 250m from the nearest sensitive receptors. Additional mitigation is discussed throughout this part of the recommendation where appropriate.
- 5.5.13. Subject to mitigation, the applicant's assessment concludes that there would be no significant residual effects in EIA terms.

ISSUES CONSIDERED DURING THE EXAMINATION

Air Quality

- 5.5.14. No concerns regarding air quality were raised during the examination. The signed SoCG between the applicant and ECC and TDC [REP8A-027] confirmed agreement to the air quality assessments and associated mitigation. We consider there is no reason for the ExA to take a contrary view with respect to the air quality effects of the proposed development.

Airborne Noise and Vibration

Junction of the A120 and Bentley Road – Construction Noise

- 5.5.15. Some relevant representations and other written submissions received from several local residents, raised concerns in relation to the effects of construction noise, particularly during the nighttime, for receptors close to the A120's junction with Bentley Road. Following discussions at ISH3 the applicant undertook a nighttime noise assessment for the period between 22:00 and 06:00 hours, when lane closures on the A120 would be expected for safety reasons when less traffic was using that road [REP4-043].
- 5.5.16. The applicant commented in [REP4-043] that it is likely that only highway lining works would need to be undertaken during the nighttime period, with the other proposed junction works being within Bentley Road and capable of being undertaken during the day time. The applicant expects that the nighttime works would take five nights to complete [paragraph 3.1.1 in REP-043]. Although the noise levels during the one week period of nighttime working would be relatively high, at 68dB L_{Aeq} at the nearest dwelling to the junction, a low magnitude impact is predicted. This would affect medium sensitive residential receptors, resulting in a temporary minor effect, which would not be significant in EIA terms. In paragraph 3.1.2 of [REP4-043] it is explained that in addition to applying the noise mitigation measures included in the CoCP [REP8A-015], additional mitigation would take the form of residents being given prior notice of the nighttime works and the undertaking of works closest to noise sensitive receptors between 20:00 and 23:00 hours.

General constructure noise and vibration

- 5.5.17. Section 4.3 of the CoCP [REP8A-015] sets out the noise and vibration mitigation, that would be applied during the construction phase, including measures such as: plant being fitted with silencers; the number of items of plant in use at any one time in a single location being minimised; the use of speed limits on surfaced and unsurfaced haul roads; the use of localised noise screening or site hoardings; keeping plant running for the shortest periods possible; and adherence with “BS 5228 Code of Practice for noise and vibration control on construction and open sites”. We also note that the applicant has not sought to disapply the controls available to local councils under the provisions of s60 and s61 of the CoPA1974.
- 5.5.18. In the signed SoCG between the applicant, TDC and ECC, no matters of disagreement are recorded with respect to construction noise effects [REP8A-027].

Onshore Substation - Cumulative Operational Noise

- 5.5.19. IPs, including TDC and ECC in their joint LIR [REP2-043], raised concerns regarding cumulative noise from the proposed development’s OnSS being sited close to the substations proposed for the NFOWF and the EACN. Responding to that matter the applicant submitted an Onshore Substations Operational Noise and The Outline Noise Complaints Protocol, initially as [REP5-088], which following discussions about it at ISH6, was superseded by [REP7-080]. Amongst other things, that document illustrated that the proposed substations would operate with a cumulative noise level of 35dB $L_{A_{Tr}}$. Lower individual operating noise limits for each of the substations would be secured through their respective DCOs. The operational noise limits for the proposed development’s OnSS are stated in Requirement 15(1) of the dDCO [REP8A-004], with the limit at Normans Farm being 31dB $L_{A_{Tr}}$. The setting of the noise limits in Requirement 15 of the dDCO would ensure that cumulative noise should not exceed levels assessed in the ES.
- 5.5.20. Included in [REP7-080] is a commitment that the applicant and the applicants for the NFOWF and EACN would develop a tripartite noise investigation protocol. That protocol would set out how complaints and on-going compliance would be managed between the projects. Under Requirement 15(2) a final version of the investigation would be submitted for approval prior the commencement of construction works for the proposed OnSS.
- 5.5.21. TDC and ECC in their closing submission [REP8A-044] have raised concerns about the the outline noise complaints protocol included in [REP7-080], including the amount of time identified for undertaking investigations of possible noise level breaches.

ExA’s findings on noise

- 5.5.22. With respect to nighttime noise at the junction of Bentley Road and the A120, we are content that the nature and duration of the proposed works would not give rise to an unacceptable effect for nearby residents.
- 5.5.23. In relation to general construction noise and vibration, we consider that the mitigation included in the CoCP [REP8A-015] would be sufficient to control the effects to an acceptable level. Powers to control construction noise would also be available to TDC under the provisions of s60 and s61 of CoPA1974.
- 5.5.24. With regards to cumulative noise associated with the proposed OnSS and the proposed substations for the NFOWF and the EACN, given the relatively quiet nature of the area there would be potential for the combined operation of the

proposed substations to cause noise disturbance for the small number of residents of the area. However, we consider that so long as the noise levels stated in Requirement 15(1) of the dDCO [REP8A-004] were adhered to the operation of the proposed development's OnSS alone would not be the source of unacceptable noise.

- 5.5.25. We share some of TDC's and ECC's concerns about the potential length of time it would take to investigate noise complaints to determine which of the three proposed substations was the source under the outline noise investigation protocol included in [REP7-080]. However, the final version of the noise investigation protocol would be for ECC's approval, as the designated discharging authority for the purposes of the dDCO. Should the version submitted for approval under Requirement 15(2) be unacceptable to ECC it would be open to ECC not to approve it.

CONCLUSIONS ON AIR QUALITY AND AIRBORNE NOISE AND VIBRATION

- 5.5.26. We consider the applicant's assessments in relation to air quality and mitigation measures accord with the provisions of paragraphs 5.2.9 and 5.2.10 of NPS-EN1.
- 5.5.27. We are of the view that assessment of airborne noise and vibration accords with the provisions of paragraphs 5.12.6 and 5.12.9 of NPS-EN1. We also consider that the proposed mitigation measures would be acceptable and would accord with relevant policy, including paragraphs 5.12.15 and 5.12.17 of NPS-EN1.
- 5.5.28. Subject to the application of the proposed mitigation measures, we are content that residual effects would not be significant in EIA terms in relation to effects on human receptors at any phase of the proposed development, alone or cumulatively.
- 5.5.29. Accordingly, we are content that the proposed development would be in accordance with the relevant policy in NPS EN-1, the NPSE, the CAS, the EIP, as well as other national and local policies and the other relevant legislation.
- 5.5.30. When effects of the proposed development are considered over its lifetime, we attach a little negative weight to effects on human health from air quality and effects from airborne noise and vibration in the planning balance.

5.6. ONSHORE ECOLOGY AND BIODIVERSITY

INTRODUCTION

- 5.6.1. In this section consideration is given to the proposed development's effects on onshore ecology and biodiversity, hereafter referred to as onshore ecology. Regard has been given to proposed habitat creation, protected and notable species and BNG at the OnSS and protected species and habitat loss during construction of the proposed OnECC.
- 5.6.2. Consideration in this section is given to:
- Legislation, policy and guidance relevant to onshore ecology;
 - The application proposals; and
 - Issues considered during the examination.

LEGISLATION, POLICY AND GUIDANCE

National legislation

5.6.3. The principal legislation in relation to onshore ecology is The Environment Act 2021 that sets out the new UK framework for environmental protection.

5.6.4. Other national legislation of relevance to onshore ecology are as follows:

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- Natural Environment and Rural Communities Act 2006
- Hedgerows Regulations 1997
- Protection of Badgers Act 1992
- Wildlife and Countryside Act 1981

NPS

5.6.5. NPS EN-1 paragraphs:

- 4.3.10 to 4.3.17, 4.6.6 to 4.6.18 and 5.4.17 to 5.4.34 - applicant's assessment and factors influencing site selection and design
- 5.4.7 to 5.4.16 – impacts
- 5.4.35 to 5.4.38 - mitigation
- 4.3.18 to 4.3.29, 4.6.1 to 4.6.3 and 5.4.39 to 5.4.55 - SoSESNZ's decision making with respect to impacts

5.6.6. NPS EN-3 paragraphs:

- 2.8.4, 2.8.34 to 2.8.43, 2.8.60, 2.8.74 and 2.8.75- applicant's assessment and factors influencing site selection and design
- 2.8.93 to 2.8.111 and 2.8.126 – impacts
- 2.8.226 to 2.8.232 and 2.8.236 - mitigation
- 2.8.285 to 2.8.291, 2.8.302 to 2.8.308 and 2.8.311 - SoSESNZ's decision making with respect to network connections

5.6.7. NPS EN-5 paragraphs:

- 2.6.1 to 2.6.7, 2.9.1 to 2.9.6, 2.9.20 to 2.9.25 and 2.13.1 to 2.13.13 applicant's assessment and factors influencing site selection and design
- 2.6.1 to 2.6.7 and 2.13.14 to 2.13.23 – impacts
- 2.10.2 to 2.10.04 and 2.14.1 to 2.14.2 - mitigation
- 2.5, 2.11.1 and 2.15. - SoSESNZ's decision making with respect to impacts

Other national policy and guidance

5.6.8. [National Planning Policy Framework](#) (December 2024, as corrected in February 2025) does not contain specific policies for Nationally Significant Infrastructure Projects, however its policies are capable of being matters that are important and relevant in considering the proposed development. Of particular relevance to onshore ecology are paragraphs:

- Paragraphs 174, 179 and 185 - applicant's assessment and factors influencing site selection and design.

5.6.9. We also consider the following policy and guidance published by Defra are of relevance to onshore ecology:

- [Circular 06/2005](#) Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system
- [Understanding biodiversity net gain - GOV.UK](#) – Guidance for the applicant to calculate biodiversity value with the statutory biodiversity metric

Local policy

5.6.10. The Local Impact Report (LIR):

TDC and ECC in their combined LIR [[REP2-043](#) and [REP2-042](#) (accompanying appendices)] identified the following development plan policies and other local policy documents of relevance to onshore ecology and biodiversity:

- Tendring District Local Plan 2013-2033 and Beyond: North Essex Authorities Shared Strategic Section 1 (2021) and Tendring District Local Plan 2013-2033 and Beyond: Section 2 (2022):
 - SP 7 – Place shaping principles
 - SPL 3 – Sustainable design
 - HP 3 – Green infrastructure
 - HP 4 Safeguarded open space
 - PPL 4 – Biodiversity and geodiversity
- Essex County Council NSIP's Policy (2022)
- Net Zero: Making Essex Carbon Neutral – Essex Climate Action Commission including Essex Green Infrastructure (GI) Strategy
- Essex County Council Rural Strategy (2016)

THE APPLICATION

5.6.11. Onshore ecology is assessed in the ES in [[APP-086](#)] of the ES. The area identified for Lesser Black Back Gull (LBBG) compensation at Orford Ness has been considered in Chapter 4 above, as has any other species or habitats subject to the Habitats Regulations Assessment. The ES [[APP-086](#)] was supplemented by species and habitat specific appendices, which we have referred to below as necessary.

BASELINE DATA AND SURVEYS

5.6.12. The applicant has adopted a MDS as explained in paragraph 4.7.36 and Table 4.22 in [[APP-086](#)]. The onshore biodiversity study area encompasses habitats and protected or notable species within and beyond the Order Land. That study area, being up to 2km beyond the Order Land, extends from all areas landward of Mean High Water Springs (MHWS) (Works No. 3) to the OnSS zone (Works No. 15).

5.6.13. The assessment methodology used comprised a combination of: desk top studies and surveys; consultations as explained in [[APP-086](#)]; and consideration of the NFOWF Ecology Reports [[APP-158](#)].

DESIGNATED SITES AND PROTECTED SPECIES

5.6.14. There are several designated sites close to, abutting or within the Order Land, including Special Protection Areas (SPA), Ramsar, Sites of Special Scientific Interest (SSSI), Local Nature Reserves (LNR) and Local Wildlife Sites (LWS) shown in Figure 4.3 in [[APP-086](#)].

5.6.15. The route of the OnECC was designed to avoid key areas of sensitivity as far as practicable. Where the proposed development would cross a designated site, for

example the Holland Haven Marshes SSSI, horizontal directional drilling (HDD) would be carried out for the installation of cable ducting. A full catalogue of obstacles and how they would be managed is identified in Table 6 of the Obstacle Crossing Register [\[REP3-010\]](#).

- 5.6.16. Protected species identified as important ecological features are shown in Table 4.13 of [\[APP-086\]](#). The identification of those ecological features was informed by the baseline studies and survey work undertaken and included bats, badgers, dormice, otter, water vole, breeding and non-breeding birds, notable plant species, invertebrates, amphibians and reptiles.
- 5.6.17. The applicant has indicated that an ecological clerk of works (ECoW) would be appointed and would coordinate pre-construction surveys, oversee all engineering operations and ensure all necessary licences were obtained. The ECoW would also be responsible for ensuring that habitat reinstatement, following commissioning, would be to an acceptable standard. The role and duties of the ECoW is set out in section 4.5 of the CoCP [\[REP8A-015\]](#).

HABITAT LOSS AND CREATION

OnECC

- 5.6.18. The route of the OnECC crosses predominantly arable land, around 220.5ha in extent, and the applicant has indicated that the engineering operations would result in the temporary loss of that habitat during construction. Overall, the proposed reinstatement would return the land to original use. The full extent of the proposed temporary loss of habitat is set out in Table 4.16 in [\[APP-086\]](#).
- 5.6.19. There would be limited permanent loss of habitat, including 1.26ha of grazing marsh and modified grassland to accommodate the landfall compound for the transition joint bay (TJB). That would be a small proportion of that habitat, present locally, as illustrated on Sheet 3 of Figure 4.4 in [\[APP-086\]](#).

OnSS

- 5.6.20. The site for the proposed OnSS is identified in section 1.2 of the oLEMP [\[REP8A-017\]](#) as an opportunity to introduce a mosaic of habitats including the creation of an orchard, lowland meadows, wetland, woodland and the planting of trees and 4.53km of hedgerows [Table 4.17 in [\[APP-086\]](#) to increase network connections in and around the OnSS work zone. Those planting proposals are illustrated in Figure 1.4 [\[REP8A-017\]](#).
- 5.6.21. The creation of the proposed habitats plus the construction of this project's OnSS, together with the works required for the proposed NFOWF, would result in the loss of 39.82ha of arable habitat [Table 5.8 in [\[APP-087\]](#). That arable habitat supports breeding sites for corn bunting and skylark, both being protected species [Table 4.13 in [\[APP-086\]](#).

TREES AND HEDGEROWS

OnECC

- 5.6.22. The applicant in its Arboricultural Report [\[APP-255\]](#) identified a number of trees within the survey area as being subject to Tree Preservation Orders (TPO) as set out in Table D. The applicant has identified two TPOs likely to be impacted by the proposed development being 23/00005/TPO and 21/00091/TPO.

- 5.6.23. In regard to hedgerows these fall into two categories being “important”, three being so identified, or not as defined by Hedgerow Regulations 1997. The applicant in adopting a MDS identified in Table 4.17 in [APP-086] a potential temporary loss of 1.61km of hedgerow. Those hedgerows are identified in Parts 2 and 3 of Schedule 12 of the dDCO [REP8A-004].

BIODIVERSITY NET GAIN

- 5.6.24. To identify biodiversity unit loss/gain using the BNG metric the applicant has completed two calculations. Option 1 being “Unmanaged habitats counted as lost” and Option 2 “Unmanaged habitats counted as lost and created”, Tables 5-1 and 5-2 of the Onshore Biodiversity Net Gain Indicative Design Stage Report (OBNGR) [REP6-015] set out the overall outcomes. The applicant considered Option 2 to be the most appropriate calculation.
- 5.6.25. The justification for Option 2 being most appropriate is stated in paragraph 4.1.4 of the OBNGR [REP6-015], commenting NE in pre-application consultation advised BNG cannot be claimed for areas where habitat is lost and reinstated, unless the reinstated area is included in a 30 year management plan, which is the position under Option 1. In this instance, only those hedgerows within the proposed OnSS Zone, being within the applicant’s control, would be subject to a 30 year management plan as set out in the OBNGR [paragraph 4.1.1 of REP6-015].
- 5.6.26. The applicant does not consider it reasonable, as set out in the OBNGR [paragraph 4.1.4 REP6-015], that the reinstated hedgerows within the OnECC would be subject to more than 5-year aftercare and has included these into Option 2 calculation.
- 5.6.27. The applicant indicated in paragraph 1.2.2 of the OBNGR [REP6-015] that the BNG assessment would be updated following the making of any DCO for the proposed development and would be based on the detailed scheme design to deliver 10% BNG.

Mitigation

- 5.6.28. The details for ecological monitoring and management during construction and operations are set out in section 10 of the oLEMP [REP8A-017]. These details would be embedded within the CoCP [REP8A-015], including the appointment of an ECoW. With respect to the proposed OnECC and ancillary uses, sections 4 to 7 of the oLEMP [REP8A-017] address mitigation for designated sites, habitats and protected species.
- 5.6.29. Trees subject of TPOs may require tree surgery to allow the installation of cable ducting or the passage of AILs and that tree surgery would be undertaken to accord with recognised standards. Site reinstatement works would include hedgerow planting and where trees were removed it is proposed three would be planted for every tree removed, as explained in the oLEMP [REP8A-017]. The oLEMP further sets out details for the proposed reinstatement works. Embedded mitigation is also included in the CoCP.
- 5.6.30. Both the CoCP and the oLEMP would be secured by requirements in the dDCO [REP8A-004], as would the provision of landscaping in the proposed OnSS zone, soil management, the protection of species, the reinstatement of land used temporarily and the delivery of BNG.

Summary of impacts and effects

- 5.6.31. During the different phases of the proposed development the following potential impacts and effects have been identified by the applicant:

Construction

- 5.6.32. In Table 4.17 in [\[APP-086\]](#) habitat losses and the significance of those losses are identified as follows:

- hedgerows (OnECC) – temporary - significant adverse, short term at local level, but following mitigation not significant in mid to long term
- arable field margins (OnECC) – temporary, but after mitigation not significant in short term
- woodland (OnECC) – temporary – significant adverse, short term at local level, but after mitigation not significant long term
- coastal grazing marsh (landfall TJB) – permanent, but not significant with mitigation
- coastal grazing marsh (OnECC) – temporary - not significant, short term, with mitigation

- 5.6.33. Table 4.18 in [\[APP-086\]](#) summarise the effects for protected and notable species in terms of habitat fragmentation and isolation, indicating the duration of loss and significance as follows:

- plant species (OnECC coastal habitats and arable margins) – temporary – significant adverse, short term at local level and with mitigation not significant mid-term
- invertebrates (OnECC) – temporary – significant adverse, short term at local level and with mitigation not significant mid-term
- amphibians (OnECC) – temporary and with mitigation not significant
- reptiles (OnECC) – temporary and with mitigation not significant
- breeding birds (excluding qualifying or notified features for designated sites) landfall (OnECC) – temporary and with mitigation not significant
- breeding birds (OnECC and OnSS) – temporary and with mitigation not significant
- breeding birds (OnSS) – temporary and with mitigation not significant
- breeding birds (OnSS) – permanent and no mitigation would be possible resulting in the loss of up to six corn bunting territories (county level) and 21 skylark territories (local level), giving rise to a significant adverse effect
- non-breeding birds (excluding qualifying or notified features designated sites) landfall (OnECC) – temporary and with mitigation not significant
- non-breeding birds (excluding qualifying or notified features designated sites) landfall (OnECC) – temporary and with mitigation not significant
- bats (OnECC and OnSS) – temporary and with mitigation not significant
- badger (OnECC and OnSS) – temporary and with mitigation not significant
- water vole (OnECC and OnSS) – temporary and with mitigation not significant
- dormice (OnECC and OnSS) – temporary and with mitigation not significant
- other mammals (OnECC and OnSS) – temporary and with mitigation not significant

Operations and maintenance

- 5.6.34. The applicant has considered disturbance or damage to important ecological features, bats and breeding and non-breeding birds at the OnSS, the route of the

OnECC and the TJB at landfall and finds in section 4.12 of [APP-086] that no significant adverse effect are anticipated arising from noise and light.

Cumulative effects

5.6.35. Table 4.21 in [APP-086] summarises the cumulative effects and their significance under the MDS, as follows:

- permanent and temporary habitat loss – subject to other projects being constructed in accordance with specific mitigation and compensation measures – no significant cumulative loss during construction phase
- temporary impacts on protected or notable species (resting and breeding sites) - subject to other projects being constructed in accordance with specific mitigation and compensation measures – no significant cumulative loss during construction and decommissioning phases
- habitat fragmentation and species isolation – subject to other projects being constructed in accordance with specific mitigation and compensation measures – no significant cumulative loss during construction phase
- non-breeding birds, temporary and permanent habitat loss and disturbance during construction – cumulative effects are likely during construction only due in part to the potential for an extended period. Subject to mitigation measures long term effects are not likely to be significant
- breeding birds including permanent and temporary loss of habitat during construction – cumulative for the proposed development, NFOWF and EACN would be a significant cumulative negative effect in relation to corn bunting and skylark

Decommissioning

5.6.36. No specific assessment has been provided for this phase, with the applicant advising in section 4.13 of [APP-086] that decommissioning activities would not exceed the construction phase worst case scenario assessed. In addition, near the end of the lifetime of the proposed development an updated ecological survey would inform a decommissioning strategy that would be finalised in agreement with relevant authorities and statutory consultees.

ISSUES CONSIDERED DURING THE EXAMINATION

5.6.37. Based on the relevant representations and written and oral submissions made by IP's during the examination, the key onshore ecology issues for consideration were:

- surveys
- designated onshore sites
- protected species
- trees/hedgerows
- habitat loss/habitat creation
- biodiversity net gain (BNG)

SURVEYS

5.6.38. NE identified at an early stage of the examination that some of the submitted onshore ecology species surveys had not been carried out appropriately or provided insufficient confidence for delivering mitigation. NE maintained its concern throughout the examination [items J1 and J2/J32 in REP8A-053]. The applicant provided a proposal for further species surveys in [PD1-002]. NE has accepted the further species surveys proposed for the OnECC as being appropriate. However,

NE maintained its concern in respect of the proposed LBBG compensation site, a matter addressed by us in Chapter 4 of this recommendation.

- 5.6.39. The applicant's final position regarding the undertaking of onshore species surveys pre-construction forms part of the oLEMP [[REP8A-017](#)].

DESIGNATED SITES

- 5.6.40. There are a number of designated sites potentially affected by the OnECC with Holland Haven Marshes SSSI directly impacted, with part of it being within the Order Land.
- 5.6.41. NE recommended that further consideration was needed of the impacts from bentonite frac-out, specifically at Holland Haven Marshes SSSI. NE considered the Environment Agency to be the regulator, in respect of this issue and consequently, we have considered that matter in section 5.6 of our recommendation.

PROTECTED SPECIES

Dormice

- 5.6.42. During examination SPFL expressed concern that seeking to avoid dormice would result in a significant diversion of the construction haul road [paragraph 2.5 in [REP2-086](#)].
- 5.6.43. The applicant clarified during ISH3 that pre-construction presence/absence surveys for all hedgerows along the OnECC's route would be carried out [paragraphs 1.2.17 and 1.2.18 in [REP3-022](#)]. That would inform a decision as to whether HDD would be the most appropriate method for installing cable ducting. Where no protected species are identified, the haul road would not be diverted and would follow the OnECC route. In ISH3 SPFL accepted the applicant's explanation.

Badgers

- 5.6.44. NE recommended that where practicable the pre-construction surveys should identify the main badger sett locations. The applicant has included badgers in the oLEMP [paragraph 7.9.2, 7.9.3 and 7.94 [REP8A-017](#)], committing to pre-construction surveys and making provision to employ reasonable avoidance measures and where necessary the ECoW would secure any required licences.

Migratory Bats

- 5.6.45. The German government in [[RR-035](#)] raised a concern regarding the proposed WTG being sited in the flight path for bats migrating between mainland Europe and the United Kingdom. That concern was echoed by SCC in [[REP2-046](#)].
- 5.6.46. Following requests by the ExA to NE to clarify its position on this matter (including in [[PD-014](#)]), there was now agreement between the applicant and NE that the proposed development could be in the flight path for migratory bats.
- 5.6.47. Considering mitigation, NE and the applicant stated in [[REP4-063](#)] and [[REP5-074](#)] that curtailing the operation of the proposed WTGs at times when wind speeds were lower and more conducive for bat flights would be ineffective. That is because of the presence of other nearby OWFs. We note the comments of SCC [[REP2-046](#)] in relation to operational curtailment at Borssele OWF which is located off the coast of

the Netherlands. As explained by the applicant in [\[REP3-025\]](#), the Borssele OWF is not directly comparable with the proposed development because it is closer to the coast.

- 5.6.48. This matter would typically be dealt with via an individual species license under the Habitats Regulations. However, in responding to ExQ3 ME.3.03 the applicant commented that such a license has never been requested for a comparable development and there is no good reason to do so in this case [\[REP7-084\]](#).

HABITAT LOSS/HABITAT CREATION

- 5.6.49. As explained in [\[APP-086\]](#) the applicant's focus for habitat loss and creation has largely been in respect of the OnSS zone. During examination ECC questioned the appropriateness of that approach, stating "*compensation is required to ensure enhancements can be delivered outside the redline boundary, fulfilling the requirements called for by Design Review Panel to ensure a meaningful extension of the GI network in the immediate and surrounding locality*" [pages 19 of 20 [REP8A-044](#)]. The applicant in responding reiterated its position with regards to combining landscape mitigation with ecological enhancement as set out in [\[APP-086\]](#).

HEDGEROWS AND TREES

- 5.6.50. Whilst hedgerows and trees have been considered in landscape and visual impact terms, they are also habitats in ecological terms. The applicant during ISH6 advised that the MDS assumption treats all of the hedgerows catalogued in Schedule 12 of the dDCO [\[REP8A-004\]](#) as being at potential risk of removal [paragraph 1.7.12 in [REP6-045](#)]. The embedding of pre-construction surveys within the oLEMP [\[REP8A-017\]](#) has the potential to reduce the need for all the hedgerows being removed and only those necessary, to facilitate trenching, would be identified in the final design details.
- 5.6.51. During examination the applicant introduced a new part in Schedule 12 of the dDCO [\[REP8A-004\]](#) cataloguing trees subject to TPOs. We are content that TPO trees would be appropriately protected and lopping, felling and root cutting would only be carried out where the identified trees were found to be an obstacle to undertaking works or the passage of AILs.

BIODIVERSITY NET GAIN

- 5.6.52. Providing BNG for Nationally Significant Infrastructure Projects is not currently mandatory, however given the coming into force date for BNG, the applicant has made provision for it as part of the proposed development. The outcome of the evaluation of the BNG metric identified a shortfall in habitat creation. The applicant has chosen to concentrate its BNG provision within the proposed OnSS Zone, with a combination of landscaping for the purposes of visual screening and ecological enhancement. Those would feed into the calculation of BNG units for the proposed development [paragraph 2.2.2(c) in [REP3-022](#)].
- 5.6.53. During ISH3 the ExA requested the applicant explain the approach to BNG including the differences between the NFOWF proposal and its own proposal. The applicant did not wish to comment on NFOWF proposal but provided its position on BNG [paragraph 1.3.3 in [REP3-022](#)], reiterating the reasons put forward in the OBNGR [\[REP6-015\]](#).

- 5.6.54. At an early stage of the examination NE sought a minimum 10% BNG to be secured through a requirement in any made DCO for the proposed development. That matter remains unresolved insofar as Requirement 20 in the dDCO [[REP8A-004](#)] does not include a BNG delivery percentage.
- 5.6.55. ECC confirmed, in response to our questions that opportunities exist through its green infrastructure/habitat networks to provide BNG offsite, acknowledged by the applicant as an option [response to ExQ SLV.2.04 [REP4-039](#)].

CONCLUSIONS ON ONSHORE ECOLOGY AND BIODIVERSITY

SURVEYS

- 5.6.56. The applicant has committed to carrying out pre-construction surveys of habitats and protected and notable species in and around the Order Land. We consider those surveys would inform appropriate mitigation measures to ensure that onshore ecology would not be adversely impacted during the construction and operational phases and that there would be no residual adverse effects.

PROTECTED SPECIES

Dormice/Badgers

- 5.6.57. We are content that the applicant has provided clarity on its position in regards to dormice and badgers, including the commitments within the CoCP and the oLEMP [[REP8A-017](#)] to carry out pre-construction surveys, implement mitigation during construction and reinstatement.

Migratory Bats

- 5.6.58. The exact number of migratory bats flying through the proposed array areas is unknown as stated by the applicant in its response to the representation from the German government [[REP1-049](#)]. Migratory bats are not qualifying features of any designated European site directly or indirectly affected by the proposed development. However, effects on an individual protected species (such as *Nathusius pipistrelle*) cannot be ruled out.
- 5.6.59. Given the siting of the proposed WTGs protection for species under the Habitats Regulations only extends to territorial seas in England. Such waters are up to 12 nautical miles from the coast.
- 5.6.60. To assist the understanding of the movement of bats between mainland Europe and the UK, as well as any implications the presence of OWFs have for migrating bats, the applicant has updated the Offshore In-Principle Monitoring Plan (IPMP) [[REP8A-023](#)] to implement bat monitoring. The undertaking of this monitoring has been welcomed by NE in [[REP8-054](#)].
- 5.6.61. In accordance with paragraph 2.8.223 of NPS EN-3, such monitoring could “... *be of sufficient standard to inform future decision-making*”. In line with the provisions of paragraph 2.8.296 of NPS EN-3 the ExA consider that the monitoring of any impacts for bats would be appropriate, because it would provide useful baseline data for the consideration of this matter in the future when other offshore wind proposals are being designed and/or considered by the SoSESNZ.
- 5.6.62. Although the applicant has made provision for bat monitoring in the IPMP and that document would be secured under the provisions of the deemed marine licences included in Schedules 10 and 11 of the dDCO, we consider that the undertaking of

bat monitoring should be secured via a requirement included in any made DCO for the proposed development. We have therefore incorporated a new requirement, Requirement 23, into our recommended DCO to address this matter.

- 5.6.63. With respect to mitigating effects for migrating bat, we agree with the applicant that curtailment might not be effective because of the presence of other nearby OWFs that would not be subject to any such curtailment. No other mitigation appears to be available. Accordingly, an element of harm to bat species cannot be excluded.
- 5.6.64. Taking everything together, there is potential for the proposed development to cause harm to bats. The degree of harm cannot be quantified at this stage.

HABITAT LOSS/HABITAT CREATION

- 5.6.65. The loss of arable habitat at the OnSS site would be locally significant, however, the applicant is proposing a mosaic of habitats within the OnSS zone. Whilst some of the proposed landscape planting would be visual mitigation (paragraph 1.2.8 in the oLEMP [\[REP8A-017\]](#)) we accept that it would represent the creation of some new habitat.
- 5.6.66. We have some reservations with regard to the amount of land at the OnSS site identified for ecological enhancement and habitat creation. Paragraph 5.4.35 of NPS EN-1 requires mitigation through habitat creation to be focused on areas where the most ecological and ecosystems benefits can be realised. We consider that the applicant has not, as yet, fully investigated alternative provision for habitat creation within the Order Land along the route of the OnECC or in relation to ECC's recommendation to consider alternative opportunities being promoted through its Essex Green Infrastructure (GI) Strategy [\[REP8A-044\]](#). This matter is further considered in the BNG section below and should the applicant achieve a 10% BNG the matter of habitat loss and creation there would be no adverse residual effects.

HEDGEROWS AND TREES

- 5.6.67. We are content that the applicant has provided sufficient mitigation embedded in both the CoCP [\[REP8A-015\]](#) and the oLEMP [\[REP8A-017\]](#) to protect trees and hedgerows during construction or where removed are to be replaced.

BIODIVERSITY NET GAIN

- 5.6.68. The applicant in responding to ExQ2 SLV.2.04 [\[REP4-039\]](#) has advised that should 10% BNG not be achieved within the proposed Order Land then any shortfall would be delivered off site [\[REP4-039\]](#). NE have maintained its position with regards to delivering a fully 10% BNG. The applicant has committed to ongoing discussions with landowners within Essex [paragraph 6.1.1 of [REP6-015](#)] to secure offsite BNG. Given the applicant's commitment to deliver 10% BNG and the need under Requirement 20 to obtain approval for a BNG strategy, we consider an appropriate level of BNG would be secured as part of the proposed development.

SUMMARY OF CONCLUSIONS

- 5.6.69. There would be potential for currently unquantifiable harm to be caused to bats. Nevertheless, we do not consider that potential harm to be of such significance to warrant the withholding of consent for the proposed development. In all other regards we are content that the proposed development would not give rise to unacceptable harm to onshore ecology. Overall, we consider the proposed development would accord with the relevant policy in the NPS EN-1, NPS EN-3 and

NPS EN-5. We therefore consider that the effects on onshore ecology are neutral in the planning balance.

5.7. FLOOD RISK AND WATER QUALITY

INTRODUCTION

- 5.7.1. In this section consideration is given to the proposed development's effects on onshore hydrology, hydrogeology and flood risk, hereafter referred to as the water environment. Regard is given to flood risk, surface water and ground water quality during the construction and operation of the proposed OnSS, the construction and maintenance of the proposed OnECC and decommissioning.

LEGISLATION, POLICY AND GUIDANCE

National legislation

- 5.7.2. The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (WFD) is the principal protection for all elements of the water cycle and extends into coastal waters.

- 5.7.3. Other national legislation of relevance to water environment are as follows:

- Environmental Permitting (England and Wales) Regulations 2016
- The Private Water Supplies (England) Regulations 2016
- Flood and Water Management Act 2010
- Flood Risk Regulations 2009
- The Water Resources Act 1991
- The Land Drainage Act 1991

NPS

- 5.7.4. NPS EN-1 paragraphs:

- 4.3.10 to 4.3.17, 4.6.13, 4.10.5, 4.10.6, 4.10.8 to 4.10.12, 4.11.5, 4.11.7, 4.12.6 to 4.12.8, 5.4.7, 5.4.17, 5.4.18, 5.6.11, 5.6.14, 5.8.6 to 5.8.11, 5.8.13 to 5.8.23, 5.11.4, 5.11.7 and 5.16.3 to 5.16.7 - applicant's assessment and factors influencing site selection and design
- 4.12.5, 5.4.8, 5.6.11, 5.8.5, 5.8.15, 5.16.1, 5.16.2 and 5.16.7 - impacts
- 4.12.4, 5.4.35, 5.4.37, 5.6.14, 5.8.2, 5.8.4, 5.8.12, 5.8.24 to 5.8.35, 5.11.13, 5.11.15, 5.16.5, 5.16.6 and 5.16.8 to 5.16.10 - mitigation
- 4.3.18 to 4.3.20, 4.3.29, 4.10.13, 4.10.16, 4.10.19, 4.11.12, 4.11.13, 4.12.9, 4.12.10, 4.12.13 to 4.12.16, 5.4.44, 5.4.48, 5.4.50, 5.4.54, 5.6.17, 5.8.36 to 5.8.42 and 5.16.11 to 5.16.16 - SoSESNZ's decision making with respect to impacts

- 5.7.5. NPS EN-3 paragraphs:

- 2.8.37, 2.8.67, 2.8.68 and 2.8.72 - applicant's assessment and factors influencing site selection and design
- NPS EN-5 paragraphs:
- 2.3.1, 2.3.2, 2.3.3 2.9.1, 2.9.2, 2.9.19 and 2.13.10 - applicant's assessment and factors influencing site selection and design
- 2.9.1, 2.9.19, 2.13.14, 2.13.15, 2.13.16, 2.13.18, 2.13.20 and 2.13.23 – impacts
- 2.14.2 - mitigation
- 2.3.1, 2.4.4, 2.9.24 to 2.9.25 and 2.15.1 - SoSESNZ's decision making with respect to impacts

5.7.6. NPS EN-5 paragraphs:

- 2.3.1, 2.3.2, 2.3.3 2.9.1, 2.9.2, 2.9.19 and 2.13.10 - applicant's assessment and factors influencing site selection and design
- 2.9.1, 2.9.19, 2.13.14, 2.13.15, 2.13.16, 2.13.18, 2.13.20 and 2.13.23 – impacts
- 2.14.2 - mitigation
- 2.3.1, 2.4.4, 2.9.24 to 2.9.25 and 2.15.1 - SoSESNZ's decision making with respect to impacts

Other national policy and guidance

5.7.7. [National Planning Policy Framework](#) (December 2024, as corrected in February 2025) (the NPPF). Of particular relevance to the water environment are:

- paragraphs 170 to 186 – flood risk and coastal change
- paragraphs 196 to 201 – ground conditions and pollution

5.7.8. [Planning practice guidance - GOV.UK](#) (the PPG). Of particular relevance to the water environment are:

- flood risk
- sustainability
- water quality
- pollution

5.7.9. The applicant references UK guidance on good practice for construction projects throughout the application documentation relating to the water environment.

THE APPLICATION

5.7.10. The onshore water environment is assessed in ES's chapter on Hydrology, Hydrogeology and Flood Risk [\[APP-088\]](#). The ES chapter was supplemented by technical reports and appendices, which we have referred to below as necessary:

Statutory and Non-Statutory Sites and Features of Nature Conservation – Onshore [\[AS-027\]](#)

- Water Bodies in a River Basin Management Plan (RBMP) [\[AS-028\]](#)
- Flood Risk Assessment– Onshore Export Cable Corridor [\[APP-038\]](#)
- Flood Risk Assessment (FRA) – Onshore Substation [\[APP-039\]](#)
- Cumulative Effects Assessment Methodology [\[REP4-009\]](#)
- Site Selection and Alternatives [\[APP-066\]](#)
- Onshore Project Description [\[AS-041\]](#)
- Ground Condition and Land Use [\[APP-087\]](#)
- Climate Change [\[APP-093\]](#)
- Human Health and Major Disasters [\[AS-005\]](#)
- Onshore cable route obstacle crossing register (OnOCR) [\[REP3-010\]](#)
- Ground Water Risk Assessment (GWRA) [\[REP8-018\]](#)
- Onshore Substation Design Principles [\[REP8-020\]](#)
- WFD assessment – onshore [\[APP-236\]](#)
- Outline Landfall Methodology [\[APP-262\]](#)

5.7.11. The applicant's assessments were informed through a combination of desk study, survey and consultation. Baseline data was sourced from publicly available datasets and opensource, data requests and consultation with stakeholders and regulatory bodies. The study area extends from MHWS to the connection point between the

proposed OnSS and the EACN. This area includes a 2km buffer encompassing the proposed OnSS, OnECC and TCC. Coordination with the proposed NFOWF has also included. The applicant's assessments were based on the MDS set out in Table 6-11 in [\[APP-088\]](#) relating to construction, operation, decommissioning and cumulative effects.

- 5.7.12. The WFD assessment [\[APP-236\]](#) was incorporated into the assessments and mitigation proposals for groundwater and surface water. The activities were identified in Table 5.1 and mitigation in Table 6.1. Significance was set out in Table 6.2. Overall, the applicant concludes that construction, operation, maintenance or decommissioning would be unlikely to have a permanent effect on the water environment. The current status of the water bodies, within the scope of the WFD assessment, are predicted not to deteriorate as a consequence of the proposed development.

GROUNDWATER

- 5.7.13. The baseline groundwater environment was assessed. The applicant identified the underlying Thames group bedrock to be an unproductive aquifer and therefore assigned negligible sensitivity. However, the superficial deposits where groundwater is potentially present, as perched waterbodies above lenses of impervious deposits, such as clay and other groundwater bodies classed as secondary (A or B) aquifers were assigned medium sensitivity. Several groundwater and surface water abstractions for agricultural and domestic uses were considered by the applicant to be of medium sensitivity.
- 5.7.14. The applicant sets out in section 4.11 of the CoCP [\[REP8A-015\]](#), by making reference to the GWRA [\[REP8-018\]](#), the mitigation proposed to manage ground water during construction and after, including maintenance of the OnECC. Consequently, in terms of the WFD there were very few potential pathways for adverse impact on sensitive receptors.

SURFACE WATER

- 5.7.15. The baseline surface water environment was assessed using the RBMP [\[AS-028\]](#) and WFD - onshore [\[APP-236\]](#). Overall, the applicant considered that the inland watercourse receptors, which included those that feed into designated sites, to range in sensitivity from low to high. The near-shore coastal waters of the North Sea are considered to have a medium sensitivity in terms of effects arising from onshore activities. The Colne and Stour Estuaries having international designations were assessed as being of high sensitivity in terms of effects arising from onshore activities. Where of relevance, the bathing water and chemical status has been identified as good to excellent and ecological status of moderate.
- 5.7.16. During construction the applicant has identified the sensitivity of a number of waterbodies and water courses and consequently indicated that the majority of these would not be trenched but ducting would be engineered using HDD as set out in Tables 3, 6 and 8 in [\[REP3-010\]](#), which includes Holland Haven Marshes SSSI.
- 5.7.17. The applicant sets out at sections 4.9 and 4.10 of the CoCP [\[REP8A-015\]](#) the mitigation proposed to manage surface water during construction and after, including maintenance of the proposed OnSS and OnECC during operations. Consequently, in terms of the WFD there were very few potential pathways for adverse impact on sensitive receptors.

FLOOD RISK

- 5.7.18. The applicant submitted two FRA's relating to the proposed OnECC [[APP-038](#)] and OnSS [[APP-039](#)]. The FRA for the OnSS cumulatively with the proposed NFOWF substation, provides layouts for MDS, during the construction and operational stages of the proposed development. It is noted that whilst mitigation is provided, a final design for the OnSS would follow the making of any DCO for the proposed development and would include a Sustainable Drainage Strategy (SuDS).
- 5.7.19. The FRA for the proposed OnSS considers that the site is at low risk of fluvial and tidal flooding being in Flood Zone 1. In addition, given the management of drainage including raising the development at the OnSS, the groundwater and pluvial flood risk is also considered low.
- 5.7.20. The proposed OnECC has a more complex profile being a linear development traversing upwards of 22km from landfall to the connection with the proposed EACN. There are seven route sections identified encompassing Flood Zone 1 through to Flood Zone 3, the latter mainly associated with the Holland Brook as illustrated in the Figure 3-1 of the Environment Agency (EA) Flood Map for Planning [[APP-038](#)] that passes through route section 1. Generally, the route of the OnECC sought to avoid areas vulnerable to surface water flooding.
- 5.7.21. The flood risk for the proposed OnECC is considered low to negligible, given the overall design of temporary and permanent structures such as joint boxes. The embedded mitigation for flood risk, as set out in section 4.8 of the CoCP [[REP8A-015](#)] provides for flood management and response, given that the route of the OnECC falls within the Essex and South Suffolk Shoreline Management Plan 2. Particular emphasis was given to existing coastal flood defences and the CoCP [[REP8A-015](#)] has committed to subscribing to the Floodline flood warning service.
- 5.7.22. The applicant, having applied the required FRA tests, identified that the existing coastal flood defences would remain effective and that any residual impacts that could give rise to flood risk on site or in the wider locality would be low.
- 5.7.23. The flood risk for the proposed OnSS is considered to be low from any flood scenario being in Flood Zone 1. The applicant has identified that during construction the outline design for the proposed development and that of the proposed NFOWF substation includes attenuation of surface water and discharge to existing watercourses, subject to local lead flood authority (LLFA) control under the protective provision included in Part 4 of Schedule 9 of the dDCO [[REP8A-004](#)].

OTHER RELATED MATTERS

- 5.7.24. Embedded pollution prevention measures are set out at section 3.16 of the CoCP [[REP8A-015](#)] and are expanded to incorporate unexpected contamination at section 3.17.
- 5.7.25. Two obstacles of significance were also assessed, being the sea defence managed by the EA and Frinton Golf Course (drainage and irrigation system) at the landfall route section of the proposed OnECC. In respect of the sea defence, sheet piling as described in section 3.2 of the outline landfall methodology report [[APP-262](#)] on the seaward side would provide protection during construction. In both instances ducting would be engineered using HDD as set out in Tables 6 in [[REP3-010](#)].
- 5.7.26. Given the extended period of operations, the applicant has committed to provide a detailed plan for onshore decommissioning. That would include a bespoke CoCP,

incorporating flood risk, surface and ground water management secured by Requirement (R) 22 in the dDCO [\[REP8A-004\]](#).

Overall summary of effects

- 5.7.27. The applicant through the application of the mitigation set out above, considers overall that the hydrology, hydrogeology, in terms of the WFD, and flood risk in the study area would be of a low sensitivity during construction and operation. Mitigation through the CoCP [\[REP8A-015\]](#) would provide adequate pollution control throughout the life of the proposed development.

ISSUES CONSIDERED DURING THE EXAMINATION

- 5.7.28. Section 5.2 of this recommendation has considered issues relating to agricultural land drainage and irrigation. Based on the relevant representations and written and oral submissions made during the examination, the key issues relating to hydrology, hydrogeology and flood risk are:
- Groundwater
 - Surface Water
 - Flood Risk

GROUNDWATER

- 5.7.29. During examination, we raised questions regarding the robustness of the ground water monitoring carried out pre-application. Subsequently, more survey work was undertaken during the examination in conjunction with the NFOWF project and in consultation with the EA. The data collected informed a substantially revised GWRA [\[REP8-018\]](#) that now includes an outline groundwater monitoring and mitigation plan (oGWMP).
- 5.7.30. The applicant identified a total of seven private water supplies (PWS) together with an abstraction site, in Table 2-1 of the oGWMP [\[REP8-039\]](#), as being at potential risk arising from dewatering during construction. Section 2.6 of the oGWMP [\[REP8-039\]](#) sets out the mitigation planning, through a programme of routine monitoring of groundwater levels and water quality before and during construction. Where PWS levels dropped and were attributed to dewatering, the applicant would cease those operations and where necessary provide a temporary water supply. The oGWMP would be a certified document in its own right and would be subject of R13 of the dDCO [\[REP8A-004\]](#). We are therefore satisfied that the implementation of mitigation would not give rise to adverse effects on groundwater during construction and operations and that further mitigation would be submitted for approval prior to the decommissioning of the proposed development.

SURFACE WATER AND FLOOD RISK

- 5.7.31. NE highlighted in [\[REP8A-053\]](#) concerns relating to bentonite frac-out during HDD under the waterbodies of Holland Haven SSSI. However, NE deferred to the EA, being the regulator in respect of environmental water management. In direct response to the protection of the SSSI and the potential risk for frac-out, the applicant set out mitigation proposals for HDD [\[SoCG REP8A-025\]](#) that would be embedded into the CoCP [\[REP8A-015\]](#). The EA has indicated that subject to implementation of the CoCP [\[REP8A-015\]](#), mitigation measures would provide sufficient control to manage frac-out.
- 5.7.32. Throughout the examination the EA, ECC as LLFA and TDC were requested by the us to comment on various aspects of surface water management and flood risk. As

set out in its SoCG [\[REP8A-025\]](#) the EA and ECC/TDC in [\[REP8A-027\]](#) in addressing impacts on surface water and flood risk, indicated that they were content with the mitigation proposals set out in the CoCP [\[REP8A-015\]](#). We are therefore satisfied that the implementation of mitigation would not give rise to adverse effects, on surface water and the management of flood risk, during construction and operations and that further mitigation would be submitted for approval prior to the decommissioning of the proposed development.

CONCLUSIONS ON HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK

- 5.7.33. NPS EN-1 paragraph 5.16.12 states that the SoSESNZ would need to give impacts on the water environment more weight where projects would adversely affect the achievement of the environmental objectives established under the WFD. NPS EN-1 at paragraph 5.16.16 requires consideration of the appropriateness of mitigation where adverse impacts are likely to arise and whether appropriate requirements should be attached to any development consent.

SURFACE WATER AND FLOOD RISK

- 5.7.34. There would be potential for adverse effects arising from the proposed development. However, the proposed surface water and flood risk management would provide appropriate mitigation, during construction, operation and maintenance of the proposed OnECC, mitigation that is embedded in the CoCP [\[REP8A-015\]](#). We consider with mitigation, the effects in terms of surface water protection and flood risk relating to the proposed OnECC, would address the requirements of the WFD and those effects would be neutral in the planning balance.
- 5.7.35. The ExA considers that subject to mitigation through the CoCP and the final design of the OnSS secured R5 in the dDCO [\[REP8A-004\]](#) the effects in terms of surface water protection and flood risk associated with the proposed OnSS, would address the requirements of the WFD and those effects would be neutral in the planning balance.

GROUNDWATER

- 5.7.36. The applicant has stated that during the construction phase ground water management would be informed by a GWMP secured via R13 in the dDCO [\[REP8A-004\]](#).
- 5.7.37. We consider that subject to mitigation, the effects in terms of ground water protection address the requirements of the WFD during the construction phase and would be neutral in the planning balance.
- 5.7.38. We recognise that given the long operational period, decommissioning would be for consideration in the future. However, we see no reason why the proposed development's decommissioning could not be undertaken in a manner that would accord with the WFD.
- 5.7.39. Overall, the ExA considers that there would be the potential for adverse effects arising from all phases of the proposed development. However, given the need for the proposed management plans to be approved and implemented to mitigate any adverse effects, we consider the proposed development would accord with the provisions of the WFD and the relevant policies in the NPSs, most particularly NPS EN-1 and NPS EN-5. Overall, we therefore consider that matters relating to the

water environment, most particularly water quality and flood risk would be neutral in the planning balance.

6. ONSHORE AND OFFSHORE ISSUES

6.1. INTRODUCTION

6.1.1. In this chapter we assess the planning issues concerning the following onshore matters:

- Historic environment
- Climate change
- Socioeconomics
- Cumulative and interrelated effects
- Good design

6.2. HISTORIC ENVIRONMENT

INTRODUCTION

6.2.1. This section considers the effects of the onshore and offshore elements of the proposed development on the historic environment including marine archaeology. Onshore we consider the proposed development's effects on any nearby listed buildings and their settings. Offshore we consider effects on historic assets, including proposed measures for their protection, including any mitigation measures, where appropriate. Matters relating to Seascape and Visual issues are considered in Chapter 4.

LEGISLATION, POLICY AND GUIDANCE

In its consideration of the historic environment and marine archaeology effects, below, the ExA has had regard to:

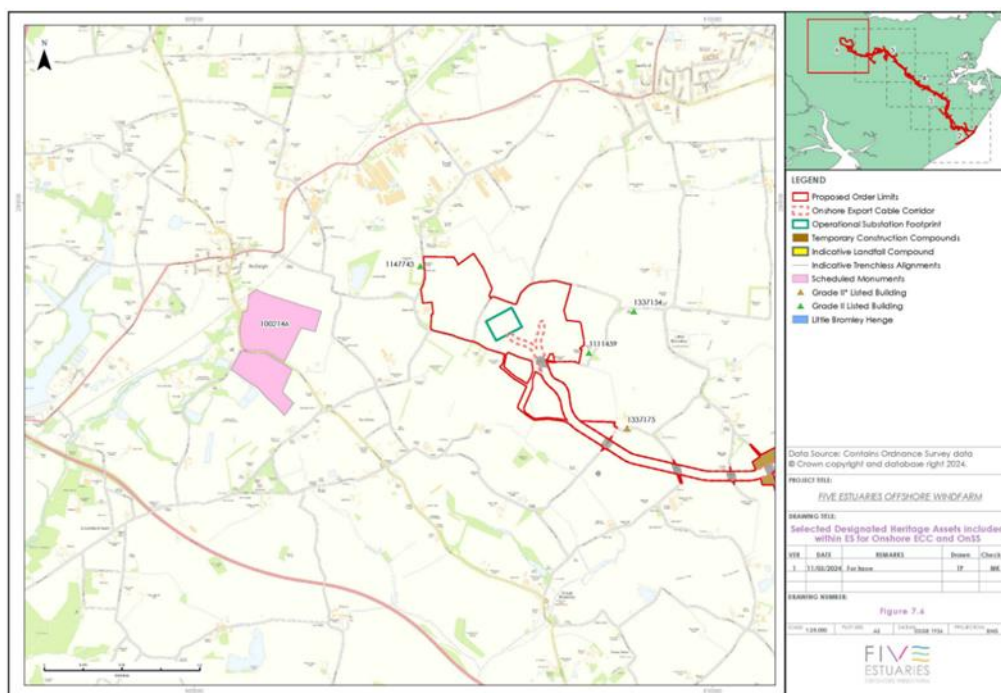
- The Planning (Listed Building and Conservation Areas) Act 1990
- Marine and Coastal Access Act 2009
- Merchant Shipping Act 1995
- Protection of Wrecks Act 1973
- The Protection of Military Remains Act 1986
- Burial Act 1857
- The Treasure Act 1996
- The Treasure (Designation) Order 2002
- Ancient Monuments and Archaeological Areas Act 1979
- Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010
- Paragraphs 5.9.9 to 5.9.14, 5.9.17 to 5.9.22 5.9.24 to 5.9.28, 5.9.30 to 5.9.33 and 5.9.35 to 5.9.36 of the Overarching National Policy Statement for Energy (NPS EN-1)
- Paragraphs 2.8.167 to 2.8.177, 2.8.252 to 2.8.258 and 2.8.325 of the National Policy Statement for Renewable Energy Infrastructure (NPS EN-3)
- Paragraphs 2.2.10, 2.9.19 and footnote 21, and 2.10.1 and footnote 27 of the National Policy Statement for Electricity Networks Infrastructure (NPS-EN5)
- UK Marine Policy Statement (HM Government, 2011)
- East Inshore and East Offshore Marine Plans (2014) (EIEOMP)
- South East Inshore Marine Plan (2021) (SEIMP)
- Local Impact Reports (LIR) submitted from Essex County Council [[REP2-042](#) and [REP2-043](#)]
- The National Planning Policy Framework in Section 16: Conserving and enhancing the historic environment is relevant also.
- Any matters prescribed in relation to the development; and
- Any other important and relevant matters

THE APPLICATION

Onshore

- 6.2.2. The applicant's assessment of effects on onshore heritage assets is set out in Archaeology and Cultural Heritage chapter of the Environmental Statement (ES) [APP-089]. That chapter is supported by:
- Historic Environment Plan – Onshore [APP-016] and Revision B [AS-026];
 - Historic Environment Desk-Based Assessment [APP-160];
 - Onshore Geophysics Report [APP-161];
 - Geoarchaeological Desk Based Assessment [APP-162];
 - Archaeological and Geoarchaeological Monitoring of Ground Investigation works [APP-163] and Revision B [REP4-012];
 - Onshore Cultural Heritage – GPA3 Exercise and Technical note – Onshore Project Area [APP-165];
 - Onshore Archaeological and Geoarchaeological Monitoring of Ground Investigation – Onshore ECC [APP-166];
 - Archaeological and Palaeolithic Evaluation Phase 1 and Phase 2 [APP-167 and APP-168];
 - Cultural Heritage Wirelines and Viewpoints – Parts 1, 2 and 3 [APP-169 to APP-171];
 - Environment Desk-Based Assessment – Appendix 4 APS Report [PD4-013];
 - Onshore Historic Environment Desk-Based Assessment Figures [REP5-089];
 - Outline Onshore Written Scheme of Investigation Revision B [REP8-028];
 - Archaeological Mitigation Strategy (AMS) [REP6-051] and Revision B [REP8-033];
- 6.2.3. Onshore, the applicant has identified three Grade II* listed buildings, 54 Grade II listed buildings, three scheduled monuments and three conservation areas within the 500 metres (m) and 2 kilometres (km) study areas surrounding the proposed Order Limits (paragraph 7.7.59 in the Archaeology and Cultural Heritage report [APP-089]). In addition, an undesignated heritage asset has also been taken into consideration by the applicant, comprising a cropmark of a henge which has been put forward by Historic England to become a scheduled monument.
- 6.2.4. The ES [APP-089] also identifies a large number of heritage assets located within the 70km coastal study area and, of these, detailed assessments of potential effects were carried out in relation to The North Lookout Aldeburgh, The South Lookout Aldeburgh, Martello Tower Aldeburgh, Orford Castle and Naze Tower. The historic assets scoped in for detailed assessment by the applicant are set out in paragraph 7.7.62 of [APP-089] and their locations are shown in Figures 7.2 to 7.6 in [APP-089]. Archaeological discoveries within the study area and the geoarchaeological background are provided in paragraphs 7.7.2 to 7.7.58 in [APP-089].
- 6.2.5. The proposed onshore substation (OnSS) would be located to the west of the nearest listed building, Jennings Farmhouse, which is a Grade II building and is located around 250m from the proposed Order Limits at its closest point. The Grade II* Church of St Mary is also nearby to the south east of the proposed OnSS site and also within the vicinity of a section of the proposed onshore export cable corridor (OnECC). Those heritage assets are identified in Figure 2.11 Historic Environment Plan – Onshore [APP-016].

Figure 6.1: Selected Designated Heritage Assets included within ES for Onshore ECC and OnSS [Figure 7.6 in APP-089]



- 6.2.6. In Table 7.6 of [APP-089] consideration is given to the maximum design scenario (MDS) for the proposed development and its potential effects on the historic environment during construction, operation and decommissioning phases. Tables 7.7 and 7.8 in [APP-089] identify embedded mitigation that has been applied to the proposed development's indicative design and additional mitigation measures that would be applied as part of the project's detailed design.
- 6.2.7. Paragraphs 7.10.2 through to 7.10.25 in [APP-089] assess the impacts on any potential palaeolithic and palaeoenvironment deposits. Potential archaeological assets, geophysical anomalies and other potential remains are assessed in paragraphs 7.10. 26 to 7.10.55 and the mitigation detailed in 7.10.56 to 7.10.59 in [APP-089]. The indirect effects on heritage significance during construction is considered and assessed from paragraphs 7.10.62 to 7.10.80. Those assessments cover: the level of heritage significance for each asset identified; the settings for the assets; and the likely impacts for each of the assets. The findings of these assessments are summarised in Table 7.12 in [APP-089], which details the effects of the proposed development on the affected heritage assets during construction, as well as during operation and decommissioning and any proposed mitigation if necessary.
- 6.2.8. Table 7.12 in [APP-089] identifies that during the construction and operational phases the highest direct and indirect effects for some of the identified heritage assets would be minor adverse (not significant) which would mainly affect archaeological remains directly. There would also be some effects to the listed Jennings Farmhouse due to the changes within its setting. In terms of the proposed mitigation, where required this would involve preservation by record of buried archaeology (or archaeological remains), which would involve: a programme of archaeological fieldwork to be approved by the discharging authority (Essex County Council (ECC)) acting for Tendring District Council (TDC - the local planning

authority); and recording, including the creation of an archaeological archive so the remains can be preserved by record.

- 6.2.9. The applicant has also provided an Outline Written Scheme of Investigation for Archaeological Investigation (oWSI) [REP8-028] which sets out the in-principle measures which would be implemented to secure the completion of archaeological and geoarchaeological investigations prior to the construction of the onshore elements of the proposed development and the mitigation measures to be undertaken during construction. This forms part of the process outlined in the Archaeological Mitigation Strategy (AMS) [REP8-033] and the measures detailed in these documents would be secured by Requirement 9 of the dDCO [REP8A-004].

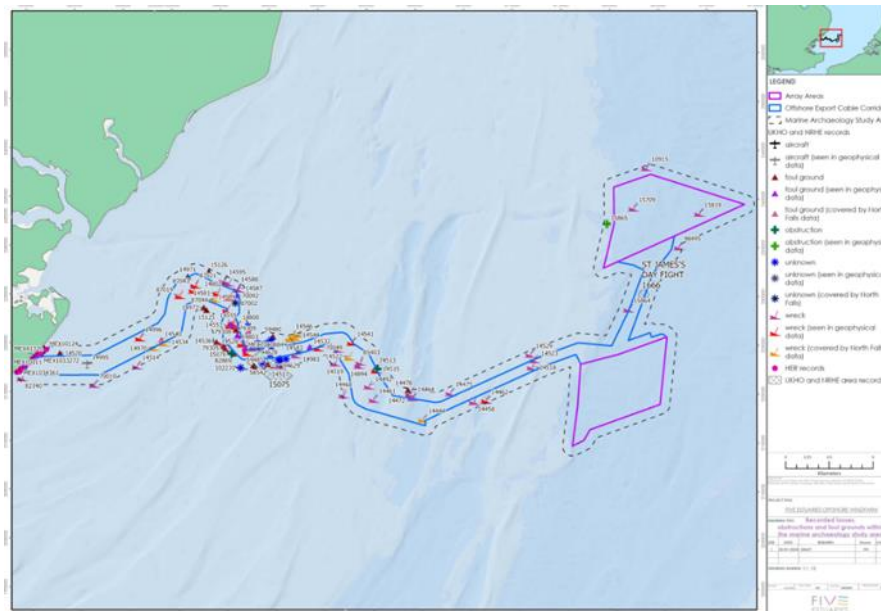
Offshore

- 6.2.10. The applicant's assessment of the effects on offshore heritage assets is set out in Offshore Archaeology and Cultural Heritage [APP-080], which forms part of the ES. It is supported by:

- Historic Environment Plan – Offshore [APP-017];
- Onshore Cultural Heritage – GPA3 Exercise and Technical Note – Offshore Array [APP-164];
- Archaeological Mitigation Strategy (AMS) [REP6-051] and Revision B [REP8-033]

- 6.2.11. The assessment in [APP-080] includes the consideration of the potential impacts on wrecks and potential offshore archaeological deposits as a result of the proposed works below Mean High Water Springs (MHWS) during the proposed construction, operation and decommissioning phases including cable laying and foundation construction.

Figure 6.2: Recorded losses, obstructions and foul grounds within the marine archaeology study area [Drawing 11.10 APP-080]



6.2.12. Figures 11.4 to 11.9 in [APP-080] variously show the locations for recorded losses, features of geoarchaeological potential and geophysical anomalies within the proposed array areas and the offshore export cable corridor (OfECC). Figure 11.10 shows recorded losses, obstructions and foul grounds within the study area. The applicant has identified 15 impacts which could potentially arise during construction, operation and decommissioning, including indirect and direct effects for the historic seascape character, marine heritage receptors and perceived historic uses resulting from the proposed development. Table 11.24 in [APP-080] summarises the effects on marine heritage receptors, the need or otherwise for any additional mitigation measures and the resulting residual impacts during construction, operation and decommissioning.

6.2.13. In [APP-080] the applicant explains that for the important receptors the proposed development would result in some direct and indirect effects. However, the applicant concludes in [APP-080] that there would be no significant effects on the offshore archaeological environment. Mitigation measures would be developed through additional investigations and assessments required throughout all stages of the project and are identified in the Outline Marine Written Schemes of Investigation (oMWSI) [REP4-025] and plans secured through the Deemed Marine Licence. The applicant is therefore of the view that there would be no significant adverse residual effects for the historic environment arising from the proposed development.

ISSUES CONSIDERED DURING THE EXAMINATION

6.2.14. At the close of the examination, many of the initial concerns raised by ECC and TDC and Historic England (HE) had been resolved. The unresolved historic environment matters at the examination's close are considered below.

ECC AND TDC

6.2.15. TDC and ECC in section 5 of [REP8A-044] have set out their closing position in relation to the historic environment and observe that they are now content with:

- the redrafting of the draft Development Consent Order (dDCO) insofar as it addresses the proposed development's effects on onshore archaeology (proposed Requirement 9)
- the applicant's revisions to the Archaeological Mitigation Strategy (AMS) [REP8-033], outline Onshore Written Scheme of Investigation (oWSI) [REP8-028] and the recommended changes to the Code of Construction Practice (CoCP) [REP8A-015].

6.2.16. However, TDC and ECC have advised on page 18 of [REP8A-044] that there remains a lack of agreement about the adequacy of the pre-application intrusive archaeological fieldwork and that concern remains unresolved. TDC and ECC therefore conclude that, the information submitted to date is insufficient to assess the impact on archaeological remains and whether the proposed mitigation would be achievable. The Statement of Common Ground (SoCG) between TDC, ECC and the applicant [REP8A-027] confirms that at the examination's close there remained disagreement about the adequacy of the pre-application intrusive fieldwork and the impact on archaeological remains. In that SoCG, the applicant has commented that undertaking trial trenching across the entirety of the OnECC would have been disproportionately disruptive for landowners and expensive and that the combination of a desk based assessment, geophysical surveys, the use of aerial photographs and a small amount of ground surveying has provided sufficient evidence to inform the assessment and identify mitigation measures.

- 6.2.17. In terms of TDC's and ECC's initial references to Jennings Farmhouse and other designated heritage assets, effects on those assets have been assessed by the applicant in [\[APP-089\]](#), as summarised above. In the SoCG between the TDC, ECC and the applicant [\[REP8A-027\]](#), it has been agreed that the assessment and conclusions relating to designated heritage assets are appropriate. In that regard we are content that the affected heritage assets have been identified and that the assessment methodology set out in [\[APP-089\]](#) was appropriate.
- 6.2.18. With respect to archaeological considerations, the applicant has submitted that the investigations undertaken to date are considered to be proportionate and in accordance with the approach required by NPS EN-1, NSP EN-3 and NPS EN-5. The applicant considers the carrying out of trial trenching within the entirety of the OnECC at the pre-application stage would have been unduly disruptive for landowners and it undertook no further intrusive archaeological investigations following the application's submission.
- 6.2.19. During the examination, the applicant submitted an AMS, its final version being [\[REP8-033\]](#) and updated its oWSI [\[REP8-028\]](#) which proposes a phased programme of fieldwork post-consent including archaeology-led trenching and the approach and details of mitigation would be secured under Requirement 9 of the dDCO [\[REP8A-004\]](#). The ExA agrees with the applicant's position on this matter.

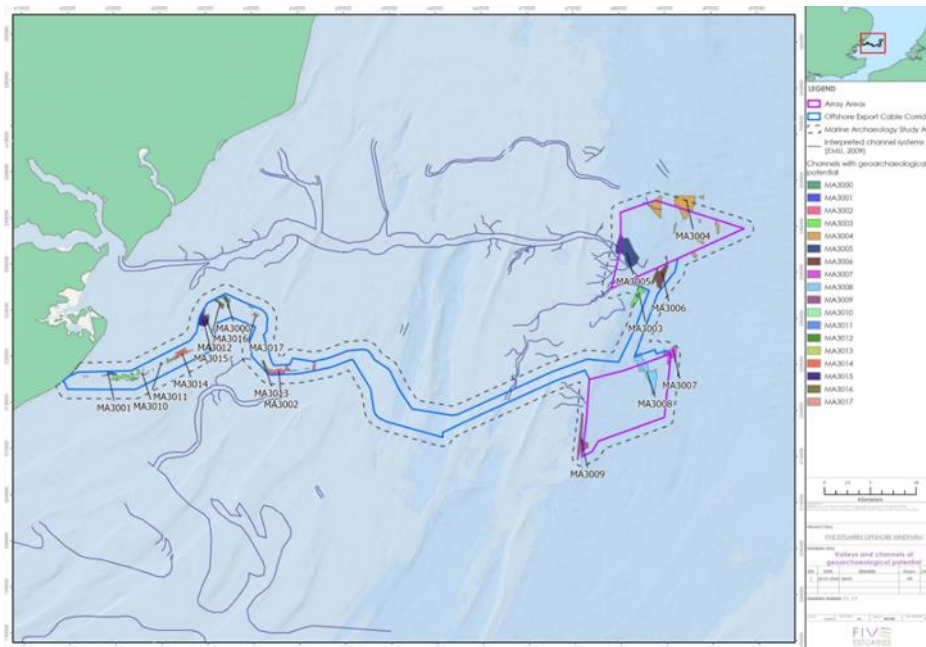
HISTORIC ENGLAND

- 6.2.20. Initially, HE had a number of concerns and it progressed matters with the applicant throughout the examination. A signed SoCG [\[REP8A-029\]](#) between HE and the applicant was submitted at the examination's final deadline which records progress having been made and a number of HE's initial concerns had been addressed.
- 6.2.21. At the examination's close the only unresolved matter recorded in [\[REP8A-029\]](#) concerns HE's view that wording should be included in Condition 13(2) of Part 2 of Schedule 11 (Deemed marine licence (DML) for transmission assets) of the dDCO [\[REP8A-004\]](#) which would require the Marine Management Organisation (MMO) to consult with ECC in respect of works subject to the DML falling within the jurisdiction of a local authority.
- 6.2.22. In response, the applicant explained that ECC would be the discharging authority for onshore works in TDC's area and its jurisdiction would end at the low water mark, with the result that most of the licenced work would not come within ECC's remit. The applicant therefore considered it would be unnecessary for the MMO to consult with ECC in respect of works not impacting on the intertidal area, an area which would be covered by the final version of the oMWSI.
- 6.2.23. We recognise that the majority of the DML would relate to works beyond the jurisdiction of ECC acting as the discharging authority on TDC's behalf. Nevertheless, in respect of the intertidal area, where there would be a transition between the jurisdictions of the MMO and ECC there would be the potential for an inconsistency to arise between what might be approved under the DML by the MMO and ECC when it was discharging a request for an approval under Requirement 9. To avoid any potential for such an inconsistency to arise, we agree with HE that ECC should be named as a consultee of the MMO in respect of the Condition 13(2) of the DML forming Schedule 11 of the dDCO [\[REP8A-004\]](#) (Condition 22(2) in our recommended DCO), subject to any such consultation being limited to works within the intertidal zone. Wording to that effect has been included in our recommended DCO.

EXA ISSUES RAISED AT ISSUE SPECIFIC HEARING 6 (ISH6) REGARDING THE OfECC WIDTH

- 6.2.24. During ISH6 we sought clarification from the applicant as to whether the proposed OfECC would be of sufficient width to accommodate the proposed works given the extent of the proposed offshore archaeological exclusion zones. In response to that question the applicant advised that the width of the OfECC was evaluated at this point and combined engineering exercises were carried out which concluded a low risk. The applicant clarified that they had looked at avoidance measures in respect of archaeology in this location but if that was not possible then micro-targeting was possible, and mitigation measures could be put in place to record and replace any finds in proximity to the OfECC [EV10-007]. Accordingly, the applicant is content that buried archaeology would not be a constraint and that the proposed works could be accommodated within the OfECC and the oMWSI [REP4-025] would control any necessary investigations or mitigation measures, secured by Schedule 11, Part 2 of the dDCO [REP8A-004].

Figure 6.3: Valleys and channels of geoarchaeological potential [Drawing No 11.17 in APP-080]



- 6.2.25. Based on the information provided in the application and the clarification provided by the applicant during ISH6, we are content that there would be sufficient width within the OfECC to accommodate the proposed works without there being adverse effects for offshore buried archaeology.

ExA's Considerations

- 6.2.26. NPS EN-1 requires that considerable importance and weight be given to the desirability of preserving all heritage assets and any harm or loss of significance of a designated heritage asset should require clear and convincing justification. Furthermore, paragraph 5.9.27 of NPS EN-1 states that when considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation.

- 6.2.27. NPS EN-5 refers to Schedule 9 of the Electricity Act 1989, which places a duty to have regard to the desirability of protecting sites, buildings and objects of architectural, historic or archaeological interest and do what can be reasonably done to mitigate any effects.

Onshore

- 6.2.28. The Grade II* Church of St Mary is in a relatively isolated location and is originally a 12th century building of high heritage significance, derived from its ecclesiastical architectural interest. Its immediate setting comprises its churchyard and the wider setting is characterised by agricultural land with some sporadic properties and associated rectory. The Church is located over a kilometre from the OnSS site and there is a substantial amount of intervening screening from buildings and hedgerows which removes any meaningful intervisibility between the church and the proposed site for the OnSS. In terms of the OnECC, construction would be undertaken to the immediate south of the Church, which would have some effects on the setting of this listed building. The applicant has assessed this as being a temporary minor adverse effect and would only occur during the construction phase, with the land being restored to its current condition and use. The ExA agrees with that assessment and as such finds that there would be no harm arising in respect of the effects of the proposed OnECC.
- 6.2.29. Jennings Farmhouse is Grade II listed, which is a 17th century farmhouse of high heritage significance. Its setting is characterised by its immediate garden area, as well as the wider agricultural land which make a positive contribution to its special interest and significance. The location of the proposed OnSS would introduce an industrial feature into the landscape in proximity to the listed building and would be visible within its setting. The extent of this, however would reduce as the proposed planting matures as detailed in Viewpoint 4 Figures 2.19a-d [APP-187]. In the Statement of Common Ground [REP8A-027] ECC note that less than substantial harm would be caused to the significance through change within the setting and the applicant considers that the assessed effect of “*minor adverse*” is not significant and it was agreed that the assessment and conclusions were appropriate. The applicant does not reference any “*less than substantial harm*” nevertheless, given the minor adverse effect identified, the ExA considers this would equate to less than substantial harm in this instance.
- 6.2.30. Table 7.12 in [APP-089] summaries the effects of the proposed development, both direct and indirect, on archaeological and cultural heritage assets. The report finds that there would be some impacts on some heritage assets, mainly during construction and some during the operational phase of the proposed development. However, with the mitigation measures in place, to be subject to approval, through preservation by record or by retaining in situ, the effects would be reduced to a minor adverse effect and are not considered to result in significant residual effects. In terms of the impacts of the proposed development on the setting of the nearby listed buildings, no significant indirect effects have been identified with only minor or negligible effects being identified.
- 6.2.31. We consider that the proposed development would give rise to less than substantial harm to the significance of Jennings Farm Grade II listed building, due to changes within its setting, however this would be very limited and at the lowest end of the less than substantial scale of harm. We also note that, in many cases, the effects would be temporary and short term, occurring only during the construction period.

Offshore

- 6.2.32. In respect of the offshore investigations and surveys carried out to date the applicant has clarified that these surveys represent initial investigations and that further investigations would be carried out post-consent. The applicant has identified areas of uncertainty and detailed any technical difficulties expected to be encountered in section 11.6 in [\[APP-080\]](#). Based on: the application documentation; the additional evidence presented during the examination, including the advice provided by HE; and the further investigations that would be undertaken post the making of any DCO for the proposed development, we are content that the offshore works would be capable of being implemented without resulting in significant effects. Appropriate mitigation would be secured through the approval of final version of the oMWSI.

CONCLUSION

- 6.2.33. In relation to both the onshore and offshore heritage assets, including archaeology, we consider the proposed development accords with the relevant policy included in NPS EN-1, NPS EN-3 and NPS EN-5, as well as meeting the statutory requirements of Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 which require regard is paid to the desirability of preserving listed building or their setting or any features of special architectural or historic interest which they possesses. We consider the proposed development would also meet the requirements of policies SE-HER-1 of the SEIMP and Policy SOC2 of the EIEOMP.
- 6.2.34. For the above reasons, there would be less than substantial harm arising from the proposed development in relation to the designated heritage assets which will be weighed against the public benefits in the overall planning balance section in Chapter 8 of our recommendation. We have had regard to the temporary nature of the impacts on the historic environment, and the proposed further investigations, mitigation and measures that would be secured in any made DCO for the proposed development. The ExA therefore affords a little negative weight to the effects of the proposed development on the historic environment in the planning balance.

6.3. CLIMATE CHANGE

INTRODUCTION

- 6.3.1. This section considers the effects of the proposed development upon climate change.

LEGISLATION, POLICY AND GUIDANCE

- 6.3.2. In our consideration of climate change, we have, in particular had regard to:
- Sections 4.3, 4.10 and 5.3 of NPS EN-1
 - Section 2.4 of NPS EN-3
 - Section 2.3 of NPS EN-5
 - Policies CC1 and CC2 in the EIEOMP
 - Policy SE-CCUS-1 in SEIMP
 - Paragraph 168 of the NPPF
- 6.3.3. The following legislation and guidance is also relevant:
- The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
 - Climate Change Act 2008, and the Carbon Budgets Order

- Energy Act 2023
- The UK's Net Zero Strategy
- IEMA Environmental Impact Assessment Guide to: Climate Change Resilience and Adaptation (2020)
- International Standards Organisation, ISO 14040-44
- Local Impact Reports (LIR), to the extent that they are relevant to the topic, submitted by Babergh District Council [[REP2-040](#)], Essex County Council/Tendring District Council [[REP2-043](#)], East Suffolk Council [[REP2-041](#)] and Suffolk County Council (SCC) [[REP2-046](#)]
- Any other matters prescribed in relation to the development
- Any other important and relevant matters

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- 6.3.4. The applicant considered the potential impact of the proposed development on climate change in ES Part 4, Chapter 1 [[APP-093](#)], informed by a Green House Gas (GHG) Assessment [[APP-094](#)]. The applicant when referring to any GHG savings has compared the proposed development with electricity generated by non-renewable sources, such as gas.
- 6.3.5. The ES Part 4, Chapter 1 [[APP-093](#)] climate change resilience (CCR) assessment categorised receptors into four categories:
- Offshore built assets and infrastructure;
 - Onshore built assets and infrastructure;
 - Construction workers and site users; and
 - Drainage systems.
- 6.3.6. The results of the CCR assessment in [[APP-093](#)] are set out in table 1.15 for the construction phase, table 1.16 for the operational phase, and table 1.17 for the decommissioning phase. An assessment of in-combination climate impact effects across the lifetime of the proposed development was also undertaken, with the results set out in table 1.18.
- 6.3.7. The potential impact of the proposed development on climate change receptors has been assessed in each ES chapter. The assessment made in [[APP-093](#)] draws on assessments undertaken by the applicant for other topics, such as air quality, traffic and transport, hydrology and marine geology and physical processes. Proposed mitigation relating to climate change is set out in table 1.14 of [[APP-093](#)]. It also sets out the potential vulnerability of the proposed development to the impacts of climate change.
- 6.3.8. The GHG Assessment [[APP-094](#)] presented two scenarios as there would be alternatives for the choice of foundations and the number of wind turbine generators, together with an operational lifetime of between 24 and 40 years. The two scenarios represent the best and worst scenarios of the total life cycle impacts of the proposed development. The total emissions calculated for the worst-case development scenario assessed for the proposed development entire life would be 4,095,000 tonnes of carbon dioxide equivalent (tCO₂e). Whilst emissions from the proposed development would occur during operation and decommissioning, the majority would occur during the construction phase of the project. The United Kingdom (UK) carbon budget for 2028 to 2032 is 1,725 MtCO₂e, meaning that the construction of the proposed development has been assessed to only contribute to 0.24% of the UK carbon budget.

- 6.3.9. The applicant's assessment calculated that the proposed development would be anticipated to "pay-back" the emissions associated with its construction in approximately two years. The energy produced after the first two years of operation would therefore go on to deliver annual savings for UK energy generation. Consequently, the effects of the proposed development would be of beneficial significance for reducing GHG emissions, when compared to the baseline scenarios as set out in table 1.8 in [\[APP-093\]](#).
- 6.3.10. The applicant in [\[APP-093\]](#) also considered the resilience of the proposed development to climate change and the exacerbating effect of climate change on other environmental receptors. The assessment summarised in table 1.19 in [\[APP-093\]](#) indicates that, taking into account the mitigation outlined in table 1.14, the significance of the identified effects would vary from minor adverse to negligible. Overall, all identified effects across construction, operation and decommissioning, are considered by the applicant not to be significant.
- 6.3.11. The applicant therefore concludes in [\[APP-093\]](#) that there would be no significant negative effects upon climate change receptors. It goes on to state that there would be a significant positive impact from the reduction in carbon emissions resulting from clean energy production, when compared with non-renewable generating sources, which would also help towards meeting the government's targets for net zero and lower cost, secure sources of energy.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.3.12. The effects of the proposed development relating to climate change was not a matter disputed by the parties during the examination.
- 6.3.13. As part of our second round of written questions (CC.2.01 and CC.2.02 in [\[PD-014\]](#)) we sought clarification as to whether Sulphur Hexafluoride (SF6) would or would not be used if the proposed onshore substation was to be gas insulated. We also asked the applicant whether the recent High Court judgement for Friends of the Earth Limited (FoE) and South Lakeland Action on Climate Change versus Secretary of State Levelling Up Housing and Communities [2024] EWHC 2349 (Admin) had any implications for the assessment of carbon emissions undertaken in [\[APP-093\]](#).
- 6.3.14. In relation to SF6 the applicant responded in [\[REP4-044\]](#) that its primary approach would be to avoid the use of SF6. The transition to SF6 free gas insulated switchgear (GIS) substations is in progress. The applicant would look to use air insulated switchgear (AIS) technology. However, if this were not possible and GIS must be used, the applicant would seek SF6 free equipment or at worst a hybrid solution depending on the available technology at the time of construction. If SF6 could not be avoided the applicant would abide by the monitoring plan and Defra's *"Requirements for businesses that operate or service high voltage switchgear that contains sulphur hexafluoride (SF6)"*.
- 6.3.15. In response to the question regarding the recent High Court Judgment on the FoE case, the applicant in [\[REP4-044\]](#) set out what it considered to be the key differences between that case (and the previous R (Finch on behalf of the Weald Action Group) v Surrey County Council [2024] UKSC 20 (the Finch case)) and the proposed development. The position in those cases can be distinguished from the proposed development by virtue of the fact that this is a renewable development and would provide energy which is generated through renewable means, rather than through the combustion of carbon-emitting fuels. The impact-receptor-effect pathway is considered too intangible for there to be any assessment of the likely

significant effects of the proposed development. The applicant has submitted that a wind farm provides emissions-free electricity to its customers, so once built, the only likely significant future carbon impacts for the proposed development would be associated with decommissioning, which has been assessed by the applicant.

- 6.3.16. The ExA was satisfied that the applicant had reasonably addressed its questions about SF6 and the implications of the recent FoE and Finch cases and accordingly had no further questions on climate change matters.

CONCLUSIONS ON CLIMATE CHANGE

- 6.3.17. As required by section 4.10 in NPS EN-1, section 2.4 in NPS EN-3 and section 2.3 in NPS EN-5, the applicant has assessed in [\[APP-093\]](#) the resilience of the proposed development to climate change and its effects on climate change on other environmental receptors. With mitigation, including the implementation of various management plans to be secured through requirements included in the draft Development Consent Order [\[REP8A-004\]](#), effects vary from minor adverse to negligible, and all identified effects across construction, operation, and decommissioning are assessed not to be significant.
- 6.3.18. The GHG Assessment [\[APP-094\]](#) submitted identified that the proposed development would be anticipated to pay back the emissions associated with its construction after approximately two years of operation. Electricity generated thereafter by the proposed development would be emissions-free, helping to reduce the UK's GHG emissions. During the examination no parties disputed the applicant's GHG assessment; therefore, we are content with the applicant's submissions in [\[APP-093\]](#) and [\[APP-094\]](#).
- 6.3.19. We conclude that, the climate change argument for the proposed development is very strong in terms of the reduction in carbon emissions resulting from clean energy production, which would also help towards meeting government targets for net zero and lower cost, secure sources of energy. Accordingly, we consider the proposed development would accord with the relevant policies in NPS EN-1, NPS EN-3 and NPS EN-5 and Policies CC1 and CC2 of the EIEOMP and Policy SE-CCU-1 of the SEIMP. We therefore consider the climate change argument weighs heavily in the planning balance.

6.4. SOCIO-ECONOMICS

INTRODUCTION

- 6.4.1. In this section we consider the effects of the proposed development on socio-economic factors, such as employment, recreation and tourism. We have considered effects concerning commercial fisheries and other offshore infrastructure respectively in sections 4.5 and 4.7 in chapter 4 of our recommendation.
- 6.4.2. Below, consideration is given to:
- Policy and guidance relevant to socio-economics;
 - The application proposals; and
 - Issues considered during the examination.

POLICY AND GUIDANCE

- 6.4.3. The following policy and guidance is relevant to the assessment of effects for socio-economic receptors:

- Paragraphs 5.13.2 to 5.13.8 of NPS EN-1
- Policies PP12 and PPL10 of the Tendring Local Plan 2013-2033
- Marine Policy Statement (2011)
- South East Local Enterprise Partnership (SELEP) Economic Recovery Strategy (2022)
- SELEP Skills Strategy (2023)
- Recovery Plan for Essex's Tourism and Hospitality Industry (2021), Visit Essex

6.4.4. The following government documents are also relevant:

- The British Energy Security Strategy (2022), BEIS
- The Net Zero: Build Back Greener Strategy (2021), DESNZ and BEIS

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6.4.5. The applicant considered the impacts of the proposed development on socio-economic factors in the ES in Socio-economic, Tourism and Recreation [[APP-085](#)]. That chapter is supported by two appendices: Annex 6.3.1 FTE Employment and GVA Headlines [[APP-130](#)] and Annex 6.3.2 Community Facilities within 5km of the Onshore Order Limits [[APP-131](#)].

6.4.6. The applicant also submitted an Outline Skills and Employment Strategy (oSES) [[APP-260](#)] to provide an outline strategy that can be developed further with the relevant key stakeholders into a Skills and Employment Strategy (SES) focused on Tendring District and the wider Essex and Suffolk region. The oSES aims to identify and secure a greater contingent of local workforce, which would increase skills locally and lower the number of workers travelling from outside of the local area. This would be secured by Requirement 16 in the dDCO [[REP8A-004](#)].

6.4.7. In [[APP-085](#)] the applicant assessed both a wider study area and a local area of impact. The wider study area includes the area where significant effects on employment and the local economy could occur. The local area of impact focusses on receptors that could experience effects more locally, namely community, tourism and recreational assets.

6.4.8. Mitigation measures proposed by the applicant included a detailed site selection and design process to determine the locations and manage the impacts of the landfall, onshore substation and onshore cable corridor to select the area with the lowest level of adverse impacts. This would include using trenchless techniques to cross key routes, such as the A120, the railway and the proposed English Coastal Path, and routing away from major tourism assets and key waterbodies.

6.4.9. Various control documents submitted by the applicant and secured through Requirements 6 and 7 of the dDCO [[REP8A-004](#)] also provide mitigation for impacts on the community, recreational activities and tourism. These include the outline Code of Construction Practice [[REP8A-015](#)], the outline Construction Traffic Management Plan [[REP8A-019](#)] and outline Public Access Management Plan [[REP8A-021](#)].

6.4.10. In relation to employment impacts during construction, including direct construction employment, workforce spending and supply chain effects in [[APP-085](#)] the applicant concludes that the proposed development would result in minor beneficial effects, which would be not significant. In relation to effects on tourism, community and recreational facilities during construction and operation in [[APP-085](#)] the applicant concludes that the proposed development would result in minor adverse effects, which would be not significant.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.4.11. During the examination hearings, the primary issues discussed under the socio-economic heading of the agendas related to effects for the fishing industry and during ISH6 wake loss. Those matters are addressed respectively in sections 4.5 and 4.7 in chapter 4 of this recommendation. Accordingly, our conclusions in this section do not take either of those matters into account, to avoid the double counting of effects in respect of those matters.
- 6.4.12. In relation to the socio-economic matters addressed in this section, the main issue that was discussed during the examination was raised by Suffolk County Council (SCC) in relation to the oSES [APP-260]. SCC broadly supported the oSES, but requested a clear commitment for there to be consultation with SCC to coordinate various employment and skills matters to ensure that the maximum benefit would be gained from the measures in the final SES. Accordingly, SCC requested it be made a consultee for Requirement 16 of the dDCO [REP8A-004] when it was being considered by ECC as the discharging authority.
- 6.4.13. The applicant's view was that SCC is not the host authority for the proposed development. It contended that as a very small proportion of the local workforce is anticipated to be drawn from Suffolk, there is no requirement for mitigation of an impact. Accordingly, the applicant was of the view it would be unnecessary for SCC to be named as a consultee under Requirement 16 of the dDCO. The applicant within sections 5.1 and 5.2 of the oSES [APP-260] has committed to continued engagement on the development of the final SES with key stakeholders, including SCC.
- 6.4.14. This disputed point carried through to the examination's close, as set out in the SoCG between the applicant and SCC [REP5-064]. SCC's view was that were the commitments to continued engagement with SCC in the oSES not to be translated into the version of the SES submitted for approval to ECC, SCC would have no recourse unless it was a named consultee for Requirement 16. SCC argued that being a named consultee, as opposed to effectively being an optional one, ensures that there would be procedural fairness for its consultation. That would be because SCC would have more time to provide an adequate response and be informed of any additional information.
- 6.4.15. We have considered SCC's request but we do not consider it necessary for SCC to be named as a consultee for discharging Requirement 16 of the dDCO. The applicant has demonstrated through the oSES [APP-260] a commitment to ongoing engagement with key stakeholders. We have no reason to believe that would not translate to a final version of the SES for approval. Notwithstanding this point, the discharging authority for the SES would be Essex County Council (ECC). Throughout the examination ECC will have noted SCC's sustained interest in this matter and we have no reason to believe that ECC would fail to consult SCC when approval for the SES was being sought by the undertaker.

CONCLUSIONS ON SOCIO-ECONOMICS

- 6.4.16. We concur with the socio-economic assessment included in [APP-085] that in relation to employment impacts the proposed development would result in minor beneficial effects during construction, but the effects on tourism, community and recreational activities during construction and operation would result in minor adverse effects. Neither the beneficial nor the adverse effects would be significant in EIA terms.

- 6.4.17. We conclude that the assessment set out in [\[APP-085\]](#) meets the requirements of paragraphs 5.13.2 to 5.13.8 of NPS EN-1 and that a final SES based on the oSES [\[APP-260\]](#) would be likely to maximise the benefits for the local economy. That is secured within the dDCO [\[REP8A-004\]](#) via Requirement 16.
- 6.4.18. We are therefore content that in relation to socio-economic effects the proposed development accords with the requirements of NPS EN-1, as well as local policies and strategies and all other relevant matters and there are no other important or relevant considerations.
- 6.4.19. The socio-economic benefits of the proposed development consider in this section are equally weighted, with identified benefits and harm. Accordingly, we consider the effects of the proposed development are therefore neutral for socio-economics and neither weigh for nor against in the planning balance.

6.5. CUMULATIVE AND INTERRELATED EFFECTS

INTRODUCTION

- 6.5.1. This section considers the cumulative and interrelated effects of the proposed development.
- 6.5.2. Cumulative effects were considered by the applicant on a topic-by-topic basis and reported as such in the ES. Where cumulative effects were identified these have been considered in the individual topic sections of the report and are not repeated here. This section therefore considers:
- whether cumulative effects have been sufficiently assessed alongside other plans, projects and on-going activities; and
 - the accumulation of, and interrelationship between, effects arising from the proposed development.

LEGISLATION, POLICY AND GUIDANCE

- 6.5.3. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) in paragraph 5(e) of Schedule 4 require a cumulative effects assessment (CEA) to be undertaken.
- 6.5.4. NPS EN-1 sets out the need to consider cumulative effects in paragraph 4.1.5, proposed compensation for residual impacts in paragraph 4.2.12 and interrelated effects in paragraph 4.3.19.
- 6.5.5. NPS EN-1, NPS EN-3 and NPS EN-5 all identify the need to address the maximum potential adverse impacts.
- 6.5.6. The Marine Policy Statement 2011 sets out the need to address cumulative impacts or effects in paragraph 2.3.2.1.

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- 6.5.7. The applicant's methodology for CEA was outlined in [\[APP-064\]](#), which was later superseded by [\[REP4-009\]](#). The CEA identifies those projects, plans and activities both onshore and offshore with which the proposed development may interact with to produce a cumulative effect.

- 6.5.8. In order for the proposed development to connect to National Grid's transmission system, the proposed Norwich to Tilbury Reinforcement Project and the associated East Anglia Connection Node (EACN) substation would need to be operational. Despite the pre-application stage that National Grid's project is at, given the proposed development's dependency on it, the applicant's CEA affords that project greater consideration than other projects at a similar stage in the planning process. For the purposes of the cumulative assessment of the two projects, the worst-case delivery scenario, with limited co-ordination was assessed for the direct and indirect impacts.
- 6.5.9. The application for the neighbouring proposed North Falls Offshore Wind Farm (NFOWF) was expected to be submitted after the application for the proposed development. The two projects are pursuing a coordinated approach to their construction, so far as possible. For the CEA of NFOWF in each ES chapter, the maximum construction scenario was considered for each respective topic.
- 6.5.10. The applicant has also provided an inter-related effects assessment in [\[APP-098\]](#). This considered the potential for multiple impacts from the construction, operation and decommissioning of the proposed development on the same receptor to result in a greater effect than each impact when considered in isolation. These were divided into project lifetime effects or receptor-led effects.
- 6.5.11. The inter-related effects assessment for the proposed development did not identify any significant effects that were not already identified in the topic-specific ES chapters. The assessment did not identify any inter-related effects that were predicted to lead to effects of greater significance compared to those identified in isolation.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.5.12. During the examination, the application for the proposed NFOWF (EN010119) was accepted for examination on 22 August 2024. Given the coordinated approach already undertaken between the two projects, neither the CEA nor inter-related effects assessment required updating to reflect this change.
- 6.5.13. In their joint Local Impact Report (LIR) ECC and TDC [\[REP2-043\]](#) set out concerns regarding the cumulative effects of the three substations for the proposed development, NFOWF and EACN, and other matters including landscape, highways, tourism and local communities.
- 6.5.14. In response to the concerns raised by ECC relating to cumulative transport impacts, the applicant provided further information in the CEA methodology [\[REP4-009\]](#) and submitted an updated ES Part 3, Chapter 8: Traffic and Transport [\[REP7-031\]](#).
- 6.5.15. SCC in its LIR [\[REP2-046\]](#) highlighted, among other issues, concerns regarding cumulative effects on seascape and visual amenity and highways.
- 6.5.16. Ardeleigh Parish Council in its relevant representation (RR) [\[RR-008\]](#) and in [\[REP3-039\]](#) set out its concerns regarding the cumulative effects of the proposed development, NFOWF, EACN and also the proposed Tarchon Interconnector project. RRs from a number of local residents similarly highlighted concerns regarding the cumulative effects of these proposals on local communities.
- 6.5.17. The National Federation of Fishermen's Organisation its RR [\[RR-077\]](#) highlighted the cumulative impacts of offshore wind farms reducing the available marine space

for fishing activities. Harwich Harbour Fishermen's Association echoed this point during its participation in the examination, including in [\[REP1-063\]](#).

- 6.5.18. NE in its RR [\[RR-081\]](#) set out concerns including the CEA methodology, and cumulative effects on seascape and visual amenity, the marine environment and bird species.
- 6.5.19. We explored cumulative effects relating to residential amenity and noise during the construction phase with the applicant during ISH3. We also raised queries regarding the assessment for cumulative operational noise in relation to the three proposed substations together with the existing Lawford substation.
- 6.5.20. In this recommendation, we have considered the cumulative and interrelated effects of the proposed development in our assessment of relevant topics, including ecology, commercial fishing, seascape, landscape, highways and noise in chapters 4 and 5 and summarised in chapter 8.
- 6.5.21. In-combination and interrelated effects for the proposed development have also considered in the Habitat Regulations Assessment (HRA) in appendix C and summarised in chapter 7 of this recommendation.
- 6.5.22. We are content that the applicant has appropriately addressed the requirements of paragraph 4.1.5 of NPS EN-1 by considering cumulative effects as set out in [\[REP4-009\]](#) and paragraph 4.3.19 of NPS EN-1 in its consideration of interrelated effects in [\[APP-098\]](#). We also consider that the applicant has addressed the maximum potential adverse impacts as required by NPS EN-1, NPS EN-3 and NPS EN-5.
- 6.5.23. Because the CEA was carried out on a topic-by-topic basis and has been considered by us in our assessment of each relevant topic, we have not repeated our conclusions in the section below to avoid the double counting of effects.

CONCLUSIONS ON CUMULATIVE AND INTERRELATED EFFECTS

- 6.5.24. For the reasons given above, we are content that the proposed development, including the implementation of mitigation measures identified by the applicant, would be unlikely to give rise to significant cumulative and/or interrelated effects. The necessary mitigation measures would be secured through requirements or Deemed Marine Licence conditions included in the dDCO [\[REP8A-004\]](#).
- 6.5.25. We are content that the assessment of cumulative and interrelated effects undertaken by the applicant accords with the EIA Regulations and NPS EN-1, NPS EN-3 and NPS EN-5. The ExA therefore considers that interrelated effects neither weigh for nor against the proposed development and are neutral in the planning balance.

6.6. GOOD DESIGN

INTRODUCTION

- 6.6.1. This section considers whether the proposed development meets the criteria for good design, with particular reference to the siting and design of the OnSS. We consider the relevant legislation, policy and guidance relating to good design, the application, and any remaining issues considered during the application.

- 6.6.2. Matters relating to the OnSS and its visual impacts are considered in section 5.1 in Chapter 5 of this recommendation.

LEGISLATION, POLICY AND GUIDANCE

- 6.6.3. In considering good design, we have had regard to:

- NPS EN-1 in particular paragraphs 4.7.1 to 4.7.15, 5.4.46, 5.10.30, 5.12.14 and 5.12.15
- NPS EN-3 in particular paragraphs 2.5.1 to 2.5.3, 2.8.43 to 2.8.44, 2.8.61, 2.8.73 to 2.8.74 and 2.8.263 to 2.8.264
- NPS-EN5 in particular paragraphs 2.4.1 to 2.4.4
- LIRs to the extent that they are relevant to this topic from Babergh District Council and ECC and TDC [[REP2-040](#), [REP2-042](#) and [REP2-043](#)]
- National Grid's Guidelines on Substation Siting and Design (The Horlock Rules)
- Any matters prescribed in relation to the proposed development; and
- Any other important and relevant matters including the National Planning Policy Framework (2024) Chapter 12, particularly paragraph 137, The National Infrastructure Commissions (NIC) Design Principles for National Infrastructure 2020 and the Nationally Significant Infrastructure Projects: Advice on Good Design.

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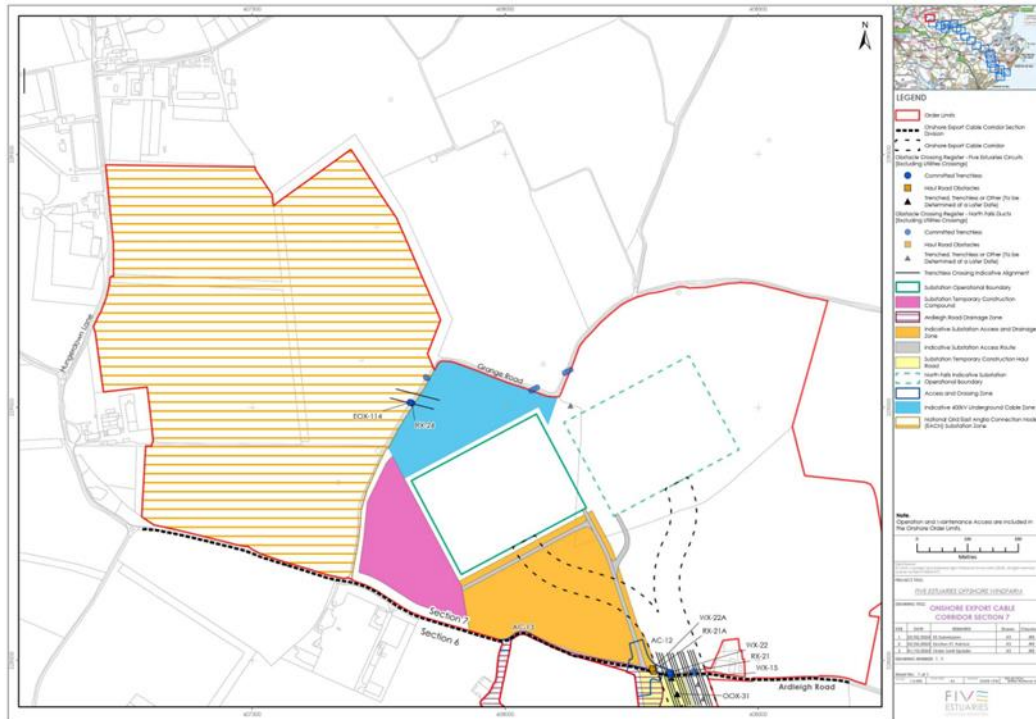
- 6.6.4. The applicant has addressed good design in the following documentation:

- Site Selection and Alternatives [[APP-066](#)]
- Offshore Project Description [[AS-041](#)]
- Detailed Offshore Project Design Envelope [[APP-070](#)]
- Onshore Project Description [[AS-004](#)]
- Offshore Project Design Principles [[APP-233](#)]
- Onshore Substation Design Principles Document [[REP8-020](#)]
- Outline Landscape and Ecological Management Plan [[REP8A-017](#)]
- Coordination Document [[REP8-029](#)]
- Technical Note – Onshore Civils and Electrical [[REP2-030](#)]

- 6.6.5. The applicant outlines the NIC design principles in Table 1 in [[REP8-020](#)]. That highlights the four design principles: climate; people; places; and value and details the aims and the objectives that the design choices and options will be measured against.

- 6.6.6. The orientation and location of the OnSS has been influenced by the operational requirement to be close to the proposed EACN and coordination with the proposed NFOWF. The applicant explains it has worked closely with the applicant for NFOWF to optimise their designs and would share the same connection point with the national electricity transmission network and share the proposed OnECC, landfall location and OnSS zone [[APP-066](#)].

Figure 6.4: Location of the proposed OnSS and the EACN site [Drawing Number 1.9 in AS-042]



- 6.6.7. The design for the proposed OnSS has not been formally confirmed because it would either have gas or air insulated switchgear (GIS and AIS) requiring different designs and scales (see Figure 5.3 above). The ES considered a worst-case scenario comprising a hybrid of maximum heights for a GIS option and the maximum footprint for an AIS option. Annex C in [\[REP8-020\]](#) summarises the design commitments for the proposed development, while Annex D in [\[REP8-020\]](#) outlines the design elements that have been assessed by an internal design panel, for which external engagement is intended.

ISSUES CONSIDERED DURING THE EXAMINATION

- 6.6.8. Representations from ECC and TDC and our consideration of the proposed development gave rise to the following issues being considered during the examination:

- The design of the OnSS;
- Co-ordination with the proposed NFOWF; and
- Design Review and Design Guide

Design of the OnSS

- 6.6.9. The final SoCG between the applicant and ECC/TDC [\[REP8A-027\]](#) addresses the OnSS's design principles and explains that the position in this regard is now agreed. During our hearings we raised questions about the proposed OnSS's orientation and design.

Applicant's Case

- 6.6.10. The applicant, in the SoCG with ECC/TDC [\[REP8A - 027\]](#) explains that the orientation of the OnSS is influenced by the direction from which the onshore cables are required to ingress and egress and other technical considerations. The applicant

also points out that the designs are currently indicative and will be informed by updates to the oLEMP [\[REP8A-017\]](#) and the Onshore Substation Design Principles Document [\[REP8-020\]](#), which in turn would inform the detailed design process and allow for key stakeholder engagement. In addition, the proposed OnSS has been sited away from built up areas to minimise the impacts for visual and noise receptors, while avoiding impacts on designated landscapes. The final design for the proposed OnSS would be refined post-consent, via a Design Guide to be produced jointly with the applicant for the proposed NFOWF.

ExA's Considerations

- 6.6.11. We acknowledge that the design of the OnSS would be led to some extent by the operational, technical and functional requirements of the project. We also note the applicant's clarification about the reason for the OnSS's orientation, which would be angled relative to the field boundaries. Matters relating to the suitability of the landscaping were discussed during our hearings and amendments were made to the oLEMP [\[REP8A-017\]](#) to include the integration of woodland planting in the northern area rather than relying only on the originally proposed orchard planting.
- 6.6.12. We accept that the detailed design of the OnSS would be developed post-consent and we are content that process would be secured through the discharging of Requirement 5 in the dDCO [\[REP8A-004\]](#).
- 6.6.13. We are content that, whilst the OnSS would introduce a dominant industrial feature into the area, the applicant has sought to balance the operational and functional requirements of the proposed OnSS with the need to assimilate this development into the existing landscape, as far as practicably possible, while at the same time needing to be cognisant of the proposals for the NFOWF and the EACN. The securing of further detailed design evolution and mitigation in the form of landscaping would be via Requirements 5 and 10 in the dDCO [\[REP8A-004\]](#).

Coordination with the NFOWF

- 6.6.14. During the examination, we queried the applicant's approach to coordination between its proposed development and the proposals for the NFOWF. We sought clarification with regards to: why separate OnSSs are required for the projects; the differences between the landscaping proposals for the proposed development and NFOWF; and the implications of only one of the projects proceeding.
- 6.6.15. In [\[PD-034\]](#) we sought further information in relation to the then extant Coordination Document [\[APP-263\]](#) and requested that it be updated with an emphasis on explaining how the mitigation measures for both projects would be coordinated. Our ExQ2 SLV.2.04 [\[PD-014\]](#) and request for further information [\[PD-032\]](#) sought from the applicant and the NFOWFL explanations for the rationale behind the differences in approaches being taken to designing the OnSS zone and how any incompatibility would be addressed. The applicant advised in [\[REP4-039\]](#) that two separate environmental consultancies had developed the indicative designs for their respective projects, although they had used a similar method with similar outcomes. The applicant also provided a summary of its approach to designing the proposed development in [\[REP4-039\]](#). NFOWF's applicant provided a report including its design consideration and approach in [\[REP7-118\]](#). The differences in the approach to the land take for the proposed OnSS zones have been considered in our Land Rights chapter (Chapter 9).

Applicant's Case

- 6.6.16. The Coordination Document [REP8-029] and the Onshore Substation Design Principles Document [REP8-020] outline the applicant's coordinated approach with NFOWF. It is intended the oLEMP [REP8A-017] would be developed further post consent in collaboration with the NFOWF project. The MDS makes allowances for coordination and screening along the OnSS zone boundary (Works No. 15). The proposed landscaping scheme is indicative at this stage and would be subject to further development, post-consent in collaboration with the NFOWF project.
- 6.6.17. The applicant has explained why various components of the proposed development would need to be provided separately and could not be shared in [REP2-030]. In relation to the need for two OnSSs, the applicant has explained that the projects are separate and under the UK's current regulatory regime for electricity each project would be required to provide its own transmission assets and the detailed electrical design of the equipment would be specific to each circuit and each project. To attempt to use common ancillary equipment would add complexity to the projects. With respect to onshore cabling, the generated electricity would be transmitted via a three phase system. That presents technical limitations for the size of cable conductors and the cable voltage, which in turn affects the capacity of each project's circuits to transmit electricity. National Grid does not permit single cable connections to its transmission system over 1,800 megawatts and the combined power output for the proposed wind farm projects would exceed that limit [section 4 in REP2-030].
- 6.6.18. In addition, coordination with the NFOWF project is limited to a degree by the proposed arrays being further from the shore, leading to longer cables and the need for larger reactive power compensation requirements and as the final sizes of the two wind farms may differ, different sizes of equipment would be required ruling out equipment sharing.
- 6.6.19. During ISH6 we queried what would be the implications if only one of the projects proceeded [EV10-001]. The applicant advised that if its proposed development proceeded without the NFOWF, its OnSS would still be sited in the same location due to other considerations which have influenced the OnSS's proposed location, as explained in [APP-066], including the connection requirements. The applicant also noted that the overall site has been designed jointly with the NFOWF project and to undertake the relevant assessments for this proposed development alone would require a significant amount of time.

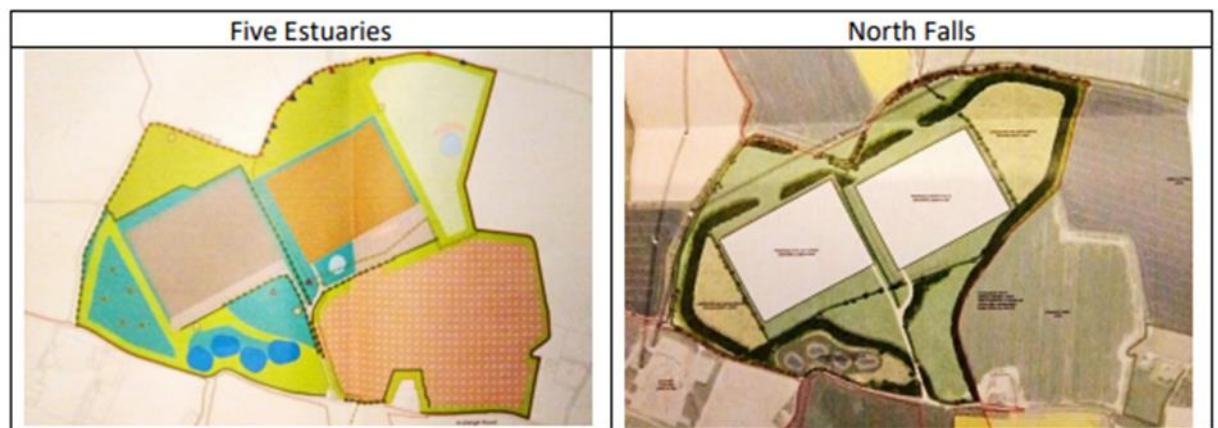
ExA's Considerations

- 6.6.20. We have considered the applicant's explanations as to why separate substations and equipment would be required for each project and we are content that the current regulatory regime for electricity transmission requires a separate approach be taken. We, however, consider the way the industry's regulatory regime is currently operating is not conducive to the pursuance of good design from a land use planning perspective, potentially requiring greater compounded areas than might otherwise be necessary.
- 6.6.21. Specific details regarding the proposed landscaping for the proposed development have been considered in section 5.1 of this recommendation. We remain concerned about the differing landscaping approaches being pursued by the applicant and the NFOWF project. We recognise that detailed landscaping schemes would be progressed following the making of any DCO for either of these projects. Nevertheless, the differences in approach relating to the location for the proposed screen planting and the amount of land needed to deliver these projects, suggests

to us that there has been an insufficient level of collaboration between the applicants for each of the projects. In that regard we consider it notable that the external design review for both projects, initiated and led by the NFOWF project, which was undertaken by the Design Council, was far from complete when the applicant submitted its application for examination [section 4 in [REP8-037](#)].

- 6.6.22. It is far from clear to us as to why the two projects have ended up with differing approaches in their respective applications, notwithstanding the appointment of different environmental consultancies. With greater and more timely coordination between the projects, the divergence in the approach in formulating the designs for the OnSS zone, most particularly in respect of the indicative landscaping schemes, should have been entirely avoidable. We say that having regard to the circumstances of this case, under which the applicants are seeking to collaborate with one another to share an OnSS zone capable of accommodating their respective OnSSs. The figure below shows the difference in approach being taken to the design of the OnSS zone by the two projects.

Figure 6.5 Comparison between the two OnSS zone proposals [included in REP2-095]



- 6.6.23. Accordingly, based on the evidence before us, we are not persuaded that there has been an appropriate approach to collaboration to date as advocated in NPS EN-1, NPS EN-3 and NPS EN-5. Although the applicant has made further commitments to work with the applicant for the proposed NFOWF, following the making of any DCOs by the SoSESNZ, that we consider would be rather late in the day.

Design Review and Design Guide

- 6.6.24. ECC and TDC in [\[REP8A-044\]](#), in commenting on the applicant's commitment to prepare a design guide to be reviewed independently, observed the design guide's review should have external involvement. In that regard the council submitted that the Onshore Substation Design Principles Document [\[REP8-020\]](#) should be worded so as to ensure that there would be an external review process.

Applicant's Case

- 6.6.25. The applicant explains the intended design review process in Section 2.3 of [\[REP8-020\]](#). That would be a post-consent process, in collaboration with the applicant for NFOWF. In [\[REP8-020\]](#), amongst other things, it is stated that a Design Guide would be produced and that guide would be subjected to independent external review (paragraph 2.3.7). The applicant also stated that the project's

“*design champion(s)*” would oversee the work of a “*design review panel*” that would be an internal panel. The undertaking of the design review process explained in section 2.3 of [REP8-020] would be secured under Requirement 5(2) in the dDCO [REP8A-004].

ExA Considerations

6.6.26. Belatedly in the examination the applicant decided to prepare a design guide to inform the design for the proposed OnSS prior to details for it being submitted for approval under the provisions of Requirement 5 in the dDCO [REP8A-004]. Although the applicant has proposed that design guide would be subject to independent external review that in our view would not amount to a full independent review of the design for the proposed OnSS. We consider a full independent review is important, given the existing character of the OnSS zone and the absence of a unified approach to date having been taken by the applicant and the NFOWF project in relation to their design proposals within the OnSS zone. We have explained above that there is evidence of the applicant being less engaged with the external review process pre-application than the NFOWF project.

6.6.27. We requested the applicant to submit without prejudice wording for an independent design review mechanism to be incorporated into Requirement 5 of its dDCO [ExQ3 SLV.3.1(b) in PD-026]. In making that request we were mindful that such a requirement (Requirement 10(5)(b)) has been included in the made DCO for the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm. The applicant declined to provide the requested wording commenting in [REP7-084]:

“...The Applicant has already participated in an independent design review process with the Design Council and North Falls and the recommendations, where appropriate, have been incorporated within the project design and control documents. Further detail on this is set out in 10.53 Response to Rule 17 Request - 17 February 2025 [REP6A-003].

The Applicant notes that Sheringham Shoal and Dudgeon Extensions Offshore Wind Farms did not undertake pre-consent independent design review, and part of the explanation for including a DCO Requirement to secure a post-consent Design Review was to account for the absence of an independent review process, when seeking to ensure compliance with NPS EN-1.

The Applicant notes a number of design processes and commitments are set out in the 9.4 Onshore Design Principles Document [REP6-018] which accords with the Design Principles for National Infrastructure. The Applicant has also committed to appointing a Design Champion to oversee the review process. As detailed in para 2.3.9 “They will be selected based on design experience, adherence to design commitments, and seniority to hold the project team to account and challenge decisions when appropriate. Their role is to retain overarching responsibility for design quality throughout the Project. This response has been agreed with North Falls OWF.”

6.6.28. We are not persuaded by the applicant’s response to ExQ3 SLV.3.01 that there would be no benefit in subjecting the design for the proposed OnSS to a post consent independent design review. That is because the conclusion of the Design Council’s review post dated the submission of the applicant’s application. Accordingly, the applicant’s submitted proposals for OnSS and the wider OnSS zone could not have fully taken account of the advice provided as part of the Design Council’s review. That in part might explain why different proposals have been included in the applications for the proposed development and the proposed

NFOWF. We have therefore recommended in our rDCO (Appendix E to this recommendation) that an independent review mechanism be incorporated into Requirement 5. That wording can be found in Chapter 10 of this recommendation, as well as our rDCO.

CONCLUSIONS

- 6.6.29. In conclusion, having regard to the above matters, we acknowledge that there are functional and operational factors influencing the overall design for the proposed development, which must be taken into consideration. We also note the applicant's justification for the siting and orientation, as well as the need to be able to make a connection with the proposed EACN.
- 6.6.30. Offshore we consider the applicant has demonstrated good design through: the reduction in the extent of the northern array area to address navigation and shipping concerns; and a reduction in tip height for the proposed WTGs to address the Ministry of Defence's concerns with respect to radar interference. The applicant has also sought to ensure there would be no unacceptable effects for matters such as noise and flood risk.
- 6.6.31. Notwithstanding the aspects of the proposed development for which we consider the applicant has demonstrated good design, we have concerns in relating to the design for the proposed OnSS and the wider OnSS zone. We consider the collaboration with the proposed NFOWF has not been effective, given the two projects have included different proposals for the entirety of OnSS zone in their respective applications. We also consider the evidence we sought from the applicant during the examination demonstrates that it was only partially engaged in the independent design review process prior to the submission of its application and it has sought to address that deficiency belatedly by committing to the preparation of a design guide, informed by independent review, post consent. Accordingly, we do not consider good design has been embedded from the outset within the applicant's proposals for the OnSS and in that regard we consider there is little demonstration of compliance with paragraph 4.7.5 of NPS EN-1.
- 6.6.32. Although going forward the applicant has committed to preparing a design guide, which would be subject to an independent design review under the provisions of Requirement 5(2) of the dDCO [\[REP8A-004\]](#), we consider that mechanism falls short of what would be necessary to achieve good design for such a significant element of the proposed onshore works. In our rDCO we have therefore amended the wording for Requirement 5 to secure the undertaking of an independent design review.
- 6.6.33. Paragraph 4.7.1 of NPS EN-1 recognises the importance of functionality of a building. Paragraph 4.7.2 notes good design in energy projects should be sensitive to place, consider impacts on heritage, land use considerations and good aesthetics as far as possible. Paragraph 5.4.46 recognises that building in beneficial biodiversity or geological features can form part of good design and paragraph 5.12.15 considers good design in relation to plant and noise matters.
- 6.6.34. With respect to good design, we consider, the applicant has gone some way to meeting the requirements of the NPS EN-1 in taking into account both the functionality and aesthetics of the proposed development as far as possible through the evolution of the design process. However, the different approaches taken by the applicant and the NFOWF project in respect of the OnSS zone does not demonstrate good design, given both projects are seeking to accommodate two

OnSSs on a collaborative basis and yet are promoting different schemes. Accordingly for this issue we conclude that good design carries moderate negative weight in the planning balance.

7. SUMMARY OF CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

7.1. INTRODUCTION

- 7.1.1. This chapter provides a summary of the Examining Authority's (ExA) conclusions relevant to the Habitats Regulations Assessment (HRA). The full analysis can be found in Appendix C to this report. Together, these will help the Secretary of State for Energy Security and Net Zero (SoSESNZ) perform the duties of Competent Authority under the Conservation of Habitats and Species Regulations 2017 (as amended) and The Conservation of Offshore Marine Habitats and Species Regulations 2017 (the Habitats Regulations).
- 7.1.2. The ExA produced a Report on the Implications for European Sites (RIES) [\[PD-027\]](#) which compiled relevant information in the examination up to Deadline 5 (10 January 2025). The RIES set out the ExA's understanding and the position of parties in relation to the effects of the proposed development on European sites at that point in time. The responses to the RIES, and other examination submissions has helped to inform the ExA's consideration of HRA matters.
- 7.1.3. The proposed development was identified as having likely significant effects (LSE) on European sites, now referred to as National Site Network sites following the United Kingdom's withdrawal from the European Union. We have, however, used the term European site to be consistent with the submitted application documentation. It is not directly connected to the management of a European site and therefore, the SoSESNZ should undertake an Appropriate Assessment (AA).
- 7.1.4. If the competent authority cannot conclude the absence of adverse effects on integrity (AEoI), such that no reasonable scientific doubt remains, then under the Habitats Regulations the proposed development can proceed only if there are no alternative solutions and there are imperative reasons of overriding public interest (IROPI) as to why it must be carried out. Suitable compensatory measures must also be secured.

7.2. HABITATS REGULATIONS ASSESSMENT IMPLICATIONS

- 7.2.1. The proposed development is not directly connected with or necessary to the management of a European site. The spatial relationship between the order limits of the proposed development and European sites is shown in Figures 2.1 to 45.1 of the Summary of Designated Sites [\[APP-044\]](#).
- 7.2.2. The applicant submitted a Report to Inform Appropriate Assessment (RIAA) [\[REP8-004\]](#) (superseding application version [\[APP-040\]](#) and versions submitted at Deadline 1 and 7 [\[REP1-016\]](#) and [\[REP7-017\]](#) respectively), together with a Lesser Black Backed Gull Habitats Regulations Assessment [\[REP7-025\]](#) (the LBBG HRA'). That superseded versions [\[APP-045\]](#) and [\[AS-039\]](#). Those assessments found that AEoI at the Alde-Ore Estuary Special Protection Area (AOE SPA) and Ramsar site could not be ruled out by virtue of an in-combination collision risk to the lesser black backed gull (LBBG) qualifying bird feature.
- 7.2.3. Consequently, A 'derogation case' [\[AS-003\]](#) was made by the applicant in relation to LBBG. Furthermore, notwithstanding the applicant's conclusions of no AEoI at Flamborough and Filey Coast Special Protection Area (FFC SPA), a "*without prejudice*" derogation case was made in relation to the kittiwake, guillemot and

razorbill features of the designated sites. A “*without prejudice derogation case*” was also produced should cable protection ultimately be required within the Margate and Long Sands Special Area of Conservation (MLS SAC) if AEoI at this designation cannot be ruled out. Compensation measures were set out in:

- Benthic Compensation Strategy Roadmap [\[REP8-008\]](#).
- Lesser Black Backed Gull Compensation - Evidence, Site Selection and Roadmap [\[REP8-010\]](#).
- Kittiwake - Evidence, Site Selection and Roadmap [\[REP5-017\]](#).
- Guillemot and Razorbill - Evidence, Site Selection and Roadmap [\[REP8-012\]](#).

7.3. SUMMARY OF HABITATS REGULATIONS ASSESSMENT MATTERS CONSIDERED DURING THE EXAMINATION

7.3.1. The main HRA matters raised by the ExA, NE and other IPs and discussed during the examination were:

- The adequacy of the applicant’s baseline data and mitigation proposals in relation to compensation sites.
- The adequacy of the applicant’s modelling in relation to disturbance and collision risk to offshore ornithology.
- The assessment of effects on marine mammals including the use of the interim Population Consequences of Disturbance (iPCoD) modelling and the adequacy of mitigation proposals.
- The assessment of effects on the Margate and Long Sands Special Area of Conservation (MLS SAC) including the definition of the maximum design scenario (MDS) or worst-case scenario (WCS), conclusions on AEoI and the adequacy of proposed compensatory measures.
- The range of potential LSE on the relevant European sites.
- The applicant’s conclusions on LSE for marine mammal and ornithological qualifying features.
- The applicant’s conclusions in relation to AEoI on relevant ornithological qualifying features.
- The feasibility, deliverability and likely success of the proposed compensatory measures.
- The availability of strategic compensation.

SUMMARY OF LIKELY SIGNIFICANT EFFECTS

7.3.2. The European sites and qualifying features that were considered in the applicant’s assessment of LSE are listed in matrices 1 to 116 of the HRA Screening Matrices [\[REP8-006\]](#). The RIAA [\[REP8-004\]](#) and LBBG HRA [\[REP7-025\]](#) set out the

methodology applied by the applicant determining what would constitute a “significant effect”.

- 7.3.3. Following queries within the RIES ([\[PD-027\]](#) Q2.2.1 and Q2.2.3) in relation to the inclusion of European sites, and associated responses from Natural England (NE) and the applicant (including at [\[REP7-083\]](#) and [\[REP7-110\]](#), the ExA is content that all relevant European sites have been considered.
- 7.3.4. The European sites and qualifying features for which the applicant concludes no LSE are listed in the HRA Screening Matrices [\[REP8-006\]](#). In the RIAA, the applicant concluded no LSE for 68 of the European sites assessed, but two of these were screened in for effects in the LBBG HRA.
- 7.3.5. That said, the applicant concluded that the proposed development would be likely to give rise to significant effects, either alone or in-combination with other projects or plans, for one or more of the qualifying features at a number of European sites. LSE were considered to arise because of impact pathways including disturbance and collision risk for birds, underwater noise, sediment dispersal and pollution to marine mammals and habitat disturbance from cable protection to benthic features.
- 7.3.6. A number of concerns were raised from Interested Parties (IPs) in relation to the applicant’s screening conclusions and its decision to exclude certain LSE impact pathways. These include NE in [\[PD2-012\]](#) and [\[PD2-005\]](#) and the National Trust (NT) in [\[RR-080\]](#).
- 7.3.7. Nevertheless, matters in relation to LSE have been considered and addressed in detail throughout the examination. The ExA is content that the correct impact-effect pathways on each European site have been assessed and with the applicant’s approach to the assessment of alone and in-combination LSE. That said, it is considered that operational disturbance to the red-throated diver (RTD) feature of the Outer Thames Estuary Special Protection Area (OTE SPA) should also be screened into the assessment. The ExA has made its assessment on that basis.

SUMMARY OF FINDINGS IN RELATION TO ADVERSE EFFECTS ON INTEGRITY

- 7.3.8. The European sites and qualifying features identified in RIES Annex 1, Tables 1 and 2 [\[PD-027\]](#) were further assessed by the applicant to determine if they could be subject to AEoI from the proposed development, either alone or in combination with other projects and plans. The assessment of AEoI was made in light of the conservation objectives for the European sites [\[REP8-004\]](#). The outcome of the applicant’s assessment is set out in section 11 and summarised in Table 14.1 of the RIAA [\[REP8-004\]](#) and section 4.5 of the LBBG HRA Report [\[REP7-025\]](#). The ExA is content with the scope of the applicant’s assessment in relation to AEoI.
- 7.3.9. For many of the sites and features, the applicant’s conclusions were not disputed by any IPs (see Table 1 of Appendix C to this recommendation). In the absence of any issues raised, the ExA is content that AEoI on the sites and qualifying features listed can be excluded.
- 7.3.10. However, several of the applicant’s conclusions of no AEoI in relation to these European sites and their qualifying features were disputed by IPs and were discussed throughout the examination. To assist the reader the applicant’s consideration in relation to AEoI on key ornithological, benthic and marine mammal qualifying features are set out below, together with the ExA’s findings.

Ornithological Features

LBBG – Feature of AOE SPA and Ramsar Site

- 7.3.11. The applicant's assessments cannot exclude AEol of the AOE SPA and Ramsar site by virtue of in-combination collision risk to the LBBG qualifying feature during the proposed development's operation and maintenance phase. Consequently, a "derogation case" has been made for this species [\[AS-003\]](#). The ExA has no good reason to conclude otherwise on this matter.

Kittiwake – Feature of FFC SPA

- 7.3.12. In-combination predicted mortality would increase from the baseline by around 4.2%. The applicant considers that these levels of impact are not of sufficient magnitude to make a material contribution to natural mortality rates. It concludes that there would be no AEol for the FFC SPA as a result of potential harm to kittiwake species.
- 7.3.13. Both NE and the Royal Society for the Protection of Birds (RSPB) dispute the applicant's conclusion of no AEol for the FFC SPA from collision risk to kittiwake in-combination with other developments. Amongst other things, NE [\[PD2-005\]](#) stated that seabirds continue to experience multiple human induced pressures that offshore developments are at risk of accentuating. Moreover, the RSPB [\[RR-094\]](#) and [\[REP2-068\]](#) concluded that in-combination with other projects there will be an AEol to the FFC SPA owing to the impact of mortality arising from collision and distributional change combined on the kittiwake population.
- 7.3.14. The applicant's evidence, including Population Viability Analysis assessments over a range of scenarios, are acknowledged. Nevertheless, given the increasing number of offshore wind farms (OWFs) in this particular region, with apparent growing cumulative effects, in a finely balanced decision the ExA finds that AEol to the kittiwake feature of the FFC SPA from the operation of the proposed development in-combination with other plans and projects cannot be excluded. This is particularly so noting that the SoSES NZ has already concluded that in-combination there would be an AEol for the FFC SPA for kittiwake features for other similar offshore developments, including Rampion 2 Offshore Windfarm.

Guillemot and Razorbill – Features of FFC SPA and Farne Islands Special Protection Area (SPA)

- 7.3.15. For the FFC features, the predicted annual mortality increase from baseline from in-combination displacement effects would be around 11.116% for guillemot and 3.882% for razorbill. The applicant considers that these levels of impact are not of sufficient magnitude to make a material contribution to natural mortality rates.
- 7.3.16. It follows that, considering impacts on qualifying bird species, a conclusion of no AEol has been reached for in-combination effects for the FFC SPA and Farne Islands SPA by the applicant.
- 7.3.17. NE [\[PD2-005\]](#) advised that the in-combination impacts on the FFC SPA populations of guillemot and razorbill are already at a level where it has not been possible to rule out adverse effects and that the proposed development would add to this impact. The RSPB [\[RR-094\]](#) and [\[REP2-068\]](#) echoed NE's view.
- 7.3.18. The evidence provided by the applicant is acknowledged, including its updated RIAA [\[REP7-017\]](#) which included the most recent published numbers from

Greenvolt, Outer Dowsing, Dogger Bank South, North Falls and Ossian OWFs. Nonetheless, given the likely increasing effects from the number of OWFs in this particular region, in a finely balanced decision the ExA cannot exclude AEol for the FFC SPA and the Farne Islands SPA by virtue of in-combination harm to qualifying guillemot and razorbill features.

Gannet

- 7.3.19. The applicant concluded that there would be no AEol for the FFC SPA by virtue of harm to its gannet feature. However, the RSPB [\[REP5-067\]](#) highlighted concern with the applicant's macro-avoidance correction factor to predicted Northern Gannet collision mortalities. It therefore considered that AEol at FFC SPA cannot be excluded.
- 7.3.20. The applicant followed NE's guidance in terms of its assessment in this regard. NE raised no such concern. The ExA is therefore content that predicted gannet mortalities arising from collision are robust.
- 7.3.21. It is also agreed between the applicant and NE that AEol to the gannet feature of the FFC SPA can be ruled out. The ExA has no reason to conclude otherwise in this regard.

Red-throated diver

- 7.3.22. The applicant concluded no AEol at the OTE SPA by virtue of potential effects to its qualifying bird features (which include the RTD). Subject to the applicant's proposed seasonal restriction for cable laying activities and additional mitigation within the Working in Proximity to Wildlife in the Marine Environment [\[REP8A-013\]](#), the ExA is content that the conservation objective concerning the availability of unimpacted habitat in the OTE SPA and the maintenance of the distribution of birds would not be contravened.
- 7.3.23. The ExA therefore finds that there would be no AEol at the OTE SPA by virtue of potential effects to its qualifying bird features.

Marine Mammals – Harbour Porpoise Feature of SNS SAC

- 7.3.24. The main residual matter at the close of examination in relation to effects on marine mammals concerned noise and disturbance to the harbour porpoise feature of the SNS SAC.
- 7.3.25. The ExA is content that suitable mitigation could be deployed to avoid AEol to the SNS SAC. This is particularly so noting that the outline SNS SAC Site Integrity Plan [\[REP6-022\]](#) provides a mechanism to further consider the use of noise abatement systems following any consent and could secure that if necessary.

Benthic Environment – Sandbank Feature of MLS SAC

- 7.3.26. Part of the OfECC includes a short length within the very northern edge of the MLS SAC. The qualifying feature of the MLS SAC is "*H1110 Sandbanks which are slightly covered by sea water all the time*". From the precautionary MDS assessment, two cables within the MLS SAC could be protected to a maximum length of around 900m during the construction phase. The area of cable affected by protection would occupy up to a maximum of 5,400 sq.m, equating to around 0.0008% of the MLS SAC's total area.

- 7.3.27. The applicant [\[REP8-004\]](#) concluded no AEoI to the MLS SAC based on the small scale of effect from the impact pathways (habitat loss or disturbance arising from the placement of cable protection) under the MDS and the implementation of mitigation (explained in section 4.1 of our recommendation).
- 7.3.28. NE does not agreed [\[REP8A-053\]](#) with the applicant's assessment, insofar as it excludes AEoI to the MLS SAC.
- 7.3.29. Considering NE's Response to the RIES [\[REP7-110\]](#) and the applicant's Summary of Designated Sites [\[REP7-023\]](#), the qualifying feature of the MLS SAC (Sandbank) is affected by anthropogenic activities. This includes the introduction of hard strata from offshore wind farms and power cables. These activities are affecting the form and function of the sandbanks and impacts appear to be greater than originally expected, particularly to the subtidal and coarse sediment sub-features. The sandbanks of the MLS SAC are therefore in an "*unfavourable declining*" status. There is also a risk identified from further external cable protection due to the highly mobile nature of the sandbanks.
- 7.3.30. The ExA acknowledges the very small area of the MLS SAC that could be affected by cable protection and the mitigation that the applicant has committed to. Nevertheless, in a finely balanced decision, the ExA cannot be certain that there would not be AEoI for the MLS SAC by virtue of physical habitat loss or disturbance from the proposed development alone. This is particularly so noting the declining status of the sandbank qualifying feature of the MLS SAC and the conservation objective to restore it.

ExA's Conclusion on AEoI

- 7.3.31. Taking everything together, the ExA has reached the following conclusions in relation to AEoI:
- There could be AEoI for the MLS SAC by virtue of physical habitat loss or disturbance to its qualifying sandbank feature under the proposed development's MDS.
 - There could be AEoI for the FFC SPA by virtue of in-combination harm to its qualifying kittiwake, guillemot and razorbill features.
 - There could be AEoI for the Farne Islands SPA by virtue of in-combination harm to its qualifying guillemot feature.
 - There could be AEoI for the AOE SPA and Ramsar site by virtue of in-combination harm to its qualifying LBBG feature.
- 7.3.32. In reaching these conclusions, the ExA is mindful that there may be compensatory provision to neutralise the AEoI at European sites for developments included in the applicant's in-combination assessment. Nevertheless, the exact timeframes for the delivery of that compensation are not clear. Furthermore, this proposed development must be assessed on its individual merits, in the light of its own potential in-combination effects. Consequently, compensation for AEoI at European sites for other developments scoped into the applicant's in-combination assessment does not alter the ExA's findings in this regard.

7.4. ExA FINDINGS IN RELATION TO HRA DEROGATION CASE

- 7.4.1. Given the ExA's conclusions in the preceding section, it considers the proposed development could only proceed if there are no alternative solutions and there are IROPI as to why it must be carried out. Suitable compensatory measures must also be secured. These matters are considered in turn below.

Consideration of Alternative Solutions

- 7.4.2. The applicant has concluded that there would be no suitable alternative locations for the proposed development in order to achieve the required amount of electricity generation. The applicant has discounted a do-nothing option because that would hinder efforts to respond to the urgent need for renewable energy production. The ExA has no reason to conclude otherwise, noting that no IPs with an interest in this matter have contested the applicant's case.
- 7.4.3. In terms of scale and design, the applicant advanced that the design of the proposed wind turbine generators and extent of the array could not be further modified without compromising the viability of the proposed development.
- 7.4.4. NE, in [\[REP2-059\]](#), confirmed that the applicant has taken its advice into account to reduce, avoid and where required mitigate impacts when selecting the cable route. The ExA is therefore content that the OfECC could not avoid the MLS SAC and that the number of cables needing to be laid in the MLS SAC could not be reduced under the MDS.
- 7.4.5. Taking everything together, the ExA is content that the applicant's derogation case provides a comprehensive analysis of potential alternative solutions. We also find that no alternative locations exist to produce the requisite amount of electricity (for which there is a compelling need) to meet government targets and that there are no feasible alternative design parameters for the proposed development.
- 7.4.6. The ExA therefore considers that the SoSES NZ could conclude that there are no alternative solutions for the proposed development's delivery.

IROPI

- 7.4.7. The applicant's case for IROPI under the HRA process is presented in section 5 of the HRA Derogations Case [\[AS-003\]](#).
- 7.4.8. The applicant considers there is an imperative need for this proposed development. Amongst other things, that is on the basis of the urgent need to secure a diverse, affordable and resilient energy supply and to combat the effects of climate change while meeting government targets in terms of carbon reduction.
- 7.4.9. The applicant states that there is a public interest in the proposed development in terms of combatting climate change, making employment provision and overall economic benefits (including a contribution from construction activity of £2.2 million locally and £4.6 million nationally (gross value added)).
- 7.4.10. The ExA in [\[PD-011\]](#) sought clarification in terms of the proposed development's quantum and timing in relation to electricity production. In response to this, the applicant [\[REP2-039\]](#) confirmed that there was an agreement for a connection to the national transmission for up to 1,080 megawatts (MW). A generating output of around 1,000MW represents approximately 2% of the Government's target for delivering 50 gigawatts of electricity by 2030 [\[REP2-039\]](#). Furthermore, the

proposed development would be delivered around the Government's 2030 Net Zero target (allowing for unforeseen delays).

- 7.4.11. NPS EN-1 sets out the urgent need and strong support for providing critical national priority infrastructure, including offshore wind. Overall, the ExA is content that the benefits of the proposed development, particularly from its contribution to the reduction in the United Kingdom's (UK) carbon emissions and maintaining energy security, would be sufficient to enable the SoSESNZ to conclude that there is an imperative overriding public interest. This would be so even if the proposed development was not fully operational by 2030, with a connection to the national transmission system potentially no being available before the fourth quarter in 2031¹⁰. The ExA's findings in this regard are reinforced given that there have been no concerns raised by IPs in relation to the applicant's IROPI case.

Compensation

- 7.4.12. A Compensation Longlist and Shortlist is included in [\[APP-057\]](#) and a Compensation Measures Funding Statement was submitted in [\[APP-056\]](#). The applicant has also provided, on a without prejudice basis, wording for compensatory measures, for inclusion in Schedule 13 of the draft Development Consent Order (dDCO), in the event that compensation is required for any European site qualifying features. The without prejudice wording for possible inclusion in Schedule 13 in any made DCO for the proposed development is included in [\[REP8A-042\]](#).

- 7.4.13. Compensatory measures in relation to each affected qualifying feature of a European site are considered below.

Compensation - MLS SAC

- 7.4.14. The applicant's without prejudice derogation case [\[AS-003\]](#) for the MLS SAC includes a Benthic Compensation Strategy Roadmap [\[REP8-008\]](#). That highlights a number of project-alone compensatory measures, including the removal of anthropogenic pressures and redundant infrastructure, together with seagrass restoration.
- 7.4.15. It is clear that the applicant and NE have been in discussion regarding these measures ([\[REP5-097\]](#) and [\[REP6-044\]](#)). However, on the evidence before the ExA, there remains concern that the applicant was unable to provide sufficient evidence and/or a level of confidence during the examination demonstrating the effectiveness and deliverability of the project alone compensatory measures. Consequently, the ExA cannot be certain that the identified project-alone compensatory measures would be of sufficient compensatory value.
- 7.4.16. That said, the option preferred by both the applicant and NE concerns strategic compensation. This would be delivered through funding such as the Marine Recovery Fund (MRF) to deliver the extension of a SAC or the designation of a new SAC with the sandbank qualifying feature. The MRF strategy is being developed by Defra to address the potential effects of multiple offshore infrastructure projects.
- 7.4.17. The Government's guidance "[Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance 2025](#)" provides support for strategic benthic compensation in the form of a designation or extension of a protected marine area. Moreover, paragraph 11 of this guidance illustrates that such

¹⁰ Paragraph 4.6 in Annex A of [\[REP8-029\]](#)

a strategy is applicable for this proposed development, which is an extension to an existing offshore windfarm that received a seabed lease from The Crown Estate under the 2017 extensions round. Strategic compensation is therefore applicable.

7.4.18. The applicant's assessment [\[APP-047\]](#) shows that there is sufficient undesignated Annex 1 sandbank adjacent to existing SACs to ensure that future designation would represent a significant increase in the protection of this feature. NE in [\[PD2-008\]](#) has also advised that this strategy alone would be of suitable compensatory value for the proposed development. There is no reason for the ExA to conclude otherwise on those matters. We also find that this strategic compensation would be the mechanism that has the greatest likelihood of maintaining the coherence of the National Site Network of European sites.

7.4.19. Overall, the ExA advises that, subject to the SoSESNZ being satisfied that the strategic compensation strategy would be deliverable by Defra, the effects to the MLS SAC could be compensated for.

LBBG Compensation – AOE SPA and Ramsar Site

7.4.20. The applicant in [\[REP8-010\]](#) and [\[APP-055\]](#) considers compensation for LBBG. The applicant's strategy consists of providing compensatory measures at Orford Ness (predator proof fencing and habitat management) or at the Outer Trial Bank (OTB) (predator control).

7.4.21. The site at Orford Ness falls within the AOE SPA. It is within the Order Limits and powers of compulsory rights acquisition are sought for it in the dDCO (Work No. 18B) [\[REP8A-004\]](#). The site is a cusped foreland shingle spit on the Suffolk coast, connected to the mainland at Aldeburgh and stretches southward along the coast to Orford. The proposed compensatory site is privately owned and the site is shown at Figure 2.6 in [\[REP8A-038\]](#).

7.4.22. The applicant's LBBG HRA [\[REP7-025\]](#) concludes that predator fencing would not itself have an AEol on any designated European site, including the AOE SPA and Ramsar site.

7.4.23. Turning to the OTB, this is a circular artificial island in the Wash. It has a breeding colony of LBBG that has been declining over the last 20 years. Further data in relation to this compensatory site may be found at the applicant's Digital Aerial Surveys - Outer Trial Bank [\[REP3-026\]](#). Predator control measures here would be managed through agreements with The Crown Estate (the landowner).

7.4.24. Overall, the applicant considers that the identified works at either compensatory site would more than compensate for the predicted worst-case impact of the proposed development on LBBG. Furthermore, to manage compensation, the applicant states that it will produce a final LBBG Implementation and Monitoring Plan (LIMP) based on the Outline LIMP [\[REP5-021\]](#).

7.4.25. There is disagreement between NE and the applicant in relation to the requisite compensation quantum for LBBG, with NE stating that up to 597.2 breeding pairs should be compensated for under a worst-case scenario.

7.4.26. On the basis of the evidence provided, the ExA considers that a compensation quantum of 127 breeding pairs is reasonable. This figure has been considered appropriate using an impact value based on NE's worst-case morality rates, a

compensation ratio of 3:1 and a central impact value proportionate with the level of impact associated with the proposed development.

- 7.4.27. In any event, the applicant in [\[REP8-010\]](#) submits that the site at Orford Ness has the potential to produce a breeding population of LBBG equating to a maximum of 2,400 nests. The OTB has capacity for an additional 1,500 pairs. As such, even if the SoSESNZ accepted NE's worst-case compensation quantum of 597.2 pairs, either site would have the capacity to deliver this.
- 7.4.28. The ExA considers the compensatory measures for LBBG species would be acceptable and should be secured under the LIMP, via what is Part 1 of Schedule 13, as included in the ExA's rDCO. The ExA agrees with the applicant that the undertaking of the proposed compensatory works at Orford Ness would not cause an AEol at any designated European site.

Kittiwake Compensation – FFC SPA

- 7.4.29. The compensation for kittiwakes under the applicants without prejudice derogation case is set out within the Kittiwake - Evidence, Site Selection and Roadmap [\[REP5-017\]](#) and the Kittiwake Implementation and Monitoring Plan [\[REP5-023\]](#).
- 7.4.30. The applicant considers the provision of artificial nesting structures (ANS) would be the most feasible measure for providing kittiwake compensation. An onshore ANS in Gateshead has been identified by the applicant as being suitable. The applicant is also exploring the option of buying into the MRF, as an alternative compensatory option for kittiwake.
- 7.4.31. The ExA consider that a compensation quantum of 16 breeding pairs would be reasonable. This finding is made using a compensation ratio of 3:1, a central impact value proportionate with the level of impact associated with the proposed development and the methodology used for Hornsea 3 (stage 2) Offshore Windfarm in line with NE's advice. The applicant in [\[REP5-017\]](#) has confirmed that this number of breeding pairs could be accommodated at the ANS at Gateshead. The ExA has no reason to find otherwise.
- 7.4.32. Compensatory measures for kittiwake could therefore compensate under the predicted worst-case impacts of the proposed development on this qualifying bird feature. It is, however, recommended that the identified compensatory quantum (16 breeding pairs) is incorporated into paragraph (13)(2)(c) of Part 2 of Schedule 13 the rDCO.

Guillemot and Razorbill – FFC SPA and Farne Islands SPA

- 7.4.33. Compensation for guillemot and razorbill species provided on a without prejudice basis is set out at Guillemot and Razorbill - Evidence, Site Selection and Roadmap [\[REP8-012\]](#) and the Guillemot and Razorbill Implementation and Monitoring Plans (GRIMP) [\[REP8-014\]](#).
- 7.4.34. The guillemot and razorbill compensation measures are intended to reduce recreational disturbance. These compensatory measures would likely be delivered in collaboration with other developments in one of two ways. Firstly, measures could form part of a wider strategic scheme that will target and benefit colonies across the south west region. Alternatively, a broader, regional, compensation package would be formed in collaboration with a group of developers. The benefits from these

measures would be proportionally distributed between each contributing development at an agreed rate.

- 7.4.35. For the FFC SPA, the ExA considers a compensation quantum of 31 pairs of guillemot and 16.6 pairs of razorbill would be reasonable. For the Farne Islands SPA, a compensation quantum of 35.43 pairs of guillemot would be reasonable. This is based on impact values in line with NE's worst-case mortality rates, a compensation ratio of 3:1 and a central impact value considered proportionate with the level of impact associated with the proposed development.
- 7.4.36. The applicant in [REP8-012] estimates that compensatory measures would result in an equivalent conservative maximum of 184 additional adult pairs of guillemots and 113 pairs of razorbills delivered into the regional population based on national productivity rates. The ExA considers there is no reason why the applicant's numbers should not be accepted.
- 7.4.37. Consequently, acceptable compensatory provision would be available for the guillemot and razorbill qualifying features. This would be the case even in the event that NE's worst-case compensation levels are relied on. As an alternative to providing compensatory measures in the south west, the applicant has advised that a contribution to the MRF could be made. We have therefore recommended in our rDCO that compensatory provision for the guillemot and razorbill qualifying features of the FFC SPA should be included as a new Part 3 in Schedule 13 of any made DCO for the proposed development.
- 7.4.38. The ExA, as explained above, considers there would be an AEoI for the guillemot qualifying feature of the Farne Islands SPA. However, providing compensation measures to address that AEoI has not been incorporated by the applicant in either the without prejudice wording for Part 3 of Schedule 13 of the dDCO [\[REP8A-042\]](#) or the GRIMP [\[REP8-014\]](#). The ExA considers compensatory measures would be necessary and we therefore recommend that the SoSESNZ obtains from the applicant amended versions of: text for Part 3 of Schedule 13 of the rDCO; and the GRIMP, to include making provision for compensatory measures for guillemot as a qualifying feature of the Farne Islands SPA.

7.5. CONCLUSIONS ON HABITAT REGULATIONS ASSESSMENT

- 7.5.1. Taking everything together, the ExA considers that the correct European sites and qualifying features have been identified for the purposes of this assessment. All potential impacts which could give rise to LSE, including operational disturbance to the RTD feature of the OTE SPA, have been considered by the ExA.
- 7.5.2. The ExA rules out AEoI for the majority of the designated European sites that have been assessed. Nevertheless, this cannot be excluded for:
- The MLS SAC by virtue of physical habitat loss or disturbance to its qualifying sandbank feature under the proposed development's MDS;
 - The FFC SPA by virtue of in-combination harm to its qualifying kittiwake, guillemot and razorbill features;
 - The Farne Islands SPA by virtue of in-combination harm to its qualifying guillemot feature; and

- The AOE SPA and Ramsar site by virtue of in-combination harm to its qualifying LBBG feature.

- 7.5.3. Consequently, the proposed development can proceed only if there are no alternative solutions and there are IROPI as to why it must be carried out. Suitable compensatory measures must also be secured. These matters are considered within the applicant's derogation case [\[AS-003\]](#).
- 7.5.4. For reasons given above, the ExA is content that there are no alternative solutions for the delivery of the proposed development. Moreover, the benefits of the proposed development, particularly from its contribution to the reduction in UK carbon emissions and maintaining energy security, would be sufficient to allow the SoSESNZ to conclude that for this project there are reasons of imperative overriding public interest.
- 7.5.5. In terms of compensating for the identified AEoI, with the exception of the AEoI for the guillemot qualifying feature of the Farne Islands SPA, mechanisms have been identified by the applicant enabling suitable compensatory provision for each of the identified qualifying features. Those mechanisms would be secured under the provisions of Schedule 13 included in the ExA's rDCO, albeit in respect of compensating for the AEoI for the MLS SAC, the SoSESNZ would need to be satisfied that strategic compensation (the extension of a SAC or new designation of another SAC with the Annex 1 sandbank feature) would be deliverable by Defra.
- 7.5.6. With respect to the AEoI for the guillemot qualifying feature of the Farne Islands SPA identified by the ExA, we recommend that the SoSESNZ obtains from the applicant amended versions of Part 3 of Schedule 13 of the rDCO and the GRIMP, that include making provision for compensatory measures for guillemot as a qualifying feature of the Farne Islands SPA.
- 7.5.7. Accordingly, the ExA is content that there would be sufficient information, if our recommendation with respect to the handling of the AEoI for guillemot as a qualifying feature of the Farne Islands SPA is accepted, available to the SoSESNZ to enable their undertaking of an appropriate assessment in order to fulfil the duty under the requirements of the Habitat Regulations.

8. CONCLUSIONS ON THE CASE FOR DEVELOPMENT CONSENT

8.1. INTRODUCTION

- 8.1.1. This chapter sets out the ExA's overall assessment of the planning merits for the proposed development.
- 8.1.2. We are content that the Environmental Statement (ES) and other information submitted by the applicant during the examination has provided an adequate assessment of the proposed development's environmental effects and meets the requirements under the Environmental Impact Assessment (EIA) Regulations.
- 8.1.3. We are also content that the applicant's approach to the assessment of alternatives, as described in the ES, is comprehensive and complies with the EIA Regulations. We therefore consider that the requirements of Section 4.3 of the Overarching National Policy Statement for Energy (EN-1) (NPS EN-1) have been met.
- 8.1.4. We are content with the applicant's methodology for assessing cumulative effects and its approach to decommissioning and we have taken full account of the submitted environmental information in our consideration of this application.
- 8.1.5. NPS EN-1, National Policy Statement for Renewable Energy Infrastructure (EN-3) (NPS EN-3) and National Policy Statement for Electricity Networks Infrastructure (EN-3) (NPS EN-5) provide the primary basis for the Secretary of State for Energy Security and Net Zero (SoSESNZ) to make decisions on development consent applications for generating stations that are Nationally Significant Infrastructure Projects (NSIPs). The ExA's conclusions on the case for development consent are therefore reached within the context of the policies contained in those NPSs. In arriving at the conclusions set out in this Chapter, we have taken other relevant law and policy into account, including: the Marine Policy Statement 2011(MPS); the East Inshore and East Offshore Marine Plans 2014 EIEOMP); the South East Inshore Marine Plan 2021 (SEIMP) and the National Planning Policy Statement for Ports 2012 (NPSfP).

8.2. SUMMARY OF MAIN PLANNING ISSUES

- 8.2.1. The ExA's findings in relation to the effects of the proposed development and its compliance with the relevant policy and legislation can be found in the relevant sections of Chapters 3 to 6 and are summarised in Table 8.1 below.

Table 8.1: Summary of findings on planning issues

Issue	Finding	Weighting	Chapter or Section
Overarching matters relating to Need and Alternatives to the proposed development, including Climate Change	Positive	Very great	Chapter 3 and section 6.2
Benthic and intertidal ecology, including effects on physical processes and sediment quality	Negative	A little	Section 4.1
Offshore ornithology	Negative	A little	Section 4.2
Marine mammals and fish and shellfish ecology	Negative	A little	Section 4.3
Commercial fishing	Negative	A little	Section 4.5
Seascape, and visual effects and Landscape and visual effects	Negative	A little	Sections 4.6 and 5.1
Other offshore infrastructure and activities	Negative	Very little	Section 4.7
Farming	Negative	Moderate	Section 5.2
Traffic and transport	Negative	A little	Section 5.3
Air quality and noise and vibration	Negative	A little	Section 5.4
Historic environment	Negative	A little	Section 6.1
Good design	Negative	Moderate	Section 6.5
Navigation and shipping	Neutral	Neutral	Section 4.4
Onshore ecology and biodiversity	Neutral	Neutral	Section 5.5
Flood risk and water quality	Neutral	Neutral	Section 5.6
Socioeconomics	Neutral	Neutral	Section 6.3
Cumulative and interrelated effects	Neutral	Neutral	Section 6.4

8.3. THE OVERALL PLANNING BALANCE

- 8.3.1. In this section we weigh 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.

Legal framework and policy background

- 8.3.2. We have had regard to the legal framework within which the SoSESNZ must decide this application and we have sought to explore and seek representations on the operation of s104 of PA2008 and the planning balance. Subsections 104(2) and s104(3) of the Planning Act 2008 (PA2008) require the SoSESNZ to have regard to and decide the application in accordance with the relevant NPSs, unless a relevant consideration arising from subsections 104(4) to (8) applies.
- 8.3.3. NPS EN-1 advises that the SoSESNZ will start with a presumption in favour of granting consent to applications for energy NSIPs, given the level and urgency of the need for the delivery of major energy infrastructure. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused and subject to the other provisions of PA2008.
- 8.3.4. We consider the proposed development meets the need as established in the NPSs and satisfies the tests in s104(2) and s104(3) of PA2008 and accordingly should be determined as such.
- 8.3.5. In accordance with its duties under PA2008, we have had regard to the local impact reports submitted by the local planning authorities, to prescribed matters and to other important and relevant policies and to other important and relevant matters identified in our recommendation. We have also considered whether the determination of this application in accordance with the NPSs would lead to the United Kingdom being in breach of any statutory duty, be unlawful, or be contrary to regulations about how decisions are to be taken. We are content that in all respects that would not be the case.
- 8.3.6. We are also required to consider whether the adverse impacts of the proposed development would outweigh its benefits. Paragraph 4.1.6 of NPS-EN1 advises that when weighing a proposed development's adverse impacts against its benefits, the SoSESNZ should take into account environmental, social and economic benefits and adverse impacts at the national, regional and local levels. NPS EN-1 goes on to advise that where the NPSs require an applicant to mitigate a particular impact as far as possible, but there would still be residual adverse effects after applying mitigation measures, those residual effects should be weighed against the benefits of the proposed development.

Matters weighing in favour of the DCO being made

Very great positive weight

- 8.3.7. We have found in accordance with NPS EN-1 that the proposed development would result in very great positive weight in relation to meeting the need for low carbon electricity infrastructure and the Government's energy security and net zero ambitions. This weighting includes an allowance for the contribution the proposed development would make to assisting with addressing the effects of climate change. That being a matter that we consider is closely aligned with the consideration of the need for the proposed development.

Moderate positive weight and little positive weight

- 8.3.8. We consider that there are no matters which would give rise to moderate or little positive weight.

Matters weighing against the DCO being made

Very great negative weight and great negative weight

- 8.3.9. We consider that there are no matters which would give rise to very great negative weight or great negative weight.

Moderate negative weight

- 8.3.10. We have found that the effects for farming and good design should be attributed moderate negative weight in the planning balance. Those weightings have been arrived at because: of the proposed development's effects for best and most versatile agricultural land; and the applicant's limited engagement with an independent design review process prior to the application's submission.

A Little negative weight

- 8.3.11. We have concluded that matters relating to: benthic and intertidal ecology, including effects on physical processes and sediment quality; offshore ornithology; marine mammals and fish and shellfish ecology; commercial fishing; seascape and visual effects; onshore landscape and visual effects; traffic and transport; historic environment; and air quality and noise and vibration would result in a little negative weight to be considered in the planning balance.

Very little negative weight

- 8.3.12. We consider that very little negative weight should be attributed to matters relating to other infrastructure and activities.

Neutral matters

- 8.3.13. We have identified that matters relating to: navigation and shipping; onshore ecology and biodiversity; flood risk and water quality; socioeconomic matters (excluding commercial fishing); and cumulative and interrelated effects are neutral factors and neither weigh for nor against in the planning balance.

The planning balance

- 8.3.14. Taking the above findings into consideration, we consider that whilst a number of the planning matters result in negative outcomes, with the proposed mitigation measures discussed the previous chapters, these negative outcomes would not be sufficient to outweigh the positive weight given to the projects contribution to meeting the need for low carbon energy and would therefore not lead us to conclude against the making of the Order. As such, despite the adverse effects listed in Table 8.1 above, 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 and any other relevant policy, including the MPS, EIEOMP, SEIMP and NPSfP.
- 8.3.15. If, however, the SoSES NZ were to conclude differently, and find in this instance that the harms arising from the planning matters were not outweighed by the benefits of the proposed development, it would be necessary for the SoSES NZ to also consider the Critical National Priority (CNP) policy in accordance with Figure 2 of NPS EN-1. In that instance, where residual non-HRA impacts remain after the mitigation

hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure, subject to certain exceptions which we consider do not apply in this case.

- 8.3.16. Should the SoSESNZ find that the CNP consideration should apply, we conclude that the proposed development constitutes nationally significant infrastructure, for which the Government has identified that there is a CNP. When assessing nationally significant low carbon infrastructure, the starting point is that the overarching need has been demonstrated by the Government, which should be given substantial weight as set out in paragraphs 3.2.6 to 3.2.8 in NPS EN-1. As per paragraph 4.2.7 of NPS EN-1, the CNP policy **does not** create an additional need in this regard and CNP should be applied following the normal consideration of the need case, the impacts of the project and the application of the mitigation hierarchy.

HRA considerations

- 8.3.17. The SoSESNZ is the Competent Authority under the Conservation of Habitats and Species Regulations 2017 (as amended) and The Conservation of Offshore Marine Habitats and Species Regulations 2017 (the Habitats Regulations) and will be responsible for making the definitive assessment for the purposes of the Habitats Regulations.
- 8.3.18. A HRA Report has been provided for the proposed development and the ExA considers that the correct European (national network) sites and qualifying features have been identified for the purposes of this assessment. We are content that there are no alternative solutions and there are Imperative Reasons of Overriding Public Interest (IROPI) why the proposed development should be undertaken with the compensatory measures secured in our recommended Development Consent Order (Appendix E to this recommendation), supplemented by an additional compensatory measure for guillemot as a qualifying feature of the Farne Islands Special Protection Area.
- 8.3.19. Securing the additional compensatory measure concerning the Farne Islands Special Protection Area is subject to a recommendation included in Chapter 7 of this report and involves additional details being obtained from the applicant prior to any consent being given to the proposed development. Furthermore, the ExA is content that there is sufficient information before the SoSESNZ to understand the potential for adverse effects on European sites from the proposed development, alone or in combination, and to enable the SoSESNZ to undertake an appropriate assessment in order to fulfil the duty under the requirements of the Habitats Regulations.
- 8.3.20. For the reasons explained in Chapter 7 of this recommendation, the proposed development either alone or in combination would have adverse impacts on the integrity (AEoI) of various sites forming part of the UK national site network. Accordingly, if the SoSESNZ is minded to give consent for the proposed development there would be a need to consider making a derogation under the Habitats Regulations
- 8.3.21. In Chapter 7 of this recommendation, we have concluded that there are no alternatives to the proposed development, having regard to the fact that the proposed generating station would extend an existing wind farm in close proximity to busy shipping routes, and IROPI can be demonstrated for consenting this project. We have also advised that we consider suitable compensatory measures could be secured to offset the AEoI that we have identified.

- 8.3.22. We are therefore content that the applicant's assessment has followed the mitigation hierarchy, and it has been demonstrated that there are no deliverable alternative solutions, and there are IROPI and suitable compensation measures could be secured.
- 8.3.23. However, should the SoSESNZ conclude otherwise on either the IROPI or alternative solutions considerations, it would be necessary to apply the CNP policy as per Figure 3 in NPS EN-1. The ExA has concluded that the proposed development constitutes infrastructure for which a CNP has been identified. The CNP Infrastructure considers that in terms of IROPI for HRAs, the benefit to the public is capable of outweighing the risk of environmental damage.

8.4. CONCLUSIONS

- 8.4.1. On the basis of the above considerations, we conclude that, the adverse effects identified do not outweigh the benefits and that there is a convincing case for development consent to be granted. This would not lead to any breach of international obligations, any duty imposed by or under any enactment or be unlawful. In conclusion therefore, s104 (4) to (8) do not apply and we consider that the SoSESNZ can determine the proposed development in accordance with s104(2) and 104(3) of PA2008.

9. LAND RIGHTS

9.1. INTRODUCTION

9.1.1. In this chapter we consider:

- the relevant legislative requirements relating to compulsory acquisition (CA) and temporary possession (TP)
- the applicant's request for CA and TP powers in respect of the proposed Order Land
- the purposes for which land would be required
- the examination of the CA and TP cases made by affected persons (APs)

9.1.2. Having regard to the above listed considerations at the end of this chapter we reach conclusions and recommendations with respect to land rights powers sought.

LAND RIGHTS TRACKER (LRT)

9.1.3. We made a procedural decision (PD) in [\[PD-005\]](#) requesting the applicant to submit a LRT with the purposes of enabling the applicant to report on the status of land rights: not agreed with affected persons (APs) and other parties following the application's submission; and any progress that might be made during the examination with respect to reaching agreements with APs and other parties before the examination's close.

9.1.4. The first completed version of the LRT was submitted at pre-examination Procedural Deadline C [\[PD3-002\]](#). Thereafter the LRT was updated on seven occasions with [\[REP7-062\]](#) being the final submitted version and serves as a point of reference for identifying which of the land rights powers sought by the applicant remained in dispute at the examination's close.

9.2. LEGISLATIVE REQUIREMENTS AND RELATED GUIDANCE

LEGISLATION

Planning Act 2008 (PA2008)

9.2.1. The application includes requests for CA and TP powers and the powers sought by the applicant are contained in Part 5 of the draft development consent order (ddCO) [\[REP8A-004\]](#).

9.2.2. Section (s) 122(2) of PA2008 provides that a DCO may authorise CA only if the Secretary of State for Energy Security and Net Zero (SoSESNZ) is satisfied that certain conditions are met. That includes that the land subject to CA is required for the development to which the development consent relates or is required to facilitate it or is incidental to it.

9.2.3. In addition, s122(3) of PA2008 requires that there must be a compelling case in the public interest for the land to be acquired compulsorily. For that to be met, the former Department for Community and Local Government's "*Guidance related to procedures for the compulsory acquisition of land*" (September 2013) (the CA Guidance) indicates the SoSESNZ will need to be persuaded that there is compelling evidence that the public benefits that would be derived from the CA would outweigh the private loss suffered by those whose land would be acquired.

- 9.2.4. Section 123 of PA2008 relates to the land which the authorisation of CA can cover. S123(1) permits CA if one of the three conditions in subsections (2) to (4) is met. The application includes a request for the CA of the land to be authorised and thus the condition stated in s123(2) has been met.
- 9.2.5. Section 127 of PA2008 applies to statutory undertakers' land and allows for a DCO to include the CA of land or rights over land held by a statutory undertaker for the purposes of its undertaking. Where a statutory undertaker makes representations about the CA sought, a made DCO can include the CA of rights over the undertaker's land provided the SoSESNZ is satisfied the rights can be purchased without any serious detriment to the carrying on of the undertaking or any detriment to the carrying on of the undertaking, in consequence of the acquisition of the right, can be made good by undertakers by the use of other land belonging to or available for acquisition by them.
- 9.2.6. Section 130 of PA2008 applies to land belonging to the National Trust (NT) that is held by the NT inalienably. Under s130 the authorisation of the CA of inalienable land must be subjected to additional scrutiny under special parliamentary procedure (SPP) before it could come into effect.
- 9.2.7. Section 132 of PA2008 applies to common land and open space over which the CA of rights is being sought. Under s132 it is necessary to consider whether affected common land and/or open spaces when burdened with acquired rights would need to be replaced by other land capable of fulfilling the same purpose to ensure there would be no less advantage for the owner of and members of the public using the affected land. The seeking of rights under s132 may invoke SPP if the SoSESNZ is not satisfied the provisions of subsections (3) to (5) have been met.
- 9.2.8. Section 135 of PA2008 provides that an order granting development consent may include a provision authorising the CA of an interest in Crown land only: if the interest is for the time being held otherwise than by or on behalf of the Crown; and if the appropriate Crown authority consents to the acquisition.
- 9.2.9. Section 138 of PA2008 relates to the extinguishment of rights on statutory undertakers' land. It states that an order may include a provision for the extinguishment of the relevant rights, or the removal of the relevant apparatus only if the SoSESNZ is satisfied that the extinguishment or removal is necessary for the purposes of carrying out the development to which it relates.

Human Rights Act 1998 (HRA1998)

- 9.2.10. The HRA1998 places the European Convention on Human Rights (ECHR) into UK statute. The ECHR is subscribed to by member states of the Council of Europe. ECHR rights are enforceable in the domestic courts but with final recourse to the European Court of Human Rights. Fulfilling duties under the ECHR are unaffected by the UK's decision to leave the European Union. Articles 1, 6 and 8 of the ECHR are engaged by the proposed development.

Equality Act 2010 (EA2010)

- 9.2.11. The EA2010 introduced the public sector equality duty (PSED) and the PSED applies to our conduct during the examination, our reporting and to the SoSESNZ's decision making. Having regard to our responsibilities under the PSED, during the examination APs were given the opportunity to make their cases in writing and/pr through attendance at hearings. We are content that we fulfilled our duties under the PSED.

Neighbourhood Planning Act 2017 (NPA2017)

- 9.2.12. The NPA2017 in general terms provides enhancements to the rights of persons subject to TP, with the intention of ensuring they have equivalent or proportionate rights to notice and relevant compensation to those already available to APs subject to CA. However, NPA2017 has not yet commenced and the applicant is seeking its disapplication in the dDCO [\[REP8A-004\]](#). There is precedent for that disapplication in other made DCOs.

RELATED GUIDANCE

CA Guidance

- 9.2.13. In addition to the legislative requirements set out above, the CA Guidance sets out a number of general considerations which also need to be addressed, namely that:
- All reasonable alternatives to CA (including modifications to the development) have been 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 subject to CA powers.
 - The applicant must be able to demonstrate that funds are available to meet the compensation liabilities that might flow from the exercise of CA powers.
 - The decision-maker must be satisfied that the purposes stated for the CA are legitimate and sufficiently justify the inevitable interference with the human rights of those affected.
- 9.2.14. Paragraph 25 of the CA Guidance states that applicants should seek to acquire land by negotiation wherever practicable.
- 9.2.15. Further to Part 1 of Schedule 5 of PA2008, TP powers are capable of being within the scope of a DCO. The PA2008 and the CA Guidance do not contain the same level of specification and tests to be met in relation to the granting of TP powers, as for CA powers because, by definition, such powers do not seek to permanently deprive or amend a person's interests in land. The provisions of s122 and s123 of PA2008 do not apply to the consideration of any requested TP powers. However, the seeking of TP powers must be justifiable and compatible with human rights tests as discussed below.

Guidance on associated development applications for major infrastructure projects (April 2013) (AD Guidance)

- 9.2.16. The application seeks powers onshore to implement associated development, with some of that development being intended to facilitate the construction of the proposed North Falls Offshore Wind Farm (NFOWF). The proposed NFOWF is being promoted as project in its own right, albeit not as a rival to the proposed development. The examination for NFOWF's application (case reference EN010119) will be completed no later than 28 July 2025. Given the application for the proposed development includes significant associated development for the proposed Five Estuaries Offshore Wind Farm (FEOWF), as well as such works for elements of the proposed NFOWF, the AD Guidance has some bearing of land rights considerations for this case, as referred to later in this chapter.

National Policy Statement for Electricity Networks Infrastructure (EN-5) (NPS EN-5)

- 9.2.17. Section 2.6 in NPS EN-5 advises that for projects to be able to lawfully install, inspect, maintain, repair, adjust, alter, replace or remove electricity lines (above or below land) or other related equipment applicants must own or hold sufficient rights in the land required. Section 2.6 of NPS EN-5 further advises that where an applicant does not own the land needed it should try and reach voluntary agreements to be able to undertake the relevant work, with CA powers to be used as a last resort.

9.3. THE REQUEST FOR CA AND TP POWERS

- 9.3.1. The application dDCO [[APP-024](#)] and all subsequent versions submitted by the applicant up until the examination's close [[REP8A-004](#)] include within Part 5 provisions intended to authorise the CA of the freehold over some land and the acquisition of rights over land. With respect to the CA of rights over land, the powers sought in the main would relate to the proposed onshore export cable corridor (OnECC) and be for:

- the creation of new rights to construct, install, operate, maintain and decommission the proposed development
- the acquisition of existing rights and the imposition of restrictive covenants to safeguard the proposed development throughout its operational life

- 9.3.2. For the OnECC, the applicant is seeking CA powers and TP over a corridor of land within which it proposes to microsite the cable ducts and cables. OnECC in the majority of cases, would be 90 metres (m) wide to allow for flexibility at the detailed design stage, with further investigations being required prior to construction to minimise archaeological and ecological impacts. Within the OnECC the width of the working corridor would generally be 60m. Once the construction works had been completed the CA of land rights (easements) applying to a 20m wide corridor relating to the proposed development's onshore cable circuits would be completed [paragraph 6.1.7 in [REP8A-038](#)]. The proposed NFOWF, should it be consented and constructed, would similarly require a 20m wide easement to safeguard its buried cable circuits.

- 9.3.3. The DCO sought therefore includes a request for CA pursuant to s123(2) of PA2008, with those CA powers relating only to the onshore elements of the proposed development. Powers for the TP of land within the Order Land are also sought.

- 9.3.4. With land rights being sought, the application was accompanied by: a Book of Reference (BoR) [[APP-026](#)]; a Statement of Reasons (SoR) [[APP-030](#)]; a Funding Statement [[APP-029](#)]; a Compensation Measures Funding Statement [[APP-056](#)]; Onshore Land Plans [[APP-008](#)]; Offshore Works Plans [[APP-011](#)]; Onshore Works Plans [[APP-010](#)]; Special Category Land Plans [[APP-009](#)]; Street Works and Access Plans [[APP-013](#)]; Temporary Closure of Public Rights of Way Plans [[APP-014](#)]; Onshore Crown Land Plans [[APP-022](#)]; and Offshore Crown Land Plans [[APP-021](#)]. Those documents taken together identify all of the land rights sought and describe the reasons why the land is required and the basis under which compensation would be funded.

- 9.3.5. Changes were made to some of the aforementioned land rights documents during the examination and plans in response to matters that arose during the examination, the applicant's making of a change request (as explained below) and further to the

applicant's ongoing due diligence. At the close of the examination the most update land rights plans and documents were:

- BoR [\[REP7-013\]](#)
- SoR [\[REP7-015\]](#)
- Funding Statement [\[APP-029\]](#)
- Compensation Measures Funding Statement [\[APP-056\]](#)
- Onshore Land Plans [\[REP7-004\]](#)
- Offshore Works Plans [\[REP1-006\]](#)
- Onshore Works Plans [\[REP6-005\]](#)
- Special Category Land Plans [\[REP7-005\]](#)
- Street Works and Access Plans [\[AS-023\]](#)
- Temporary Closure of Public Rights of Way Plans [\[REP7-006\]](#)
- Onshore Crown Land Plans [\[REP7-007\]](#)
- Offshore Crown Land Plans [\[APP-021\]](#)

9.3.6. Unless otherwise stated, all references to plans on documents in this chapter relevant to land rights matters are to the most up to date versions listed above.

PROPOSED CHANGES

9.3.7. The applicant submitted a change request on 10 October 2024 [\[AS-014\]](#) and the changes requested are described in section 2 of the applicant's Report of Proposed Changes [\[AS-057\]](#). We accepted the requested changes for examination on 22 October 2024 [\[PD-012\]](#) and the changes relating to land rights are as follows:

- Change 1 – a reduction in the extent of proposed Work Numbers (No/Nos) 1 and 2 to avoid an unnecessary overlap between the proposed development, the Crown Estate and the leased area for the Galloper Offshore Wind Farm.
- Change 2 – alterations to the extent of Work Nos 2A and 3 affecting plots at the transition between the offshore and onshore works arising from periodic updating by the Ordnance Survey of the mean low and mean high water lines. Change 2 altered the areas subject to CA in respect of Plots 01-007, 01-008 and 02-001 and further required the creation of a new plot 02-001A.
- Change 3 – very minor reductions to the extent of the Order Land affecting Plots 08-024 (reduction of 0.013 square metres (sq.m)) and 17-025 (reduction of 0.35sq.m) to address the erroneous inclusion of land.
- Change 4 – minor additions to the Order Land (totalling 0.95 hectares (ha)) for off route haul road in respect of Work Nos 7E and 9C relating to Plots 05-008 and 07-002.
- Change 5 – minor increases in the extent of the Order Land affecting Bentley Road relating to Work No 13 and 13A and concerning Plots 14-035, 14-036, 15-002 and 15-010 (four increases with the largest being 0.24sq.m) and Work No 13A in respect of Plot 15-013 (an increase of 32sq.m).
- Change 6 – additional construction access in Ardleigh Road relating to Work No 15 requiring a minor increase (10.4sq.m) in the Order Land as they relate to Plot 17-008.
- Change 7 – no land rights implications.
- Change 8 – no land rights implications.
- Change 9 – alterations to the Order Land for the proposed compensatory habitat for Lesser Black Backed Gull (LBBG) at Orford Ness reducing from approximately 30ha to 6ha, with the exclusion of Plots 20-002 and 20-004 and Plot 20-003 being reduced from approximately 17.4ha to 6.0ha.

- Change 10 – alterations to the proposed operational accesses: changed location in Swan Road; deletion of an access on Clacton Road; and a slight increase (0.035sq.m) in the extent of an access on Colchester Road.

9.3.8. The making of some of the above-mentioned changes to the application engaged the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 requiring the applicant to give notice of and publicise the changes to the application.

9.4. THE PURPOSES FOR WHICH LAND IS REQUIRED

9.4.1. The relevant Order land and purposes for which the CA and TP powers are required are set out in the BoR [\[REP7-013\]](#) and summarised in sections 9 and 10 of the SoR [\[REP7-015\]](#) and shown in the Land Plan Onshore [\[REP7-004\]](#). The Explanatory Memorandum [\[REP8A-007\]](#) provides a fuller explanation for the CA and TP powers included in Part 5 of the dDCO and the provisions of the articles included in the land rights part of the dDCO are summarised below.

9.4.2. CA powers are sought under Article 22 in respect of land that would be required or used permanently for the construction, operation and maintenance of the proposed development.

9.4.3. Article 23 would limit the time allowed for exercising CA (and TP) powers to seven years from the day the Order is made.

9.4.4. Article 24 would allow for rights over land to be acquired as well as the land itself, and also for new rights to be created over land. The intention of this article would be to limit the extent of land that would need to be subject to outright acquisition under Article 22. Article 24 includes the power to impose restrictive covenants. Paragraph 2 of Article 24 provides that for the land described in Schedule 7, the undertaker's powers of compulsory acquisition would be limited to the acquisition of such rights and the imposition of such restrictive covenants, as set out in Schedule 7.

9.4.5. Article 25 concerns minerals and incorporates Parts 2 and 3 of Schedule 2 to the Acquisition of Land Act 1981, exempting existing rights in minerals from the scope of compulsory acquisition unless they are expressly named and conveyed.

9.4.6. Article 26 would enable the undertaker to in effect extinguish all private rights or restrictive covenants over land subject to CA pursuant to Article 22 insofar as their continuance would be inconsistent with the exercising of powers under Article 22.

9.4.7. Article 27 would apply the Compulsory Purchase (Vesting Declarations) Act 1981 as if any made DCO was a compulsory purchase order so that the undertaker would have the option to acquire land via the vesting declarations procedure. Article 28 would enable the undertaker to acquire, or acquire or create rights in, the subsoil below land, rather than having to acquire the land itself. Article 29 would make modifications to the Compulsory Purchase Act 1965, as applied by s125 of PA2008. Article 30 would enable the undertaker to appropriate and use land above or below streets within the Order Land, without having to acquire the street or any right or easement in it.

9.4.8. Article 31 would allow the Order Land to be occupied temporarily while works were being carried out. This would be land required during the proposed development's construction that would not be required permanently. Article 31 would also allow for the temporary occupation of any of the land intended for permanent acquisition that had not yet been acquired. Without Article 31 the undertaker would require CA powers in respect of the entirety of the proposed Order Land.

- 9.4.9. Article 32 would enable the undertaker to take temporary possession of land within the Order Land for the purpose of maintaining the authorised development, at any time within a period of five years following the start of electricity being exported to the transmission network.
- 9.4.10. Article 33 would enable the undertaker to extinguish rights of statutory undertakers and remove and reposition their apparatus. Article 34 provides that if any statutory undertaker's apparatus was removed and that halted a supply from that apparatus to owners or occupiers of premises such that they had to seek a connection to other apparatus, then their reasonable costs in obtaining a new supply could be claimed from the undertaker.
- 9.4.11. Article 35 provides that the undertaker could not exercise a number of powers prior to it putting into place a guarantee or security equal to its potential liability to compensation payable under a made DCO for the affected land which would be approved by the Secretary of State.
- 9.4.12. The Onshore Land Plans [\[REP7-004\]](#) identify the CA and TP powers sought using the following colour coding:
- Land shaded pink – subject to TP and freehold acquisition
 - Land shaded blue – subject to TP and permanent acquisition of rights
 - Land shaded yellow – subject to TP
 - Land shaded green – subject to non-exclusive TP (land which would still be available to owners and occupiers to use while the proposed construction works were ongoing)
- 9.4.13. With respect to the TP powers sought, under Article 8 of the dDCO the applicant is seeking the disapplication of the provisions of the Neighbourhood Planning Act 2017 insofar as they would relate to TP¹¹. The applicant has submitted in the SoR [paragraphs 9.2.26 and 9.2.27 in [REP7-015](#)] that the use of the powers would reduce the amount of land over which permanent rights would be needed, minimising the interference with landowners' and occupiers' rights. The TP powers sought would apply to all of the Order Land and those powers might be used before any permanent rights were acquired, albeit the Plots listed in Schedule 6 of the dDCO [\[REP8A-004\]](#) would be subject only to TP and no CA powers would apply to them.
- 9.4.14. Pursuant to s135 of PA2008, Article 40 concerns rights relating to Crown land and would preclude anything prejudicial to that land being undertaken without the written consent of the Crown Estate or the relevant department being obtained.
- 9.4.15. The application as originally submitted sought powers under s130 of PA2008 to acquire rights affecting land belonging to the National Trust (NT) that it holds inalienably. However, by the close of the examination the had agreed with NT that it would not seek CA powers relating to land inalienably held by the NT, something that we return to later in this chapter.

9.5. AVAILABILITY AND ADEQUACY OF FUNDING

- 9.5.1. The has submitted in paragraph 28 of its Funding Statement [\[APP-029\]](#) that the proposed development's current estimated cost would be approximately £3.5 billion.

¹¹ At the time of the submission of this recommendation the provisions of the Neighbourhood Planning Act 2017 insofar as they relate to TP had not yet come into force

That sum covers the costs of construction, project management, financing, land acquisition and operation, including an estimated allowance of £26.4 million for the costs associated with the proposed CA and potential compensation claims (including a contingency) [paragraph 35 in APP-029].

9.5.2. In the event that ducting within the proposed OnECC is installed by the undertaker on behalf of the proposed NFOWF, those works would be funded by the NFOWF project or via an anticipatory investment framework the Office of Gas and Electricity Markets is developing [paragraph 29 in APP-029].

9.5.3. The applicant company (and intended undertaker), as explained in section 4 of [APP-029], comprises the following four partners:

- RWE Renewables UK Swindon Limited (33% stake in the proposed development), a subsidiary of RWE AG. RWE AG declared gross earnings of 6.3 billion Euros in 2022 [paragraph 13 in APP-029].
- Galloper Extension Investco Limited, a joint venture (with a 25% stake in the proposed development) led by Macquarie Asset Management. Macquarie Asset Management, as of 31 March 2023, was managing assets worth \$870 billion (Australian Dollars) [paragraph 14 in APP-029].
- ESB II UK Limited (20.9% stake in the proposed development), a company wholly owned by the Electricity Supply Board. Electricity Supply Board is a statutory corporation in the Republic of Ireland with an asset base of approximately 10.9 million Euros [paragraph 15 in APP-029]
- Sumitomo Corporation (20.9% stake in the proposed development), with Worldwide assets worth £57 billion as of 31 December 2023 [paragraph 16 in APP-029].

9.5.4. Funding for assembling the land required by the proposed development would be provided by the applicant without it needing to obtain any third party funding [paragraph 19 in APP-029]. Notwithstanding that, Article 35 (originally Article 34) in the dDCO [\[REP8A-004\]](#) would prevent the undertaker from exercising the CA powers included in any made DCO until guarantees or alternatives forms of security relating to the payment of compensation had been approved by the SoSESNZ [paragraph 21 of APP-029].

9.5.5. Having regard to the applicant's corporate structure and financial position, as stated in the submitted Funding Statement, we are content that adequate funding would be available to meet the liabilities arising from the exercise of the CA and TP powers sought.

9.6. EXAMINATION OF THE CA AND TP CASE

9.6.1. The examination of the application included consideration of the written and oral evidence provided relevant to CA and TP, using the procedures described below.

WRITTEN PROCESS

9.6.2. APs or parties potentially affected by CA or TP, including statutory undertakers, other undertakers and utility providers, who made RRs are listed in the LRT [\[REP7-062\]](#).

9.6.3. Our first, second and third rounds of written questions (ExQ1, ExQ2 and ExQ3), respectively [\[PD-011\]](#), [\[PD-014\]](#) and [\[PD-026\]](#), included questions for the applicant and APs. Additionally, we requested the Crown Estate to confirm whether under s135(2) of PA2008 it did or did not consent to any rights affecting the Crown Estate being

included in any DCO for the proposed development that may be made by the SoSESNZ [\[PD-035\]](#).

HEARINGS

9.6.4. We held the following CA hearings (CAH)

- CAH1 on 17 September 2024
- CAH2 on 31 October 2024
- CAH3 on 23 January 2025

9.6.5. It should be noted that land rights issues relating to the farming community affected by the proposed development also arose during the issue specific hearings (ISH) that considered environmental matters (ISH1, ISH3, and ISH6) and the dDCO (ISH2 and ISH7).

SITE INSPECTIONS

9.6.6. We undertook the following unaccompanied and access required site inspections: USI1 [\[EV5-001\]](#); USI2 [\[EV5-002\]](#); USI3 [\[EV5-003\]](#); USI4 [\[EV5-004\]](#); ARSI1 (Normans Farm) [\[EV5-003\]](#); and ARSI2 (Orford Ness) [\[EV5-005\]](#). Undertaking those various site inspections enabled us to gain an appreciation of the general extent of the land subject to the CA and TP powers being sought.

APPLICANT'S GENERAL CASE MADE FOR CA and TP

9.6.7. The applicant's general case for CA and TP is set out in its SoR [\[REP7-015\]](#). The applicant considers:

- The land and other interests subject to the CA powers sought represent the minimum level of interference reasonably required for the proposed development. The CA powers sought would enable the proposed development's delivery, a project which is needed both locally and nationally, which has numerous benefits and substantial policy support. That justifies the interference with the rights of the persons with land interests proposed for acquisition.
- The land identified for CA would be no more than is reasonably necessary and would therefore be proportionate.
- The need for the proposed development, suitability of the Order Land and the support for this project in the National Policy Statements (NPS) demonstrates there is a compelling case in the public interest for the CA of land.
- All reasonable alternatives to CA have been explored. There has been engagement with all APs, with a view to acquiring land interests by agreement and that is a continuing process.
- It has clearly been identified what each land plot would be used for and why it would be required. Given the national and local need for the proposed development and the support for it in policy, as well as the suitability of the Order Land, the CA of the land and rights and the suspension and/or extinguishment of rights affecting the Order Land would be justified.
- Funds required to meet any CA and compensation costs would be available.
- The inclusion of powers of CA in any made DCO for the proposed development meets the conditions of s122 of PA2008. Accordingly, a compelling case exists in the public interest justifying the making of a DCO including the CA and TP powers sought.

9.6.8. At CAH1 we asked questions concerning:

- The extent to which the CA powers sought in relation to the OnECC and onshore substation (OnSS) for the proposed development, the OnSS and cable ducting for the proposed NFOWF and National Grid Electricity Transmission PLC's (NGET) proposed East Anglia Connection Node (EACN) substation accord with: the conditions stated in s122(2) of PA2008; and the CA Guidance.
- Whether full consideration had been given to all reasonable alternatives to the CA and TP powers sought.
- Whether for the purposes of s122(3) of PA2008 there is a compelling case in the public interest for all of the land subject to the CA powers sought being acquired compulsorily.
- The implications of limiting the CA and TP powers being sought.
- The approach being taken by the applicant to negotiations with landowners and occupiers.

9.6.9. Our ExQ1 [\[PD-011\]](#) included land rights questions relating to: the land required for the OnECCs for the proposed FEOWF and NFOWF; the delay to heads of terms' (HoTs) negotiations prior to the application's submission; the land required for the proposed development's OnSS and the proposed NFOWF's OnSS; the case for the freehold acquisition of Plots 17-024 and 17-025 (the OnSS site/zone for both the proposed FEOWF and NFOWF); the acquisition of rights for the entirety of the proposed NGET EACN; and the adequacy of the consultation undertaken prior to the application's submission.

9.6.10. In ExQ1 requests were made of NGET and Affinity Water Limited to submit details of their preferred protective provisions .

9.6.11. At CAH2 we:

- Requested APs to summarise their cases, gave the applicant the opportunity to respond to those summaries and asked questions concerning:
 - The applicant's familiarity with the Court of Appeal's judgement for FCC Environment UK Limited v SoS for Energy and Climate Change ([2015] EWCA Civ 55), a case concerning the interplay between s104(3) and s104(6) of PA2008.
 - In respect of the freehold CA relating to the OnSS sites for the proposed FEOWF and NFOWF, given the Order Land sought for the latter are less than for the former, would a reasonable alternative to the CA powers being sought by applicant be to reduce the Order Land's extent in respect of Plots 17-024 and 17-025 so that they were the same as for the NFOWF.
- Asked the applicant to provide an update with respect to the land rights negotiations since CAH1.

9.6.12. In ExQ2 [\[PD-014\]](#) we asked National Highways (NH) to clarify its position with respect to the applicant's proposals for undertaking directional drilling and cable pulling activities under the A120, in response to NH's representations NH in section 6.1 in [\[REP1-066\]](#).

9.6.13. At CAH3 we:

- Requested attending APs to identify any changes in their cases following the holding of CAH2, gave the applicant the opportunity to respond to those case updates and asked questions concerning:
 - The CA powers sought in connection with the proposed OnSS zone, including whether it would be open to the SoSESNZ to conclude that all of

the acquisition powers being sought in relation of Plots 17-024 and 17-025 would not be necessary for the purposes of constructing and operating the proposed development and remove some of the proposed CA powers from any made DCO.

- The restrictive covenants relating to the undertaking of activities above and within the vicinity of the buried cables proposed in Schedule 7 (Land in which only new rights etc. may be acquired) of the dDCO.
 - The proposed compensatory habitat at Orford Ness.
- Asked the applicant to give an update with respect to its land rights negotiations since CAH2.

9.6.14. Further to the written submission made by TC Gunfleet Sands OFTO Limited [\[REP5-109\]](#) concerning any implications the proposed development might have for the operation of the Gunfleet Sands offshore wind farm, we asked (LR.3.01 in ExQ3 [\[PD-026\]](#)) whether there had been any discussions between it and the applicant and what the outcome of any discussions had been and if not, when were discussions likely to take place and when the Examining Authority (ExA) could expect to be updated.

9.6.15. Additionally, in ExQ3 DCO.3.09, the following statutory undertakers, undertakers and utility providers were requested to provide an update regarding negotiating protective provisions with the applicant and to submit a version of their preferred protective provisions s:

- Affinity Water Limited
- Cadent Gas Limited
- Environment Agency
- Essex County Council (ECC)
- London Gateway Port Limited
- NH
- Network Rail
- NFOWF
- Port of London Authority

9.6.16. In the light of a disagreement between the Harwich Haven Authority (HHA) and the applicant about the need for protective provisions in favour of the former, the HHA was requested to clarify why it considered protective provisions would be necessary as opposed to relying on works licences the undertaker would need to obtain from HHA (ExQ3 DCO.3.10).

SITE SELECTION AND ALTERNATIVES TO THE PROPOSED DEVELOPMENT

9.6.17. The applicant's consideration of the proposed development's site selection, alternatives and evolution is set out in a chapter in the Environmental Statement (ES) [\[APP-066\]](#). As we have explained in Chapter 3 above, central to the proposed development site's selection is the fact that it would be an extension to the Galloper Offshore Wind Farm, which is a limiting factor for where the generating station element of the proposed development could be located. Additionally, of significance is the proposed development's coordination with the proposed NFOWF and the need for NGET to facilitate new grid connections via a new substation, part of NGET's EACN proposals.

9.6.18. On 3 September 2024, shortly before the examination's opening, the Department for Energy Security and Net Zero announced it would be providing no further feasibility

funding for the applicant and the promoters of NFOWF and NGET in relation to the proposed wind farms connecting with NGET's proposed Sea Link¹² offshore transmission network reinforcement under the Offshore Coordination Support Scheme (OCSS) [AS-011]. Although connecting with Sea Link never formed part of the works included in the application for the proposed development, the cessation of funding for further design work under the OCSS in effect makes the proposed development reliant on an onshore connection to NGET's transmission system.

- 9.6.19. Given that background, and as explained in greater detail in Chapter 3 above, we consider the applicant has assessed all reasonable alternatives for each element of the proposed development in [APP-066] and that the most appropriate location, having regard to environmental considerations and technical constraints, is being proposed. We are therefore content that as a matter of principle it would be reasonable for any made DCO for the proposed development to include CA and TP powers. That said, for the reasons given below, we have concerns about whether it would be reasonable for all of the onshore Order Land to be made the subject of the CA powers sought by the applicant, having regard to the conditions stated in s122 of PA2008, most particularly subsection (3) “... *that there is a compelling case in the public interest for the land to be acquired compulsorily.*” and the provisions of the CA Guidance. The CA Guidance, amongst other things, advises that land to be acquired compulsorily should be no more than is reasonably required for the purposes of the proposed development (paragraph 11).
- 9.6.20. The SoR [REP7-015] provides the applicant's justification for the CA or TP powers sought for each plot shown on the Onshore Land Plans Onshore [REP7-004] and demonstrates that the applicant generally has a clear idea about how it intends to use the land subject to the proposed CA and TP.
- 9.6.21. In terms of demonstrating a compelling case in the public interest for the acquisition of land and rights, the applicant in the SoR [REP7-015] identified that the proposed development's benefits as being:
- The making of a significant contribution to meeting the urgent national need for energy infrastructure in accordance with policy stated in [NPS EN-1](#) and [NPS EN-3](#), with there being an ambition to deliver up to 50 gigawatts of offshore wind by 2030.
 - The making of socio-economic benefits, including job creation.
 - The economic benefits of assisting with mitigating significant costs to the economy from unmitigated climate change.
 - Contributing to meeting global, European and national targets for carbon dioxide reduction in line with the Climate Change Act 2008.
 - Following a more coordinated approach to the provision of onshore connection infrastructure to reduce cumulative impacts by working with the promoter for the proposed NFOWF, in accordance with [NPS EN-5](#). The land acquisition strategy for the proposed development has been developed to deliver that coordination strategy.
 - To ensure the proposed development's delivery, CA powers are required and the powers sought are proportionate.
- 9.6.22. The examination of applicant's case for the CA powers sought focused on: the justification for those powers and how the case made satisfies the conditions stated

¹² The application for Sea Link was submitted on 27 March 2025 and accepted for examination on 23 April 2025 under file reference EN020026

in s122 of PA2008 and accords with the CA Guidance, having regard to the written and oral cases made by APs.

9.6.23. Issues of particular concern to us at the opening of the examination were the applicant's demonstration of whether:

- "... all reasonable alternatives to compulsory acquisition (including modifications to the scheme) have been explored ..." (paragraph 8 in the CA Guidance).
- The conditions stated in s122 of PA2008 would be met, having particular regard to the intention for some of the land subject to the CA proposals would facilitate the construction of both the proposed FEOF and the proposed NFOF.

PURSUING ALL REASONABLE ALTERNATIVES TO CA

General considerations

9.6.24. Paragraphs 1.7 and 1.8 in the applicant's Schedule of Negotiations [[APP-027](#)] summarised the process the applicant was pursuing in seeking to conclude voluntary agreements with affected landowners and occupiers. The first stage being to agree heads of terms (HoTs). Once agreed, sets of HoTs would be used to formulate option agreements, in which the principles for terms would be agreed, albeit those terms would not become legally binding until a contract had been exchanged with individual landowners or occupiers.

9.6.25. That approach would be consistent with paragraph 24 of the CA Guidance, which states:

"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. Where proposals would entail the compulsory acquisition of many separate plots of land (such as for long, linear schemes) it may not always be practicable to acquire by agreement each plot of land. Where this is the case it is reasonable to include provision authorising compulsory acquisition covering all the land required at the outset."

9.6.26. However, at the examination's opening we were concerned that prior to the application's submission there appeared to have been little impetus behind negotiating voluntary agreements with affected landowners or occupiers. In that regard there appeared to have been something of a hiatus following discussions being held with landowners and occupiers between April and June 2023 and the application's submission on 25 March 2024. We say that because Table 2 in [[APP-027](#)] records at the application's submission negotiations with respect to agreeing HoTs were either ongoing or had not been commenced, with no signed option agreements or HoTs having been agreed with any party. That gave the impression that the applicant had not been exploring all reasonable alternatives to CA through, for example, acquiring land by negotiation wherever practicable, as encouraged in paragraphs 8 and 25 of the CA Guidance, notwithstanding the fact that the applicant began engaging with affected parties in April 2021 [paragraph 6.1.19 in [REP8A-038](#)].

9.6.27. Importantly, within paragraph 25 of the CA Guidance it is stated:

"... 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. Where proposals would entail the compulsory acquisition of many

separate plots of land (such as for long, linear schemes) it may not always be practicable to acquire by agreement each plot of land. Where this is the case it is reasonable to include provision authorising compulsory acquisition covering all the land required at the outset.”

- 9.6.28. Paragraph 45 of the CA Guidance cross refers to what is now the Ministry of Housing, Communities and Local Government’s [Guidance on the Compulsory Purchase Process](#) (January 2025)¹³. Paragraph 2.8 of that guidance states:

“Compulsory purchase is intended as a last resort to secure the assembly of all the land needed for the implementation of projects. However, an acquiring authority does not need to wait for negotiations with affected parties to break down or for the affected parties to begin to engage with them before starting the compulsory purchase process in parallel with negotiations. Delaying the start of the compulsory purchase process can result in valuable time in progressing a project being lost. Therefore, depending on when the land and/or rights are required, it may often be sensible, given the amount of time required to complete the compulsory purchase process, for the acquiring authority to:

- *plan a compulsory purchase timetable as a contingency measure*
- *initiate formal procedures”*

- 9.6.29. The guidance cited above advises it is appropriate for the applicant to seek CA powers, not least because the proposed development includes a long linear element. However, that guidance also makes clear CA powers should be used as a last resort and should not necessarily be relied on as the starting point for securing the land required to facilitate a proposed development.

- 9.6.30. A number of APs in their relevant representations expressed concerns about the way the applicant had been conducting negotiations and the general lack of progress that had been made prior to the application’s submission. That lack of any significant progress was confirmed in the first LRT to be submitted [[PD3-002](#)], which indicated instances of there having been a hiatus of around one year between initial draft HoTs being circulated and “populated” HoTs then being made available to APs. In that regard populated sets of HoTs were only circulated after the application had been acceptance for examination.

- 9.6.31. During CAH1 the applicant explained that populated sets of HoTs were circulated in response to members of this project’s land agents group having not been prepared to comment on the content of the draft HoTs of April 2023 without also having sight of a dDCO [paragraph 1.4.1(7) in [REP1-059](#)]. At CAH1 the applicant confirmed 36 sets of HoTs had been issued to APs and of those sets of HoTs nine had been agreed and signed (as of mid-September 2024) [paragraph 1.6.2(3) in [REP1-059](#)].

- 9.6.32. The apparent lack of progress in progressing HoTs and/or negotiating option agreements contributed to the ExA’s decision to hold CAH1 at the very beginning of the examination. Under agenda item 3.5 of CAH1 [[EV2-001](#)] there was a discussion about how negotiations concerning land rights were progressing. During that discussion there was some disagreement voiced amongst the APs’ representatives about how detailed the HoTs should be. Some of the APs representatives were of the view that the generic HoTs which had been circulated by the applicant were

¹³ This guidance has replaced the former Office for the Deputy Prime Minister’s Circular 06/2004 Compulsory Purchase and the Crichel Down Rules

lacking in detail, for example 'Fairley Farms'¹⁴, while others considered that the HoTs were too detailed, with implications for progressing negotiations with the applicant. The agent for Strutt Parker (Farms) Limited and Liana Enterprises Limited contended there were areas of concern in the HoTs that the applicant was unwilling to negotiate about, resulting in those APs being of the view that they could not agree to the HoTs that had been circulated.

- 9.6.33. Fairley Farms also submitted at CAH1 that the applicants for the proposed FEOF and NFOF wanted APs to sign a single set of HoTs applicable to both projects. However, in order to be able to do that and then enter into a voluntary agreement, Fairley Farms considered there was a need for them to have sufficient understanding of how both projects would affect their land [[REP2-095](#)].
- 9.6.34. During CAH1 the applicant submitted it was standard practice to seek to agree a generic set of HoTs with groups of land agents ahead of having one to one meetings with affected landowners, with the potential thereafter to agree bespoke HoTs [paragraph 1.6.4 in [REP1-059](#)]. The applicant further advised in CAH1 it would be prepared to enter into talks with APs individually, an offer which we consider should have been communicated to APs much sooner, given that a fairly small number of landowners involved notwithstanding the length of the OnECC. Had it been clearer to APs that there was an opportunity to seek to negotiate bespoke HoTs, then the need for agenda item 3.5 of CAH1 might have been avoided.
- 9.6.35. At CAH3 Fairley Farms advised that they were close to concluding agreements with the applicant, with them being incentivised by the applicant to conclude their agreements by examination deadline 6 (11 February 2025). However, Fairley Farms submitted that trying to reach agreement on a tripartite basis with the applicant and NFOF's applicant was difficult because the two projects were pursuing different schemes in the vicinity of Normans Farm. During CAH3 for Henry Fairley and Son Limited it was submitted that under the tripartite approach favoured by the applicant and NFOF, in the event of APs reaching agreement with the applicant they would be precluded from participating in the examination for the NFOF's application [[EV11-005](#)]. As an action arising from CAH3, the applicant confirmed it had written to landowners' representatives clarifying that the wording of the HoTs would not preclude landowners from participating in the examinations [item 2, page 10 in [REP6-046](#)].
- 9.6.36. The applicant has rejected the proposition raised by a number of APs in their relevant representations that there had been insufficient engagement with affected landowners and that HoTs were issued at a late stage [paragraph 6.1.19 in [REP8A-038](#)]. However, we do not share the applicant's view, not least because a lot of the affected land is owned by a relatively small number of landowners. A lack of clarity as to whether APs agreeing HoTs would affect their ability to participate in the examinations for both the proposed FEOF and NFOF appeared not to be assisting negotiations and was only resolved at a late stage in the former's examination. Notwithstanding the limited progress with negotiations prior to the examination's opening, marked progress with agreeing HoTs and negotiating option agreements was made during the examination. By the examination's close 25 sets of HoTs had been agreed [paragraph 6.1.18 in [REP8A-038](#)].

¹⁴ T and R Fairley Farming Partnerships, T Fairley and Sons Limited and Robert Fairley Limited

- 9.6.37. We consider the applicant failed to make the most of the pre-application phase to engage with landowners and occupiers of the land affected by the proposed development in order to negotiate voluntary agreements. Accordingly, we consider at the time of the application's submission there was a limited demonstration of the applicant complying with paragraph 25 of the CA Guidance, insofar as it was not clear that attempts to acquire the required land by agreement had or would fail. However, during the examination, progress was made to reach voluntary agreements with various APs and we therefore consider that lends support to the view expressed by many of the APs that the applicant had failed to direct sufficient effort to negotiating agreements prior to the application's submission. More effective negotiations took place at a time that was less than ideal (during the examination) and has potentially led to less reliance needing to be placed on the CA powers being sought than might have been the case when the application was originally submitted.
- 9.6.38. It should be recognised that in any event, as explained by the applicant in response to representations made by Cobra Mist Limited at CAH3 [around one hour into [EV11-003](#)], that the inclusion of CA powers in any made DCO would be unavoidable. That is because the undertaker might need to rely on CA powers in the event of any concluded voluntary agreements being breached or to address any issues that arise with insolvency or probate while the proposed development was being implemented.

Meeting the conditions of s122 of PA2008

Sharing of proposed works with the proposed NFOWF – general considerations

- 9.6.39. Some of the proposed works would be exclusively for the proposed FEOWF, for example the installation of two circuits of buried cables (Work Nos 5 to 12, 14 and 15A(g)) and an OnSS (Work No 15B). However, some of the other works would facilitate the construction and/or operation of the proposed NFOWF, for example ducting for two additional circuits (Work Nos 5A to 12A, 14A and 15E). In other instances, particularly within the proposed OnSS zone, works included in the application would be shared by both of the proposed offshore wind farms, for example land re-profiling and ground works (Work No 15A(a)) and landscaping works (Work No 15C).
- 9.6.40. Although consent is being sought for all of the above-mentioned works, not all of the land identified for the CA of either freeholds or rights would of themselves be required to construct and operate the proposed FEOWF (the principal development). In response to our questioning of the applicant at CAH1, it advised it considered that works required for either the proposed FEOWF or the NFOWF would be associated development (development that can be consented under s115(1)(b) of PA2008 [[REP1-059](#)]). Given that, the applicant submitted what it was proposing accorded with the AD Guidance, most particularly paragraph 5(iv) which states:

“Associated development should be proportionate to the nature and scale of the principal development. However, 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 (footnote 3). When deciding whether it is appropriate for infrastructure which is on a larger scale than is necessary to serve a project to be treated as associated development, each application will have to be assessed on its own merits. For example, the Secretary of State will have regard to all relevant

matters including whether a future application is proposed to be made by the same or related developer as the current application, the degree of physical proximity of the proposed application to the current application, and the time period in which a future application is proposed to be submitted.”

Footnote 3 states:

“For example, in the case of an application for an offshore generating station, the Secretary of State 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. Applications that include elements designed for the basis of overcapacity would be expected to demonstrate the need for the overcapacity as well as fully assessing the environmental effects.”

- 9.6.41. The CA Guidance is clearly supportive of applications for offshore generating stations being brought forward with associated infrastructure, such as a network connection, of a scale larger than would be necessary to serve the principal development, if that extra infrastructure would be likely to be utilised by another major project. For the purposes of paragraph 5(iv) of the AD Guidance, associated development can be of a quantum that in other instances might be considered to be disproportionate. In this instance consent for works for another project, the proposed NFOWF, is being sought via an extant application (EN010119) and many of NFOWF's onshore elements would immediately adjoin what would be associated development (for example the OnECC and OnSS) required for the proposed FEOWF.
- 9.6.42. In section 3.1 of [\[REP4-037\]](#) the applicant has cited East Anglia One and Norfolk Vanguard as examples of one offshore wind farm project being granted powers in their made DCOs to install ducting for other projects.
- 9.6.43. Having regard to the precedents in made DCOs for some offshore wind farms to have included powers to install onshore ducting for other wind farms and the provisions of the AD Guidance, we are content that some of the works intended to facilitate the construction and operation of the proposed NFOWF should be treated as constituting associated development. In that regard we, like the applicant and some of the APs, consider there would be clear benefits in ducting being installed concurrently in the OnECC for both the proposed FEOWF and NFOWF, to speed up the installation process and reduce disruption to farming, residents and travelling members of the public. In that regard the applicant has explained in the SoR [paragraph 3.17 in [\[REP7-015\]](#) and its post CAH1 submissions [paragraph 1.2.1(14) in [\[REP1-059\]](#) that the concurrent installation of two sets of cable ducts would:
- enable the sharing of haul roads and temporary construction compounds (TCC), respectively reducing their lengths and numbers
 - require fewer accesses from the public highway to TCCs
 - need fewer crossings of the public highway
- 9.6.44. We are therefore content that the OnECC works included in the application intended for the proposed FEOWF and NFOWF would amount to associated development that can be consented under s115 of PA2008. There is clear policy support for coordination of transmission works, such as the OnECC proposals, in both NPS EN-5 and the AD Guidance (paragraph 5(iv) and footnote 3). Accordingly, having regard to the conditions contained in s122 of PA2008 and the provisions of the CA Guidance, we consider it would be in the public interest for the CA powers that

could facilitate the installation of cable ducting for both the proposed FEOWF and NFOWF to be included in any made DCO for the proposed development.

- 9.6.45. However, consideration needs to be given to whether the seeking of freehold CA powers for the entirety of the site for the proposed NFOWF OnSS would be necessary, proportionate and thus not amount to ‘over acquisition’. We have some reservations as to whether the undertaking of enabling works for the proposed NFOWF’s OnSS, as proposed associated development, would “... *be proportionate to the nature and scale of the principal development* ...” (paragraph 5(iv) of the AD Guidance). Whether the CA powers sought relating to the OnSS for the proposed NFOWF would meet the conditions stated in s122 of PA2008 is a matter we consider below in considering specific objections made by APs relating to the proposed OnSS zone.

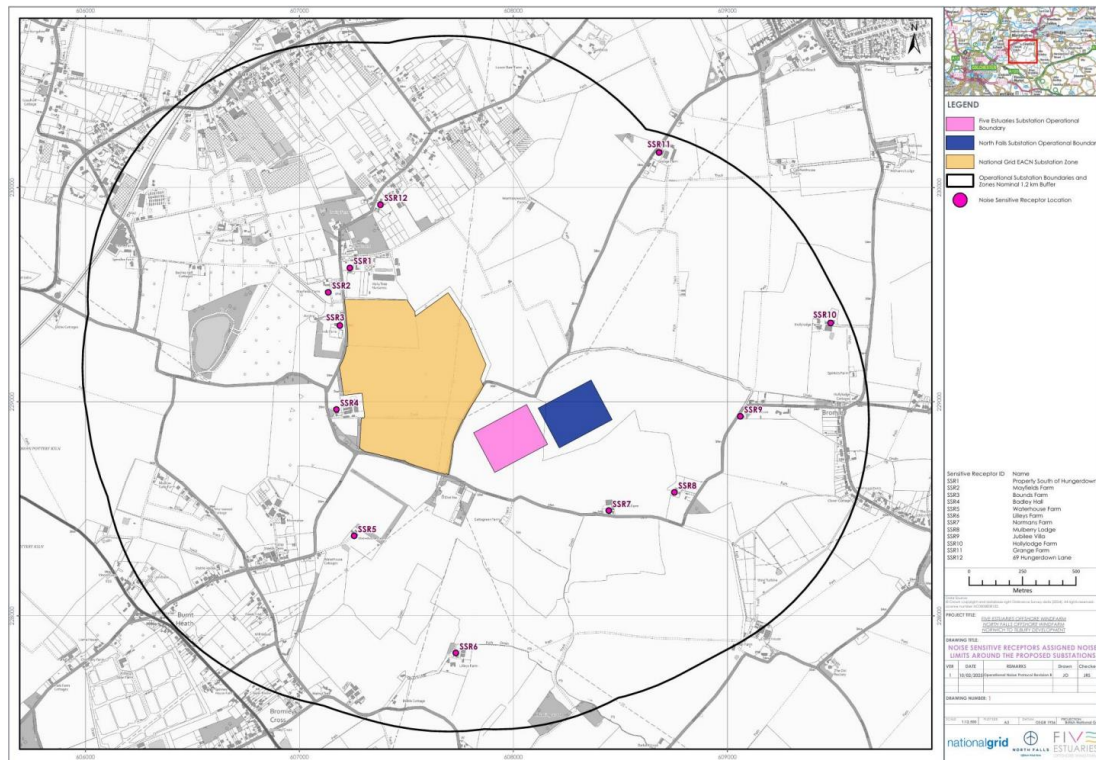
CA of rights for the purposes of making a connection with the proposed EACN

- 9.6.46. We have concerns about the rights acquisition powers being sought over the entirety of the proposed and immediately adjoining EACN substation site. That is because the rights being sought would relate to an area of approximately 41ha (Plots 17-027 to 17-031, 18-001 and 18-002¹⁵) and would only be needed to facilitate a connection being made between the proposed substations for the FEOWF and the EACN under proposed Work No 16¹⁶. However, the amount of land that would actually be needed to make a physical connection between the proposed substations would be much less than 41ha, otherwise NGET would have insufficient land available to accommodate a substation capable of serving both the proposed FEOWF and NFOWF and potentially the proposed Tarchon interconnector, for which a grid connection agreement has been entered into (see [\[REP4-055\]](#) for further information).
- 9.6.47. No siting details for the proposed EACN substation were available to us during the examination. However, the figure below shows the siting for the proposed OnSS compounds for the FEOWF (pink) and NFOWF (blue) relative to the proposed EACN site (yellow), relative to the noise receptor limit locations for the three projects identified in the joint outline operational noise complaints protocol [\[REP7-080\]](#). When regard is paid to: the likely size of the EACN substation relative to those serving the proposed wind farms; and the proximity of the noise receptor locations to the west of the EACN site, we consider it likely that the EACN substation would be located towards the centre of the yellow shaded EACN site shown in the figure below.

¹⁵ Plots all shown on Sheet 18 of the Land Plans [\[REP7-004\]](#)

¹⁶ The extent of Work Number 16 is shown on Sheet 18 of the Works Plans [\[REP6-005\]](#)

Figure 9.1 Siting relationship between the proposed EACN site and the proposed OnSS for the wind farm projects [REP7-080]



- 9.6.48. During CAH1 the applicant explained it is seeking powers to acquire rights to install and maintain cables and that those rights are being sought in respect of the whole of the proposed EACN substation site because it is not known where the NGET substation would be sited and how any connections would be routed to it. The applicant has further submitted that cable and access corridors would only be taken that aligned with the EACN's final design [paragraphs 1.2.1 16) and 17) in [REP1-059](#)].
- 9.6.49. NGET in responding to ExQ1 LR.1.06 advised it would be highly unlikely that the applicant would need to use powers over the full extent of Plots 17-031, 18-001 and 18-002 [\[REP2-061\]](#). NGET also submitted in that response that it should be possible to put in place a “*mechanism*” to narrow down the extent of the land rights required by the applicant once the EACN substation’s design has been finalised and the point of connection and cable alignment are known, with the parties having neither entered into a contract nor finalised their protective provisions. NGET additionally submitted at Deadline 2 that it is working with the applicants for the FEOWF and the NFOWF to enter into a “*Co-operation Agreement*” in respect of the interactions between the respective projects as well as seeking to agree bespoke protective provisions with the applicant for inclusion in any made DCO for the FEOWF “... to address the overlap of CA Powers in the EACN area to ensure that both NGET’s infrastructure and land rights (required to safely maintain the infrastructure) will have adequate protection.” [\[REP2-060\]](#).
- 9.6.50. Just before the examination’s close the applicant advised in a protective provisions update note [\[REP8A-037\]](#) that following the completion of a confidential agreement a set of protective provisions with NGET had been agreed and included in the dDCO [paragraphs 172 to 183 in Part 14 of Schedule 9 in [REP8A-004](#)]. Those protective provisions appear to generally preclude the proposed development’s undertaker from: acquiring interests in respect of land that NGET would have an

interest in; or undertake works on/in land that NGET would have an interest in without first obtaining NGET's approval, with any such approvals not to be unreasonably withheld or delayed. Under paragraph 177 of those protective provisions the proposed development's undertaker would be able to acquire interests in Plots 17-031, 18-001 and 18-002 in advance of obtaining NGET's approval under circumstances when the design for the proposed EACN substation had not been finalised and there was a need to maintain the construction programme or the TP powers in respect of those plots were about to expire and there was a need to exercise the CA powers.

- 9.6.51. We recognise that because of the proposed FEOWF's dependency on the EACN's substation, the precise siting for the infrastructure needed to link the respective substations cannot be determined at this time. Nevertheless, we consider the extent of the CA powers being sought in respect of the EACN substation site are based on an excessive level of flexibility, even allowing for the current uncertainty about precisely where the EACN substation might be sited. We say that because routing a connection from the proposed FEOWF's OnSS via, for example, the north western part of the EACN substation site (Plots 18-001 and 18-002) or the north eastern or southern parts of that site (Plot 17-031) would appear to be very circuitous and impractical, unless the EACN substation was to be sited in one of its site's corners, rather than more centrally, which seems doubtful to us given the likely size of that substation and the proximity of some noise receptor locations.
- 9.6.52. As the EACN substation would be purpose built and intended to serve the proposed FEOWF, amongst other projects, we consider it very unlikely that the siting of connecting infrastructure would involve the use of Plots 18-001 and 18-002. While NGET and the applicant have agreed that the latter should seek CA powers over the whole of the EACN site [fourth bullet point on page 2 in [REP2-060](#)] we are not persuaded that the entirety of Plot 17-031 or any part of Plots 18-001 or 18-002 should be subject to the CA powers sought by the applicant. As the applicants for the proposed offshore wind farms and NGET are collaborating with one another, seemingly without animosity, with the purpose of coordinating the delivery of their respective projects, we consider there ought to be a way for the applicant and NGET to secure a connection between their respective substations without the former needing acquisition powers for rights across the entirety of the EACN site.
- 9.6.53. It is clear there would be significant dependencies between the proposed FEOWF and the EACN, with the substation for the latter being an entirely new facility, whose general location has determined the siting for the proposed OnSS for the FEOWF. Given what is in effect a symbiotic relationship between these projects, we find it very surprising that both the applicant and NGET are placing reliance on exercising rights acquired compulsorily to facilitate a connection between their respective proposed substations, especially as we have set out earlier in this chapter the CA of land is intended to be a power of last resort.
- 9.6.54. In considering this issue we also consider it of note that the applicant expects the construction of the EACN substation would begin before any works commenced on making a connection between it and the proposed FEOWF's OnSS [paragraph 5.2.1 in [REP2-030](#)]. Given that sequencing we consider it unlikely that NGET would employ a design disregarding where a customer's OnSS would be likely to be sited and require the applicant to follow a tortious route to make connection.
- 9.6.55. Under circumstances where NGET and the applicant are collaborating with one another, we consider alternative mechanisms such as a voluntary agreement, commercial contract, reciprocal protective provisions included in any made DCOs

for the projects or a combination of those mechanisms ought to be capable of ensuring the substations for the proposed development and the proposed EACN could be connected without either project frustrating the construction or operation of the other project's substation. NGET and the applicant have completed an agreement and agreed a set of protective provisions in respect of the proposed FEOWF [\[REP8A-037\]](#). The aforementioned agreement has been concluded on a confidential basis and we therefore do not know what it covers. However, if that concluded agreement does not include an adequate mechanism for the two projects to connect with one another without the applicant potentially needing to rely on acquiring rights from any of the current landowners of the EACN site then that would appear to be a deficiency of the concluded agreement.

- 9.6.56. The agreed protective provisions included in the dDCO [\[REP8A-004\]](#) suggest that the exercising of the CA powers sought in respect of Plots 17-031, 18-001 and 18-002 would be largely constrained by the proposed development's undertaker, in most instances, needing to obtain NGET's prior approval. That would seem to negate the need for the CA powers that are being sought in respect of Plots 17-031, 18-001 and 18-002.
- 9.6.57. It is clear that the applicant would need to have a capability to install and maintain the infrastructure for a connection within in part of the proposed EACN substation site. However, connecting with the EACN substation would not involve using the entirety of the EACN site, as recognised by both the applicant and NGET. Accordingly, we consider it has not been demonstrated by the applicant that it has *"... a clear idea ..."* about how it would make use of all of the land within the EACN site over which it is seeking the CA of rights (paragraph 9 in the CA Guidance). We also consider that the applicant has not demonstrated *"... that land to be acquired is no more than is reasonably required for the purposes of the development."* (paragraph 11(i) of the CA Guidance). That is because the evidence presented during the examination makes plain it would only be necessary to use part of the site for the proposed EACN substation to implement Work No 16 [\[REP6-005\]](#) in making a connection between that substation and the proposed development's OnSS.
- 9.6.58. We are therefore concerned that the authorising rights in respect of the entirety of the EACN site to assist the construction and operation of the FEOWF would be more than what would reasonably be required for the purposes of that development. Accordingly, we are not content that authorising the acquisition of rights in respect of the entirety of Plot 17-031 and any part of Plots 18-001 and 18-002 would accord with the principle that the authorisation of CA should be proportionate (paragraph 8 of the CA Guidance).
- 9.6.59. In addition to considering the purposes for which CA is being sought under s122(2), under s122(3), the SoSESNZ needs to be satisfied that there is a compelling case in the public interest for the land to be acquired compulsorily. As explained in paragraph 13 of the CA Guidance, the SoSESNZ will need to be persuaded that there is compelling evidence that the public benefits arising from the compulsory acquisition would outweigh the private loss that would be suffered by the affected landowners and occupiers of the affected land, with Parliament always being of *"... the view that land should only be taken compulsorily where there is clear evidence that the public benefit will outweigh the private loss"*.
- 9.6.60. For the reasons given above, we are not persuaded that the rights acquisition sought in respect of the entirety of the EACN site would meet the public interest test under S122(3). That is because only some of land encompassed by Plots 17-031,

18-001 and 18-002 would physically be necessary to facilitate a connection between the proposed development's OnSS and the proposed EACN's substation. We would make clear that NGET in submitting any application for its project may be able to demonstrate that with respect to the EACN site there would be public benefits outweighing any private loss warranting the authorisation of CA powers over the whole of the EACN site.

- 9.6.61. In balancing public interest against private loss paragraph 16 of the CA Guidance advises:

“There may be circumstances where the Secretary of State could reasonably justify granting development consent for a project, but decide against including in an order the provisions authorising the compulsory acquisition of the land. For example, this could arise where the Secretary of State is not persuaded that all of the land which the applicant wishes to acquire compulsorily has been shown to be necessary for the purposes of the scheme. Alternatively, the Secretary of State may consider that the scheme itself should be modified in a way that affects the requirement for land which would otherwise be subject to compulsory acquisition. Such scenarios could lead to a decision to remove all or some of the proposed compulsory acquisition provisions from a development consent order.”

- 9.6.62. When applying paragraph 16 of the CA Guidance it is open to the SoSESNZ to reach a decision authorising all, some or none of the CA powers sought when determining an application for a DCO. That is something accepted by the applicant in section 2.2 in [\[REP6-049\]](#), with it being necessary for the SoSESNZ to consider the CA case made by the applicant for each plot.

- 9.6.63. In connection with the provisions of s122 of PA2008 and paragraph 16 of the CA Guidance we sought the applicant's views on the implications of the judgment concerning FCC Environment UK Limited versus Secretary of State for Energy and Climate Change and Covanta Rookery South Limited [2015 EWCA] Civ 55 (the Rookery South case). That being a case which considered the relationship between s104 and s122 of PA2008. The Court of Appeal in its judgment accepted:

“The full and proper application of the section 122(3) test is guaranteed by section 104(6) which disapplies the requirement in section 104(3) where it would lead to unlawfulness under any enactment (i.e. including under a different provision of the 2008 Act) – thus, if there was any potential conflict between sections 104(3) and 122(3), the “compelling public interest” test in section 122(3) would not be overridden by section 104(3).” [paragraph 2.1.9 in [REP4-037](#)]

- 9.6.64. In commenting on the Rookery South case the applicant advised it “... *simply re-iterates the principle that where the NPS establishes an urgent need for development under s104 of the 2008 Act, this does not mean that the “compelling case in the public interest” test in s122 of the 2008 Act is automatically and necessarily met, and that any or all of the compulsory powers sought are therefore automatically justified ...*” [paragraph 2.1.6 in [REP4-037](#)].

- 9.6.65. In paragraph 2.1.7 in [\[REP4-037\]](#) the applicant further stated:

“Compliance with the NPS and the determination under s104 that need is established does in and of itself not pre-determine the outcome of the decision under s122, which must still be separately considered. The conclusion that the need for the development is established and that it complies with government policy under s104 (where it applies) will usually, as has always been the case, form a core

part of the compelling case and is indeed put forward as such in this Application by the Applicant. It does not however mean that s122 does not fall to be determined on its own merits.”

9.6.66. In light of the Rookery South case, it is clear that support for a project under NPSs and passage through s104(3) of PA2008 does not mean proposals for CA will necessarily satisfy the conditions of s122. The Rookery South case also establishes that if the conditions of s122 have not be satisfied the provisions of s104(6) may also not be met because s122 is cable of being treated as “... *any enactment* ...” for the purposes of s104(6). S104(6) of PA2008 is therefore capable of disapplying the requirement in s104(3) where that would lead to unlawfulness under any enactment including different provisions of PA2008 [paragraph 49d in [REP6-050](#)].

9.6.67. Under s104(3) the need for a proposed development may immutably be established, nevertheless when s122 and s104(6) are applied it may be found that the need could be met without all or some of the CA powers sought, as explained in paragraph 16 of the CA Guidance. In the preceding chapters of this recommendation we have found that there is a need for the proposed development when regard is paid to, amongst other things, the policy contained in NPS EN-1, NPS EN-3 and NPS EN-5. However, as explained earlier in this section, we consider the need for the proposed development does not provide a satisfactory justification for the CA of rights being authorised across the entirety of the EACN site.

9.6.68. We are therefore not persuaded that there would be a legitimate purpose for authorising the CA of rights relating to the entirety of the EACN site sufficient to justify interfering with the human rights of the owners and occupiers of Plots 17-031, 18-001 and 18-002. Accordingly, for the reasons given above we consider that:

- Plots 18-001 and 18-002 should be excluded from the acquisition of rights sought by the applicant in the dDCO [[REP8A-004](#)].
- Plot 17-031 should also be excluded in its entirety from the acquisition of the rights sought, unless it can be demonstrated to the SoSESNZ’s satisfaction that there is either no alternative mechanism to the CA of rights for securing a connection between the proposed OnSS and the EACN site or it would currently be impossible to reduce the powers sought within Plot 17-031 to a more proportionate extent.
- We have therefore deleted the references to Plots 17-031, 18-001 and 18-002 in Schedule 7 (Land in which only new rights etc may be acquired) in our rDCO. Should those deletions be accepted by the SoSESNZ the applicant and NGET would need to reconsider the drafting of the protective provisions in favour of the latter included in Part 14 of Schedule 9 of the rDCO.

9.6.69. It should be noted that in considering individual objections made by APs in the next section of this chapter, we assess whether or not the applicant’s land rights proposals are acceptable and identify any instances under which it might be appropriate to exclude plots from the land rights powers sought having regard to the provisions of s122 of PA2008.

9.7. **CONSIDERATION OF INDIVIDUAL AP OBJECTIONS AND ISSUES**

9.7.1. Many of the APs raised similar issues. The perceived lack of engagement on the applicant’s part to obtain land rights by negotiation, including the generic nature of

the proposed HoTs, we have considered above. Other reoccurring areas of concern raised by APs in their written and oral submissions were:

- The width of the OnECC and the potential for a strip of productive farmland land to be left sterile between buried cable easements sought by the FEOF and the NFOF
- The burial depth for the cables within the OnECC
- The reluctance on the part of the applicant to consider alternative routes proposed by APs
- The restrictive nature of covenants sought that could have a detrimental effect on the future use of the farm land affected by the OnECC

9.7.2. In this section we consider the objections made by APs concerning the general width and alignment of the OnECC and the CA and TP powers sought for the proposed OnSS zone. In Appendix D we consider other objections and issues raised by individual APs relating to the proposed CA and TP powers sought by the Applicant and that appendix should be read in combination with the final version of the applicant's LRT [[REP7-062](#)].

WIDTH AND ALIGNMENT OF THE OnECC

9.7.3. Numerous APs raised concerns relating to the width and alignment of the OnECC. With respect to the width of the OnECC, the applicant has advised that its general working width would be 60m for the stretches where the proposed cable ducting would be installed in open trenches. Notwithstanding that CA and TP powers are being sought for an OnECC generally around 90m in width. That is because the precise alignment for the cable circuits remains to be fixed and would be informed by field surveys following the making of any DCO for the proposed development.

9.7.4. It is therefore clear that the width of the OnECC shown on the Onshore Land Plans [[REP7-004](#)] would be wider than necessary to physically accommodate ducting and buried cables for the proposed FEOF and ducting for the proposed NFOF. However, when regard is paid to the need for micro siting to avoid archaeological features and protected species and/or their habitats, we consider it reasonable for the OnECC to be of the proposed width and for CA powers for rights acquisition and TP powers to apply to that land. As explained by the applicant during CAH1 [paragraph 1.2.1(6) in [REP1-059](#)] in practice the TP used to install the cable ducting and/or cables would be unlikely to require the full width of the OnECC shown on the Onshore Land Plans, with the land needed during the construction phase likely to be closer to 60m (for a working corridor) than the maximum of 90m shown on the Onshore Land Plans as routing corridor, as shown in Figure 1 in [[REP2-030](#)].

9.7.5. Following the completion of the OnECC works, should the undertaker find it necessary to use the CA powers sought for rights acquisition because either there was no extant voluntary agreement or any such agreement had been breached or was incapable of being enforced for probate or insolvency reasons, the exercising of the CA powers could apply to one 20m wide easement for FEOF. It should be noted that the proposed NFOF would potentially need CA rights in respect of an easement for its buried cables, albeit that easement would be derived from any CA powers included in any made DCO for that project. The rights acquired in respect of the easements for the FEOF would allow for access to inspect and maintain the buried cables and the imposition of restrictive covenants for the protection of the buried ducts and cables.

9.7.6. For the stretches of the OnECC where trenchless methods for installing the cable ducting would be required, we consider it reasonable that TP and/or CA powers be

available for wider routing corridor, which would be refined to a narrower working corridor once all of the necessary field survey information was available to inform the detailed design for the proposed development.

9.7.7. Accordingly, we consider the CA powers sought for rights acquisition in respect of the proposed OnECC accord with the CA and Guidance and s122 of PA2008. That is because:

- the works would be associated development for the purposes of s115 of PA2008
- the works would be required for the development to which the development consent would relate (s122(2)(a) of PA2008) and the land identified for the CA of rights would be proportionate (paragraph 8 of the CA Guidance)
- there is a compelling case in the public interest for the land to be acquired compulsorily because the benefits of providing works that would facilitate additional electricity generating capacity would outweigh the private loss that would be suffered (s122(3) of PA2008 and paragraph 13 of the CA Guidance)

CA AND TP POWERS SOUGHT IN RESPECT OF THE PROPOSED OnSS ZONE

9.7.8. In this subsection we consider:

- The appropriateness of the land rights powers being sought in respect of the proposed OnSSs for the FEOWF and NFOWF
- The differences in the proposals for the OnSS zone between the proposed FEOWF and the NFOWF and whether the approach being promoted by the latter would be a potential alternative to the applicant's proposals

9.7.9. The proposed OnSSs for the FEOWF and the NFOWF would occupy land to the north of Ardleigh Road and east of Grange Road. To accommodate the construction and/or operation of those OnSSs the applicant is seeking CA and TP powers as indicated with an 'X' in the summary table below (based on entries in the BoR [\[REP7-013\]](#)).

Table 9.1 Plots and land rights powers sought relating to the proposed onshore substations for the Five Estuaries and North Falls Offshore Wind Farms

Plot Number	Area in sq.m	TP with freehold CA	TP with CA of permanent rights	TP only
17-013	61			X
17-014	489			X
17-015	30		X	
17-016	175		X	
17-017	107		X	
17-018	428		X	
17-019	35		X	
17-020	407		X	

Plot Number	Area in sq.m	TP with freehold CA	TP with CA of permanent rights	TP only
17-021	342		X	
17-022	933		X	
17-023	120		X	
17-024	296,247	X		
17-025	182,196	X		
17-026	2,436		X	
17-027	64		X	
17-028	463		X	
17-029	6		X	
17-030	2,838		X	

9.7.10. The proposals relating to the OnSS zone for the most part concern Plots 17-024 (owned by T Fairley and Sons Limited (T Fairley)) and 17-025 (the Executors of the Estate of Mr Charles Tabor (the Executors)) [see Sheet 18 in [REP7-004](#)], for which an extract is shown below. The applicant is seeking to acquire the freeholds for the entirety of Plots 17-024 and 17-025 to enable it to: construct and operate the OnSS for the proposed FEOWF; and undertake some preliminary works facilitating the construction of NFOWF's OnSS.

Figure 9.2 Extract of onshore Land Plan Sheet 18 [REP7-004]



- 9.7.11. In terms of accessing the OnSS zone during the construction phase, the applicant's proposals also include Plots 16-022 and 17-005 to the south of Ardleigh Road and for which TP powers are being sought. We refer to those Plots in greater detail below.

The case made by the Executors

- 9.7.12. The Executors objection to the CA of the freehold for Plot 17-025 is principally stated in [\[REP2-080\]](#) and [\[REP2-081\]](#) and those submissions are supplemented by those submitted by the instructed land agent in [\[REP2-082\]](#). In sections 6 and 7 of [\[REP2-081\]](#) the Executors have submitted:
- There has been inadequate consideration of alternative OnSS locations requiring less land take with reduced impacts for affected landowners
 - The selection of the OnSS has been determined by NGET's EACN proposals, which have not yet been consented as part of the Norwich to Tilbury project
 - No consideration has been given to the provision of a single OnSS serving both of the proposed wind farms
 - The proposed development should be sited on poorer quality land rather than grade 1 agricultural land
 - The scale of land take would disproportionately affect the operation of the Holly Lodge Farm unit
 - It is not legitimate to seek CA when there is uncertainty that both the FEOF and NFOF would receive consents at the same time and there is the additional uncertainty that consent would be granted for the EACN when an application for the Norwich to Tilbury grid scheme remains to be submitted and it would not be legitimate to authorise the CA of land in a DCO for FEOF when the land is only required when the NFOF receives consent
 - The proposed CA of the Executors land for the purposes of the FEOF alone does not meet the legal tests in s122(2)(a) of PA2008, with only a small part of Plot 17-025 being required for that scheme's OnSS and that OnSS could be relocated to avoid Plot 17-025
 - Apart from the actual OnSS, the proposals affecting Plot 17-025 would be required for works such as land reprofiling, fencing, utility connections, drainage works, access, cable ducting, landscaping and the provision of ecological and environmental mitigation
 - Much of what is intended for Plot 17-025 would involve landscaping and environmental mitigation and the CA Guidance (paragraph 15(ii)) indicates *"... that it is incumbent on the promoter to demonstrate that the development could only be landscaped to a satisfactory standard if the land in question were to be compulsorily acquired and that the land to be taken is no more than is reasonably necessary for that purpose and proportionate ..."*
 - Plot 17-025 has in part been identified to provide 10% biodiversity net gain (BNG), albeit the applicant has submitted it proposals for BNG could be located off site and there is therefore no need to CA land for that purpose
 - The applicant has not demonstrated that Plot 17-025 would reasonably be required in whole or part to deliver a satisfactory standard of landscaping and other ancillary works, while land for BNG does not need to be provided on site, the legal test under s122(2)(b) has not been met, with the land take being excessive and beyond what would reasonably be required to deliver the proposed development
 - Contrary to the CA Guidance there is no evidence that the applicant has considered reasonable alternatives to the CA of Plot 17-025, amending the layout for the OnSS to avoid Plot 17-025, promoting a single substation site, pursuing BNG provision off site or using BNG credits, negotiating licences for

the temporary occupation of the land or an agreement to deliver the landscaping scheme for the lifetime of the project

- Despite the perceived benefits of the FEOFWF there is no compelling case in the public interest to support the CA of Plot 17-025 to deliver either the wind farm or works incidental to the proposed development and if the proposed FEOFWF OnSS was to be relocated arguably none of Plot 17-025 would be required for it
- The FEOFWF can be delivered without the CA of Plot 17-025 and the confirmation of its acquisition would breach Article 1 of the First Protocol to the ECHR which requires no person should be deprived of their possessions except in the public interest and the requirements of s122 of PA2008 have not been met
- Plot 17-025 forms part of Holly Lodge Farm and its CA would result in a significant loss of income for the farm unit and its profitability with the farm's fixed costs having to be borne by less land
- Access to the wider farm unit would be affected during both the construction and operational phases

Case made by T Fairley

9.7.13. T Fairley's lands right objection is included in [\[RR-109\]](#), [\[AS-072\]](#), [\[REP2-095\]](#) and [\[REP6-077\]](#) and in summary that objection is:

- The proposed development would remove around 30ha (75 acres) from the farm holding, which would be around 20% of the holding's area and will affect its sustainability and profitability
- The applicant is seeking powers in respect of some land that could still be used by the farm for environmental management or carbon sequestration
- The proposed land take within the OnSS zone would allow environmental mitigation to be provided for both the FEOFWF and the NFOFWF and would be less if only the FEOFWF went ahead, but it is unclear how much would be required if only one of the project's proceeded
- The indicative landscaping designs for the two wind farm projects are different, resulting in different land takes and that lack of coordination is causing confusion, shown in the image on page 2 of [\[REP2-095\]](#)
- The proposals for the NFOFWF do not include a tree belt enclosing the Normans Farm yard or along the Ardleigh Road frontage, whilst those planting measures are being promoted as part of the FEOFWF application, resulting in a greater land take
- It is unclear whether the applicant's environmental mitigation measures within the OnSS zone include land intended to provide BNG and BNG could be provided off site
- To the south of Ardleigh Road Plots 16-022 and 17-005 are intended to be used as a haul road by the applicant. That is an access that is not being proposed by NFOFWF's applicant and accordingly Plots 16-022 and 17-005 should be removed from the application
- Without amendments being made to the proposed screen planting adjoining the Normans Farm farmstead (Normans Farm) it would not be possible to extend the farm's yard and build an additional shed and the preference would be to extend the yard rather than have screen planting to the north and west of the yard [\[REP6-077\]](#)

Submissions made jointly for the Executors and T Fairley

9.7.14. For both T Fairley and the Executors submissions in [\[RR-010\]](#), [\[REP2-082\]](#) and [\[REP2-096\]](#) raise concerns about: how negotiations were progressing with the applicant; the siting of the OnSS; and the commercial implications of land being

taken from each of the farm holdings. The commercial concerns raised would relate to the level of compensation the APs might receive if their land was to be acquired compulsorily and are not for consideration as part of the application's determination pursuant to s106 of PA2008¹⁷.

- 9.7.15. For T Fairley and the Executors it has been submitted in [\[REP3-040\]](#) that the proposed OnSS land take for both FEOWF and NFOWF would be approximately 120 acres (48.5ha) and that if only one of the projects was to proceed the land take would be reduced by around 15 acres (6ha). T Fairley and the Executors both question whether the proposals accord with s122 of PA2008.

Case made by the applicant

- 9.7.16. During CAH1 the applicant advised that the OnSS zone would need to be occupied by both of the wind farm projects to implement their schemes and the impact of the works would be reduced and be technically less challenging if the project beginning the works undertook earthworks for the other project [paragraph 1.2.1(11) and (12) in [REP1-059](#)].

- 9.7.17. With respect to the landscaping for the proposed FEOWF occupying more land than the NFOWF, in CAH1 the applicant submitted those works would be more effective if they were placed at the outer boundary of the Order Land and what is being proposed would be required even if the NFOWF element was not a consideration. The applicant in its post CAH1 submissions stated:

"... Not including the North Falls substation footprint would leave an isolated plot in the middle of the landscaping and drainage provision, which would be of little practical use to the landowner. The Applicant accordingly submits that not only is the wider area required for the development, but the inclusion of the North Falls substation footprint meets the s122 of the PA 2008 test in that it is required to facilitate the Five Estuaries development to level this land as part of the wider area works both practically and to prevent creating drainage and maintenance issues. The guidance is clear that land that is necessary for works to be carried out to make the development acceptable, such as landscaping, may be acquired compulsorily (para 12). The Applicant accordingly submits that these areas are reasonably required and meet the statutory tests and the relevant guidance."
[paragraph 1.2.1(13) in REP1-059]

- 9.7.18. With respect to the appropriateness of one project seeking CA powers for another project the applicant stated in its post CAH1 submissions that:

"... the key question is whether it is appropriate for the Applicant to seek compulsory acquisition powers for another project whilst the two projects are being promoted separately. The Applicant confirmed that the answer to such question is yes provided that the Applicant has not exceeded the scope of the definition of the associated development. The guidance is of very little assistance regarding this question."

"The Applicant summarised the background to section 5 of the 2013 Guidance on the associated development principles. This section came about because of the first East Anglia DCO project. It was recognised that the ability to do advanced works or an option of doing advanced works should be provided in the DCO. It is not

¹⁷ Matters that may be disregarded when deciding applications

accidental that the footnote in section 5 of the 2013 Guidance is an offshore windfarm example.” [paragraphs 1.2.12 and 1.2.13 in REP1-059]

- 9.7.19. Further to our request made at CAH1 that the applicant provide information for the FEOWF as a standalone scheme, the applicant explained providing that information would not be a straightforward exercise because it would “... *involve re-imagining the scheme ...*” [paragraph 1.2.19 in REP1-059]. In responding to CAH1 action point 4¹⁸ [EV2-006] in section 3.1 of [REP2-030] the applicant provided details relating to the width of the OnECC for FEOWF as a standalone project, but no further information was submitted about the onshore land take for FEOWF as a standalone project.
- 9.7.20. Further to our ExQ1 LR.1.04 (acquiring the entirety of Plots 17-024 and 17-025) [PD-011] the applicant replied in [REP2-039]:
- “Freehold acquisition is sought for plots 17-024 and 17-025, which constitute the substation area. This acquisition is essential to facilitate the development and operation of the substation, including fencing, creation of new access, drainage, screening, ecological mitigation and landscaping. These changes will result in a permanent change of land use, transitioning it from its current agricultural purpose.*
- The degree of interference required and the necessity for the Applicant to control the land, including restricting access to authorised personnel only, make it impractical for the current landowner to continue using this land. Therefore, freehold acquisition is both appropriate and justified. As set out in previous responses, the North Falls substation footprint will end up surrounded by mitigation works and isolated from agricultural use. The Applicant considers it would be unreasonable not to acquire it given it will form a stranded site surrounded by landscaping and planting maintained by the Applicant.”*
- 9.7.21. In responding to submissions made by the Executors and T Fairley during CAH2 concerning the land being acquired for BNG purposes, the applicant advised land within the OnSS zone would not be acquired of itself for BNG purposes. Instead land would be acquired for landscaping and ecology enhancement, the provision of which would feed into the calculation of the proposed development’s BNG units [paragraph 2.2.2(c) in [REP3-022]. During CAH3 the applicant further submitted that it would be legitimate for it to acquire land needed for the NFOWF, with that being an NPS requirement [paragraph 2.2.2(d) in REP3-022].
- 9.7.22. Further to the submissions made by T Fairley during CAH2 relating to the need for screen planting enclosing Normans Farm, the applicant submitted that planting would be required to mitigate the proposed OnSS’s landscape and visual impacts [paragraph 2.2.10 in REP3-022]. As an action arising from the holding of CAH2 the applicant submitted details of three alternative screen planting options for Plot 17-024 under discussion with T Fairley [REP4-038].
- 9.7.23. The screen planting proposals adjoining Normans Farm were further considered during our third round of hearings held between 21 and 23 January 2025. Around that time the applicant also held direct discussions with T Fairley resulting in amendments being made to the indicative screen planting immediately adjoining Normans Farm, as shown in the version of the outline Landscape and Ecological Management Plan (oLEMP) submitted at Deadline 6 [REP6-026] (and retained in

¹⁸ “Submit an estimate of the onshore landtake for the proposed Five Estuaries Offshore Wind Farm as a standalone development (ie excluding North Falls from the scheme world)”

the final version of the oLEMP [REP8A-017]). The making of those amendments to the oLEMP did not generally alter the land rights powers being sought, although they do incorporate field accesses immediately adjoining Normans Farm and would leave more room for the future expansion of the farmyard [section 10 in REP7-085]. The applicant in [REP7-085] further submitted that screen planting to the north of Normans Farm was required to mitigate significant effects throughout the proposed development's life because any new building at the farmstead would not be within the applicant's control and could not be relied on to provide screening.

9.7.24. The applicant in responding to T Fairley's Deadline 2 submissions advised that the off line route haul road (the loop road) south of Ardleigh Road was required to avoid an area of lowland meadow habitat [REP3-024]. Further to our asking the applicant at CAH3 whether or not the OnSS could be implemented without the loop road, the applicant in its responses to CAH3 action points advised "... *The Proposed Development would be able to be implemented, and has been assessed using either the additional loop or following the route along the export cable corridor.*" [page 12 in REP6-046].

9.7.25. In response to a question we raised during Issue Specific Hearing 6 concerning the landscaping proposals near Normans Farm, the applicant explained the mitigation planting would serve both the FEOWF's and the NFOWF's OnSS and if the latter's OnSS was not included the outer perimeter planting would still be required to effectively screen the FEOWF's OnSS [paragraph 2.2.2(b) on page 41 in REP6-045].

9.7.26. During CAH3 we requested the applicant submit versions of Sheets 17 and 18 of the Onshore Land Plans [REP7-004] for a scenario under which the proposed development proceeded without any collaboration with the NFOWF. In responding to that request as a post CAH3 action point the applicant responded in [REP6-046] as follows:

"The Applicant cannot produce or submit "without prejudice" land plans. The compulsory powers applied for are intended to facilitate the necessary coordination at the substation site. The footprint of the North Falls substation has been included in the 2.3 Land Plans – Onshore [AS-019] in order to:

- 1. Ensure comprehensive compliance with policy requirements;*
- 2. Facilitate necessary mitigation measures, such as landscaping, drainage, and ecological considerations;*
- 3. Minimise overall impacts and land use through coordinated project development; and*
- 4. Provide realistic and deliverable land take plans."*

Any without prejudice plan submitted would be wholly unrealistic as, even in an entirely uncoordinated scenario, the Applicant is required to have regard to other developments in proximity and cannot design the scheme without any regard to them.

The Applicant proposes to submit to the ExA a more detailed note explaining the rationale for this at Deadline 6A on this topic."

9.7.27. The applicant made further submissions in [REP6A-005] maintaining its position that it would be difficult to reimagine its scheme to disregard the proposed NFOWF stating:

“... In reality, even without taking into consideration the coordination between the projects, it would be unacceptable for Five Estuaries to disregard another NSIP proposal in proximity, as required by the planning process; there must always be a degree of coordination between them. For instance, if Five Estuaries were to design its substation site to infringe on the North Falls substation site, North Falls would rightly object to the resulting land use conflict, as this approach would undermine the cumulative assessment. Therefore, it is not meaningful to imagine a scenario where North Falls does not exist at all.” [paragraph 1.2.1]

“The design of the cable route and substation has been carefully planned, taking into consideration the factual circumstances and reality of North Falls sharing the same grid connection point. Every design iteration has accounted for this - imagining a scenario without North Falls is not as simple as halving the amount of land allocated for the substation site. The design iteration would need to be carried out again in a manner which is not appropriate, given that the premise is entirely unrealistic, and that work would not be compliant with policy or the need to consider cumulative impacts.” [paragraph 1.2.2]

“The siting of the substations and the landscape strategy have been developed to provide visual screening of Five Estuaries and North Falls substations, in accordance with guidance from the relevant National Policy Statements (NPS) (EN-1, EN-3 and EN-5). The NPS documents establish a policy requirement for undertakers of individual projects to collaborate with other major infrastructure projects in close proximity or where there are direct overlaps.” [paragraph 1.2.3]

“Although the projects can be delivered independently, fundamentally they have been developed to facilitate coordination, thus reducing overall impacts and land take. The Land Plans have been designed to support this coordinated approach. Consequently, it is not feasible to divide the Land Plans at this stage and allocate portions to each project separately.” [paragraph 1.2.5]

“The Land Plans – Onshore [REP6-004] outline the necessary land take to deliver the project in a policy-compliant manner, including required mitigation measures such as those for landscaping, drainage and ecological considerations. The Applicant cannot relocate any of these elements into the North Falls footprint when developing an alternative land take plan, as such a plan would be entirely unrealistic and undeliverable ...” [paragraph 1.2.7]

- 9.7.28. In section 1.3 of [REP6A-005] the applicant has submitted that if there was only an OnSS for the proposed FEOWF, the amount of land needed would exceed that currently proposed for the compounded area for the FEOWF's OnSS. That is because there would be a need to regrade the land to tie into the wider landscape, realign ditches and potentially relocate drains. The applicant has submitted that accommodating a OnSS for just the FEOWF would alter the screening planting arrangements, potentially introducing woodland blocks or belts potentially occupying the centre of fields that would fragment or prevent access to the retained fields making them unusable for farming [paragraph 1.4.4 in REP6A-005]. Section 1.6 in [REP6A-005] addresses landownership considerations and, amongst other things, reference is made to pockets of land that could “... *hypothetically (but not realistically) be freed up (part of the proposed North Falls substation and the area immediately east of Barn Lane) would be difficult to return to farming due to its isolated location without immediate access*” (paragraph 1.6.4).

- 9.7.29. In paragraph 2.1.2 of the applicant's post CAH3 legal note on excluding land from compulsory powers [REP6-049], the applicant reiterated its view that the inclusion of preparatory OnSS works for the proposed NFOWF OnSS form part of the associated development for which consent is being sought. In that note the

applicant further states *“The NPSs for energy and electricity networks infrastructure (specifically EN-1 and EN-5) require collaboration and co-ordination between projects to be sought where practicable. Five Estuaries and North Falls have worked together to identify opportunities for collaboration to minimise or control cumulative impacts.”* [paragraph 2.1.5 in REP6-049].

9.7.30. In the opinion of King’s Counsel obtained by the applicant the view is expressed *“... the proposed shared works here are properly to be regarded as associated development, and that development consent can lawfully be granted for such works in any DCO made in respect of the VE scheme”* [paragraph 85 in [REP6-050](#)].

9.7.31. The applicant provides a summary of its land take proposals for the OnSS zone in section to 6.2 of its closing statement [\[REP8A-038\]](#) and states:

“The Land Plans – Onshore [REP7-004] outline the necessary land take to deliver the project in a policy-compliant manner, including required mitigation measures such as those for landscaping, drainage and ecological considerations. As noted in the opinion of King’s Counsel submitted by the Applicant at Deadline 6 [REP6-050] at paragraph 85 “the proposed shared works are properly to be regarded as associated development”, and form a part of this Application. While the land take could theoretically be adjusted in a North Falls free-world, the overall area required, aside from the footprint of the North Falls substation, would not materially decrease” (paragraph 6.2.5)

“The wider area is necessary for the carrying out of the Five Estuaries development as the landscaping is more effectively placed on the outer Order Land. This landscaping forms necessary mitigation to make the authorised development acceptable in planning terms. It is accordingly necessary for and as part of the authorised development. The substation land take is required to deliver a policy compliant development, including the NPS policy requirement to seek to collaborate with North Falls.” (paragraph 6.2.8)

9.7.32. In paragraph 6.2.5 of [\[REP8A-038\]](#) the applicant comments *“... While the land take could theoretically be adjusted in a North Falls free-world, the overall area required, aside from the footprint of the North Falls substation, would not materially decrease”*. The applicant in paragraph 6.2.8 of [\[REP8A-038\]](#) has further stated “

ExA’s consideration of the cases made by the APs and applicant

9.7.33. At the heart of the case made by the applicant with respect to the land rights powers being sought in relation to the OnSS zone is that the works in that zone would constitute associated development for the purposes of PA2008. We agree with the applicant that central to considering the appropriateness of the OnSS zone land rights being sought is whether the undertaking of the proposed works would be associated development for the purposes of s115 of PA2008.

9.7.34. The applicant places heavily reliance on what is stated in the AD Guidance, most particularly paragraph 5(iv) and accompanying footnote 3. That guidance indicates network connection infrastructure of a scale larger than necessary to serve the principal development providing capacity for another project can be considered as being associated development, with individual cases to be assessed on their own merits. In this instance a second generating station, the proposed NFOWF, has reached its application stage and as part of its application consent is being sought for an OnSS immediately adjoining the one for the proposed FEOWF.

- 9.7.35. The AD Guidance provides some general support for works intended for the OnSS for the proposed NFOWF being associated development. However, we consider that guidance should not be looked upon as solely determining whether the land rights powers sought, most particularly the CA of freeholds and rights, would meet the conditions in s122 of PA2008 and accord with the CA Guidance. In that context we are of the view that the applicant has overstated the significance of the policy support for the proposed FEOWF and NFOWF projects coordinating with one another. That is because while both NPS EN-1 and NPS EN-5 are supportive of the coordination of transmission projects neither state such coordination is an absolute requirement. The emphasis of that national policy is that there should be more rather there must be more coordination, with for example it being stated in NPS EN-1 “... *For regions with multiple windfarms or offshore transmission projects it is expected that a more coordinated approach will be delivered*” (paragraph 3.3.71).
- 9.7.36. Paragraph 4.11.7 of NPs EN-1 states:
- “The Planning Act 2008 aims to create a holistic planning regime so that the cumulative effect of different elements of the same project can be considered together. Co-ordinated applications typically bring economic efficiencies and reduced environmental impact. The government therefore envisages that wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application to the Secretary of State or in separate applications submitted in tandem which have been prepared in an integrated way, as outlined in EN-5. This is particularly encouraged to ensure development of more co-ordinated transmission overall.”*
- 9.7.37. For this case, although the submitted application includes both a generating station and related transmission infrastructure, with some of the latter’s works relating to the proposed NFOWF. When it comes to the OnSS zone there are some differences between the applicant’s proposals and those included in the NFOWF’s application, with the application for the proposed NFOWF having been submitted around four months after the application for the FEOWF. Some of those differences are shown in the figures included in the Executors’ submission [\[REP2-081\]](#). That inconsistency suggests the two projects have not been progressed on a fully coordinated basis. That in turn we consider has implications for the proportionately of the land rights being sought in respect of the proposed OnSS zone, particularly some of the Plots owned by T Fairley. Given that background and having regard to firstly what is stated in paragraph 5(iv) of the AD Guidance and secondly the provisions of s122 of PA2008 and the CA guidance, we consider the applicant’s view that the freehold acquisition of the entirety of Plots 17-024 and 17-025 is justified because the proposed scheduled works affecting those plots form part of the development for which development consent is sought is too simplistic.
- 9.7.38. Turning first to the Executors’ contention that powers of acquisition should not be authorised in respect of Plot 17-025 to facilitate works for the proposed NFOWF. We consider it is not unreasonable for the Executors to have raised its concerns about the proposed freehold acquisition of the entirety of Plot 17-025. A significant part of Plot 17-025 would accommodate an OnSS for the proposed NFOWF and the applicant is proposing the undertaker would do groundworks and other preliminary works on behalf of the NFOWF in the event of works associated with the proposed FEOWF commencing first. Importantly it is currently uncertain: that both of the wind farm projects would be constructed (presuming they are each consented); and what the land take would need to be to deliver both of the proposed OnSSs, given the projects’ design proposals for the OnSS zone include differences.

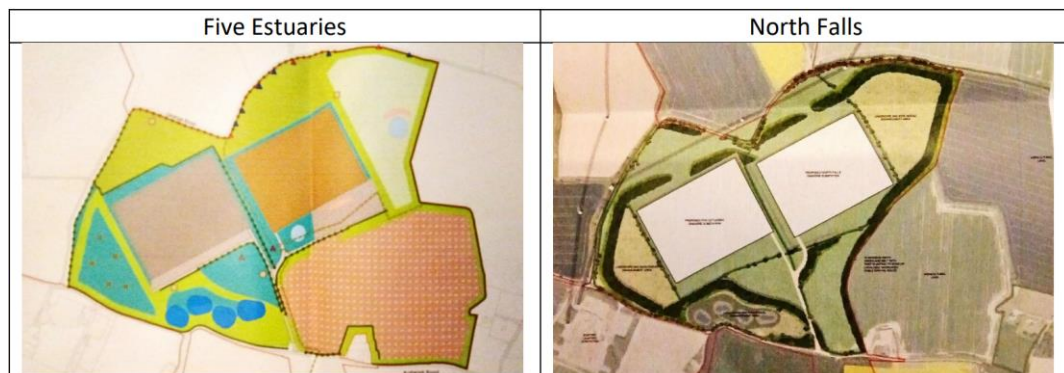
- 9.7.39. However, it should be recognised that the applicants for both the proposed FEOF and the proposed NFOF are seeking powers to acquire the Executor's land. From the figures included by the Executors in [\[REP2-081\]](#) it is evident that land included in FEOF Plot 17-025 would also be needed to accommodate the OnSS for the proposed NFOF. Accordingly, even if some or all of Plot 17-025 was to be excluded from the CA powers being sought by the applicant, presuming a DCO was to be made for the proposed NFOF then the undertaker for that development would be likely to have CA powers available to it to acquire a plot comparable with FEOF Plot 17-025, unless such powers were excluded from any made DCO for the NFOF. Given the dependency both of the proposed offshore wind farms would have on the availability of the proposed EACN's substation to transmit their electricity, we consider it very unlikely that any of the CA powers relating to the OnSS zone would be utilised until any application including the EACN had been consented by the SoSESNZ.
- 9.7.40. There is currently uncertainty surrounding whether the proposed FEOF, the proposed NFOF and the EACN would all receive consents and thereafter which of the projects would be constructed. However, we consider that, on balance, the shared works within the proposed OnSS zone are capable of being treated as associated development for the purposes of PA2008, when regard is paid to the nature of the proposed shared works and the provisions of the AD Guidance. Although it might be unusual for the applicant to be seeking powers for the freehold acquisition of the land for the site for its proposed OnSS, as well as the site for the OnSS intended to serve the proposed NFOF, we consider the principle of that scenario is not unreasonable when regard is paid to s122 of PA2008 and the CA Guidance. That is because should both wind farm projects be consented and then both proceed to construction the taking of land within Plots 17-024 and 17-025 (or the equivalent plot numbers used by the NFOF) would be necessary and the freehold acquisition of at least some of the land within those plots would be unavoidable. We consider it would be of little practical consequence which of the undertakers actually completed the acquisition of the Executor's land. Should only one of the wind farm projects proceed to construction then it would be for its undertaker to use any of the CA powers that had been authorised relating to that project to accommodate its OnSS.
- 9.7.41. Currently there is clearly uncertainty about whether the proposed FEOF, the proposed NFOF and the proposed EACN will all receive consents, with each of those projects being at varying stages in the consenting process. However, if each of the projects receives a consent, then the promoters for each of the proposed wind farms would be in the position to make their respective financial investment decisions (FID), informing the level of coordination that there would be during the construction phase [\[paragraph 3.1.2 in REP8-029\]](#).
- 9.7.42. The proposals for the OnSS zone are being promoted by the applicant and NFOF's applicant collaboratively and importantly the evidence available to us indicates there is no hostility between those projects. Although those promoting the proposed FEOF and NFOF are different legal entities, with the former comprising a consortium of four shareholders and the latter being a 50:50 joint venture, RWE Renewables is a consortium member/partner common to both schemes and is leading the FEOF project [\[paragraph 20 in REP6-050\]](#). Given RWE Renewables' involvement with both projects, we consider it surprising that

inconsistencies between the projects have found their way into the applications that have been submitted for the proposed wind farms.

9.7.43. Notwithstanding the collaboration between the projects, the applications for the FEOWF and the NFOWF include different proposals for the OnSS zone. For example, the screen planting included in the application for the proposed FEOWF, in particular, would occupy appreciably more land than is the case for the proposed NFOWF. We therefore consider that the screen planting proposals for the OnSS zone included in the application for the proposed NFOWF could be an alternative, requiring less CA of land, when compared with the proposals included in the application for the proposed FEOWF.

9.7.44. The figure below (included in [\[REP2-095\]](#)) shows the broad differences in the approach being taken to the designs for the proposed OnSS zone. The most obvious difference concerns the indicative screen planting for the proposed FEOWF to the east of Normans Farm. Consequently, the Order Land and CA and TP powers sought for the proposed FEOWF relate to a larger area than is the case for the proposed NFOWF. With respect to that matter the applicant has submitted that both projects have “... *aligned screening principles* ...” [paragraph 3.2.12 in [\[REP8-029\]](#)]. However, we do not consider that to be the case, given what is shown in the figure below.

Figure 9.3 Comparison between the proposals for the proposed Five Estuaries and North Falls offshore wind farms [REP2-095]



9.7.45. The applicant has justified its proposals for the OnSS zone on the basis that locating screen planting nearer to visual receptors (residents and users of the public highway and public rights of way) is more effective than providing planting in close proximity to the compounded (fenced) areas for each of the proposed OnSSs. The NFOWF’s applicant, by contrast, has adopted that appears to rely on screening located closer to each of the proposed OnSSs, particularly on the eastern side of the proposed OnSS zone. It appears there is a philosophical difference relating to the landscaping advice the respective projects have received. That being the case, given the two projects have been collaborating we would have expected them to have arrived at an agreed position prior to submitting their applications. Instead, there is a lack of clarity bringing into question whether all of the CA powers sought within the vicinity of Normans Farm would be necessary and proportionate.

9.7.46. The projects’ screen planting differences for the most part relate to FEOWF Plot 17-024 (owned by T Fairley) and concern the pink shaded land to the east of Normans Farm encircling the grey shaded land (land excluded from CA and TP) shown on sheet 18 of the Land Plans [\[REP7-004\]](#), an extract from which appears above. Other smaller plots, Plots 17-015, 17-016, 17-017 and 17-018 (owned by

ECC and T Fairley), immediately to the north of Ardleigh Road and also shown on the figure above (shaded blue) and are subject to requests for TP and CA (rights acquisition) powers to assist with providing screening planting to the east of Normans Farm (Work No 15C on the Works Plans [\[REP6-005\]](#) and in Schedule 1 of the dDCO [\[REP8A-004\]](#)).

- 9.7.47. Although the applicant contends its approach to screen planting should be favoured, we consider it has not been demonstrated by the applicant that relying on screen planting only to the west of Normans Farm would be unacceptable. In that regard by the examination's close we had not been advised by the applicant of any concerns having been raised in relation to the alternative approach to screen planting being pursued as part of the proposed NFOWF.
- 9.7.48. We are therefore of the view that the proposed development could be implemented without reliance on the land to the east of Normans Farm, as per the proposals being pursued in connection with the proposed NFOWF. We consider the approach being taken in connection with the proposed NFOWF would be a clear alternative to the applicant's proposals, requiring potentially less land to be authorised for CA in any made DCO for the proposed development.
- 9.7.49. We also consider that any need for screen planting to the east of Normans Farm would be less likely in the event of both the proposed FEOWF and NFOWF being consented but only the former being implemented. Although the applicant contends that the land required for one OnSS would not be much less than that required for both of the proposed OnSSs, we do not consider that proposition to be particularly persuasive. That is because there would be around half as much OnSS zone built development needing to be visually mitigated and there would be no need to design for one OnSS being in close proximity to a second one.
- 9.7.50. We recognise that the proposed screen planting to the east of Normans Farm contributes to the applicant's commitment to achieve 10% BNG, as reported on in [\[REP6-015\]](#). However, the applicant in responding to ExQ2 SLV.2.04 has advised that if 10% BNG could not be achieved within the proposed development's Order Land, then any shortfall would be delivered off site [\[REP4-039\]](#). Given that we consider that if CA powers did not apply to the land to the east of Normans Farm that, of itself, would not be an impediment to achieving 10% BNG.
- 9.7.51. Accordingly, for the purposes of s122(2)(b) of PA2008 we are not persuaded that the part of Plot 17-024 encircling the grey shaded land to the east of Normans Farm, for which powers of freehold CA are being sought, and the CA of permanent rights in respect of Plots 17-015, 17-016, 17-017 and 17-018 would either be required for the proposed development (s122(2)(a) of PA2008) or be required to facilitate or be incidental to the proposed development (s122(2)(b) of PA2008). Given that finding we further consider that in respect of part of Plot 17-024 and the entirety of Plots 17-015, 17-016, 17-017 and 17-018 there would not be a compelling case in the public interest for those plots to be acquired compulsorily under s122(3) of PA2008. With respect to the above mentioned part of Plot 17-024 and the entirety of Plots 17-015, 17-016, 17-017 and 17-018, when regard is paid to the CA Guidance we consider:
- the proposed interference in the rights for those with an interest in those plots would not be legitimate and neither be necessary nor proportionate (paragraph 8)
 - the interference with the human rights of those with an interest in those plots would neither be legitimate nor justified (paragraph 10)

- the development could be landscaped to a satisfactory standard without the acquisition of this land (paragraph 11(ii))
- that for reasons given above the public benefits derived from acquiring this land would not clearly outweigh the private loss (paragraph 13).

9.7.52. Paragraph 16 of the CA Guidance indicates that under some circumstances it is open to the SoSESNZ not to authorise all or some of the CA powers sought and as we have explained above we consider that in respect of the proposed OnSS zone there are reasons why some of the land included in the Order Land should not be authorised for CA.

9.7.53. For the reasons given above we, accordingly, recommend that any made DCO for the proposed development should exclude CA powers in respect of:

- The acquisition of rights relating to the entirety of Plots
- the acquisition of the freehold for the part of Plot 17-024 to the east of the Normans Farm

unless in determining the application for the proposed NFOWF it is concluded that the indicative screen planting proposals relating to that proposed development would be unacceptable.

9.7.54. Accordingly, amendments to that effect have been included in our recommended DCO (rDCO) (Appendix E), with 17-015, 17-016, 17-017 and 17-018 having been deleted from Schedule 7 (Land in which only new rights may be acquired). Excluding part of Plot 17-024 from the CA powers sought would require changes being made to Sheet 18 of the onshore Land Plans [[REP7-004](#)] and the BoR [[REP7-013](#)].

9.7.55. As indicated earlier in this section the applicant is proposing a loop road for the proposed haul road to the south of Ardleigh Road, in the vicinity of Normans Farm to avoid some lowland meadow habitat. The proposed loop road concerns Plots 16-022 and 17-005, for which TP powers are being sought. T Fairley has objected to the inclusion of the loop road on the basis that the land the applicant is seeking to avoid by providing the loop road is not subject to any statutory designations and the habitat could be removed as part of its farming activities. The applicant has advised that the proposed OnSS works could be implemented without relying on the loop road [page 12 in [REP6-046](#)].

9.7.56. As the applicant accepts the proposed development could be constructed without relying on the loop road, we consider granting TP powers in respect of Plots 16-022 and 17-005 cannot be justified and would be unnecessary. We therefore consider that Plots 16-022 and 17-005 should be excluded from the TP powers included in any made DCO for the proposed development. We have therefore deleted those plots from those listed in Schedule 6 (Land of which temporary possession may be taken) in our rDCO (Appendix E).

9.8. SPECIAL LAND CONSIDERATIONS

9.8.1. Section 10 of the SoR [[REP7-015](#)] outlines the applicant's case with respect to the following categories of land which are subject to special considerations:

- Common land
- Open Space
- Crown land
- National Trust land

- Statutory undertakers' land and apparatus

COMMON LAND

- 9.8.2. There are no rights of common over the Order Land [paragraph 10.1.1 in REP7-015]. We are therefore content that with respect to common land the provisions of s131 and 132 of PA2008 are not engaged in this instance.

OPEN SPACE

- 9.8.3. The applicant has submitted that there are three areas of within the Order Land that could be considered as coming within the definition of open space for the purposes of s132 (Commons, open space etc: CA of rights over land) of PA2008 [paragraphs 10.3.1, 10.3.2 and 10.3.5 in REP7-015]. Those areas are:

- Frinton Golf Course (Plots 01-010, 02-002 and 02-003)
- Holland Haven Country Park (Plots 01-001, 01-002, 01-003, 01-004, 01-005, 01-006 (part) and 01-009)
- The foreshore at the transmission between the offshore and onshore works (Plots 01-007, 01-008, 02-001 and 02-001A)

- 9.8.4. With respect to the golf course, the applicant has submitted its land does come within the definition of open space. That is because the golf course is not open for public recreation, with access being restricted to specified groups (for example club members) and thus not being available to members of the public as of right. Although two public rights of way lie within the golf course their existence does not make the surrounding space open space [paragraph 10.3.3 in REP7-015].

- 9.8.5. The proposals affecting Frinton Golf Course and Holland Haven Country Park would involve either trenchless construction methods or the provision of means of access that would operate in parallel with the existing rights of access available to the users of the affected land [paragraph 10.3.4 in REP7-015].

- 9.8.6. With respect to the foreshore area, the applicant has submitted it could be considered as being open space because it is used by the public for recreational purposes. The area within which the proposed works would be situated comprises: a beach accessible to the public; a sea defence wall with walkway above and another path and cycleway between the sea wall and the golf course and country park. When undertaking US11 [\[EV5-001\]](#) and US13 [\[EV5-003\]](#) we observed some walker, runners and cyclists variously using the walkway, path, cycleway and beach. In this area the majority of the works would be underground, although in exercising some of the proposed land rights powers sought public access in the foreshore area might need to be briefly restricted for safety reasons when construction equipment was being mobilised or demobilised [paragraphs 10.3.5 to 10.3.8 in REP7-015].

- 9.8.7. There is a further piece of land falling partially within Plot 01-012 designated as safeguarded open space under the provisions of the adopted Tendring District Local Plan. However, the applicant has submitted that this piece of land is privately owned and is farmed and does not fall within the definition of open space for the purposes of the PA2008. Notwithstanding that it is considered there would be no impact on the public enjoyment of Plot 01-012 because the works in this location would involve trenchless construction methods [paragraph 10.3.11 in REP7-015].

- 9.8.8. S132 of PA2008 applies to the CA of rights relating to open space and makes provision for SPP to be applied when a DCO authorises the CA of rights in respect of open space. However, under s132(3) or (4) SPP would not be required if the

SoSESNZ is satisfied that the open space burdened by the CA of rights authorised by a made DCO would be no less advantageous than it was before for, amongst others, persons in whom the open space is vested and the public.

- 9.8.9. Rights to install cables under open space or land that could be considered to be open space are sought. However, once the construction works had been completed there would be no obstruction or change in the use of the surface and the existing use would continue without alteration. To protect the buried cables covenants are being sought which would, amongst other things, restrict construction, planting of trees over the buried cables and the alteration of ground levels. Those are restrictions that the applicant considers would be consistent with an open space designation.
- 9.8.10. The applicant considers that although there would be some temporary disruption to the open space during the construction works, following the installation of the cables there would be no ongoing impact and the rights sought would not render the affected open space less advantageous than it is at present to its owner or members of the public, engaging the exemption for SPP under s132(3) of PA2008 [paragraph 10.3.18 in [REP7-015](#)].
- 9.8.11. Tendring District Council (TDC) had not made submissions in respect of the open space or potential open space identified by the applicant that would be affected by the proposed development. We note from what is recorded in the final statement of common ground (SoCG) between ECC, TDC and the applicant [[REP8A-027](#)] and the final LRT [[REP7-062](#)] that there have been some discussions between TDC and the applicant relating to the shoreline plots in which the former has a land rights interest. Neither the previously mentioned SoCG nor the LRT include any views from TDC about the CA powers sought by the applicant in respect of the shoreline open space or potential open space, particularly whether what is being proposed would leave it, as an owner of some of this land, or the public using it no less advantaged. It therefore appears that TDC does not disagree with the applicant's s132 PA2008 assessment.
- 9.8.12. The applicant's proposals relating to the shoreline open space or potential open space would largely be below ground and of themselves would not affect the use of that land. During construction works some access to this land may be restricted, however, that would be of a short term nature. We therefore agree with the applicant that for the purposes of s132(3) of PA2008 the shoreline open space, when burdened with the CA of the rights sought, would be no less advantageous than before for its owners and the public. We are therefore content that there would be no need for either the applicant to provide replacement land under the provisions of s132(4) or SPP to be applied under s132(2) of PA2008.

CROWN LAND

- 9.8.13. Although the proposed offshore array areas and cabling would be situated within the seabed/land owned and managed by the Crown Estate no CA is sought in respect of the proposed offshore works. That is because a lease with the Crown Estate covering the proposed array areas has been agreed and a lease relating to the proposed offshore cabling is being negotiated [paragraph 10.2.1 in [REP7-015](#)]. No freehold Crown interests have been identified relating to either the proposed OnECC or the intertidal or foreshore areas.
- 9.8.14. In relation to the proposed LBBG compensation site at Orford Ness the applicant has submitted rights are held by the Crown Estate in respect of Plots 19-001, 19-

002, 19-003 and 20-003, as shown on the Onshore Land Plans [REP7-004] and the Onshore Crown Land Plans [REP7-007]. However, with respect to Plot 19-001 the applicant advised at the examination's close it had been conveyed from the SoS Defence to the National Trust (NT) in March 1993 [AS-075]. The implications of that we consider below.

- 9.8.15. The applicant is not seeking CA rights over any Crown interests in the Orford Ness plots and will approach the rights holders to seek their consent to the rights being sought. Instead, the applicant is approaching the rights holders to seek their consent to create new rights to access, manage and maintain the land to provide compensatory habitat. Those proposals would not prejudice any Crown rights. The applicant has stated that *"Consent of the Crown to this approach under section 135 of the Planning Act 2008 is being sought."* [paragraph 10.2.3 in REP7-015].
- 9.8.16. In [PD-035] we asked the Crown Estate to confirm whether under section 135(2) of PA2008 it did or did not consent to any rights affecting the Crown Estate being included in any DCO for the proposed development that may be made by SoSESNZ. The Crown Estate advised:
- "There is no land in the Crown Land section of the Applicant's Book of Reference that is owned by The Crown Estate, and the applicant hasn't approached The Crown Estate to obtain consent under S135(2) of the Planning Act 2008. Therefore, The Crown Estate cannot provide consent under S135(2) of the Planning Act 2008."* [REP8A-056]
- 9.8.17. Given what the applicant has stated in paragraph 10.2.3 of the SoR [REP7-015] and the Crown Estate's comments in [REP8A-056], we consider there is a lack of clarity about whether the Crown Estate's consent is required under s135 of PA2008 and whether the applicant has sought any such consent. We consider the SoSESNZ needs to be advised by the applicant and the Crown Estate about whether consent is or not required from the later in relation to Plots 19-002, 19-003 and 20-003 prior to any DCO that might be made that would affect those plots.

NATIONAL TRUST LAND

- 9.8.18. In section 10.4 of the SoR [REP7-015] the applicant:
- Identifies some of the Order Land belonging to the NT at Orford Ness (Plots 19-004, 19-005, 19-006, 19-007 and 20-001) that it is proposing to use in connection with providing the proposed LBBG compensatory habitat.
 - Advised that with respect to those previously mentioned plots it would not be seeking CA powers either for the acquisition of freeholds or rights and it would instead seek the NT's consent to use those plots under a voluntary agreement.
- 9.8.19. The NT has submitted that its land at Orford Ness is inalienably held, pursuant to s21 of the National Trust Act 1907 [RR-080, REP7-101 and REP8-049]. Under s130 of PA2008 a DCO including the CA of land held inalienably by the NT is subject to SPP if the NT makes representation objecting to CA of that land and the objection is not withdrawn by the examination's close.
- 9.8.20. During the examination the applicant revised its proposals for the LBBG compensatory habitat at Orford Ness and, amongst other things, made amendments to the Onshore Land Plans [REP7-004] and BoR [REP7-013] to exclude land held inalienably by the NT from the CA powers originally sought. However, the NT submitted in [REP8-049] that a plot, Plot 19-001, was owned by it and was inalienably held. Notwithstanding that, the final versions of the Onshore

Land Plans [REP7-004] and the BoR [REP7-013] identified Plot 19-001 as land for which the CA of rights was being sought. Plot 19-001 relates to one of two jetties at Orford Ness and the NT contends that the other jetty could be relied on by the applicant [REP8-049], a jetty over which the applicant is also seeking to CA rights from another AP.

- 9.8.21. Responding to the NT's submissions in [REP8-049], the applicant advised the final versions of the Onshore Land Plans and the BoR accurately recorded the freehold ownership for Plot 19-001, albeit further information was being sought from the NT [REP8A-039]. On the day of the examination's close in [AS-075] the applicant submitted, having made further enquiries, it agreed with the NT that Plot 19-001 had been conveyed to the NT in March 1993. Accordingly, the applicant went onto submit in [AS-075] that it was no longer seeking CA powers for Plot 19-001 and would be willing to amend the Onshore Land Plans and the BoR at the earliest opportunity.
- 9.8.22. The timing of the submission of [AS-075] meant that we were unable to make a request for the submission of amended versions of the Onshore Land Plans and the BoR prior to the examination's close. There was also no opportunity for the NT comment on the applicant's withdrawal of its request for CA powers concerning Plot 19-001. At the examination's close there therefore remained an extant objection from the NT, albeit the applicant had advised it was longer seeking CA powers in respect of Plot 19-001.
- 9.8.23. To resolve the status of Plot 19-001 we recommend the SoSESNZ requests the applicant submits amended versions of the Onshore Land Plans [REP7-004] and the BoR [REP7-013] confirming the exclusion of Plot 19-001 from the CA powers being sought. Following the receipt of those revised documents we consider the SoSESNZ should request the NT to clarify whether it wishes to maintain its objection to the CA powers being sought or withdraw that objection. Obtaining the NT's clarification would enable the SoSESNZ to determine whether the SPP would be engaged under s130 of PA2008 should the SoSESNZ be minded to make a DCO.
- 9.8.24. Presuming that the Onshore Land Plans and BoR are revised through the removal of Plot 19-001 from the CA powers being sought, then no land inalienably held by the NT would be affected by the CA powers being sought by the applicant. That would mean that the SPP would not be engaged under s103 of PA2008.

STATUTORY UNDERTAKERS LAND AND APPARATUS

- 9.8.25. In section 10.5 of the SoR [REP7-015] the applicant explains:
- Powers are being sought that would authorise the CA of statutory undertaker's rights in land, in respect of land held by those undertakers for the purposes of undertaking their statutory undertakings.
 - s138 of PA2008 provides that a DCO can include provisions for the extinguishment of rights or the removal of apparatus only if the SoSESNZ is satisfied that would be necessary for the purposes of carrying out the proposed development.
 - Statutory undertakers or utility providers that may have land or apparatus belonging to them within the Order Land have been identified and discussions have been held with those parties about the acquisition of land and rights. The status of those discussions at the time of the application's submission was set out in the Statutory Undertakers Position Statement [APP-028].

- The dDCO [REP8A-004] includes draft protective provisions in respect of statutory undertakers and other undertakers which are under negotiation.

9.8.26. With respect to the applicant's seeking of CA powers pursuant to s127 (Statutory undertakers' land) and s138 (Extinguishment of rights, and removal of apparatus, of statutory undertakers) of PA2008, none of the affected statutory undertakers or other undertakers/utility providers have objected in principle to their land or apparatus being made the subject of the powers sought. Instead, the concerns raised by those APs relate to the detailed drafting of the protective provisions intended to be in their favour. Accordingly, we consider it more appropriate for us to report on the areas of disagreement relating to the proposed protective provisions and make recommendations concerning them in Chapter 10 of this recommendation, where we consider the dDCO in detail and make recommendations concerning it.

9.9. EXA'S CONCLUSIONS ON LAND RIGHTS

CONSIDERATIONS UNDER S122 AND S123 OF PA2008 AND THE CA GUIDANCE

- 9.9.1. S122 and s123 of PA2008 sets out the conditions under which CA may be authorised. The conditions of s123, most particularly subsection (2) of PA2008 have been satisfied because the applicant has requested CA powers be authorised as part of its application.
- 9.9.2. Although the proposed Order Land covers a large area of land, including land that would also facilitate the undertaking of works for the proposed NFOWF (a project subject to its own application), we consider the powers included in the rDCO would ultimately limit the applicant to no more than land than would be needed to construct and operate the proposed development. For example, in relation to the proposed OnECC the applicant has identified a maximum corridor within which any authorised CA powers could be exercised. That maximum corridor, following the undertaking of surveys and detailed design work, would be reduced in extent to establish a working corridor for the construction phase and the working corridor would be subject to TP.
- 9.9.3. Thereafter, if voluntary agreements with landowners had not been entered into or were incapable of being relied on, the CA powers sought would be available to the undertaker for the proposed FEOWF to put in place an easement, generally 20m in width for maintaining and protecting (via restrictive covenants) the installed OnECC infrastructure. The SoSES NZ has accepted this approach in other made DCOs, including circumstances when powers have been sought for one project to undertake works for a second project.
- 9.9.4. Accordingly, with respect to the proposed OnECC we are content that the applicant has demonstrated that the Order Land subject to the CA powers sought would be required for the proposed development and there is a compelling case in the public interest for the land to be acquired compulsorily because it would assist with the provision of additional electricity generation capacity. We therefore consider that CA powers sought in respect of the proposed OnECC accord with s122(2) and (3) of PA2008 and the relevant parts of the CA Guidance.
- 9.9.5. However, in respect of the proposed shared OnSS zone, in considering the objections made by T Fairley above, we are concerned that the powers being sought would exceed what would be required for the development to which the development consent relates. That is because different indicative screen planting schemes for the OnSS zone have been included in the applications for the

proposed FEOF and the proposed NFOF, even though these projects are promoted on a coordinated basis. The difference in screen planting proposals has resulted in the applicant seeking more extensive CA powers than the applicant for the proposed NFOF.

- 9.9.6. We consider the screen planting proposals for the OnSS zone being promoted in respect of the proposed NFOF are capable of being considered as a reasonable alternative to the applicant's proposals. Given that we consider for the purposes of s122 of the PA2008 authorising freehold acquisition for part of Plot 17-024 and rights acquisition for the entirety of Plots 17-015, 17-016, 17-017 and 17-018 would not be for a legitimate purpose and would be unnecessary and disproportionate to implement the proposed development (paragraph 8 of the CA Guidance). Accordingly, when regard is paid to the provisions of s122(3) of PA2008 we consider that in relation to part of Plot 17-024 and the entirety of Plots 17-015, 17-016, 17-017 and 17-018 the public benefits associated with the proposed development would not outweigh the private loss and that CA powers in respect of those parts of the Order Land should not be authorised in any made DCO. In reaching that finding and for the avoidance of doubt we are not suggesting that part of Plot 17-024 and the entirety of Plots 17-015, 17-016, 17-017 and 17-018 should be excluded from the Order Land, but rather that land should be excluded from any CA powers that might be authorised by the SoSESNZ. That would not preclude the use of that land for screen planting in the event of a voluntary agreement being entered into between the owner and the applicant.
- 9.9.7. With respect to the applicant's proposed acquisition of the entirety of Plot 17-025 (land owned by the Executors), which it is intended would accommodate: a very small part of the OnSS for the proposed FEOF; ultimately all of the OnSS for the proposed NFOF; and screen planting for both of the proposed OnSSs, we consider that the freehold CA powers being sought by the applicant would not be inappropriate under the particular circumstances of this case. That is because even if the CA powers the applicant is seeking in respect of Plot 17-025 were to be excluded from any made DCO for the proposed development, similar CA powers would be likely to be available to the proposed NFOF's undertaker in the event of a DCO being made for that development.
- 9.9.8. With the exception of some of the CA powers sought in respect of the proposed OnSS zone referred to above, we are content that the applicant has explored reasonable alternatives to the CA powers sought. In that regard during the examination significant progress was made in relation to HoTs being agreed between a number of the OnECC landowners and the applicant, as a precursor to the conclusion of voluntary agreements. Notwithstanding the progress made to agree HoTs by the examination's close no AP objections had been withdrawn. The objections raised do not persuade us from concluding that there are no alternatives to the CA powers sought which would be preferable.
- 9.9.9. In section 9.6 above we have considered whether the applicant's seeking of CA of rights for the entirety of the proposed EACN substation site would meet the conditions stated in s122 of PA2008. We have found that the proposed rights acquisition powers sought in respect of the entirety of Plots 17-031, 18-001 and 18-002 would far exceed what would be required to connect the proposed development with the proposed EACN and would therefore not meet the conditions of s122 of PA2008. In that context we consider that the applicant and NGET ought to be able to find a way of securing a connection between their respective substations without the applicant needing to resort to the CA powers it is seeking.

We therefore consider Plots 17-031, 18-001 and 18-002 should be excluded from the CA powers authorised in any made DCO for the proposed development.

- 9.9.10. Other than in respect of our concerns relating to the proposals for part of the OnSS zone and the adjoining proposed EACN substation site, we consider the applicant has demonstrated it has a clear idea (paragraph 9 in the CA Guidance) about how it intends to use the land for which CA powers are being sought and would have the necessary funding for CA and implementing the proposed development.
- 9.9.11. Subject to the exclusion of part of Plot 17-024 and the entirety of Plots 17-015, 17-016, 17-017 17-018, 17-031, 18-001 and 18-002 from any CA powers authorised in any made DCO for the proposed development, for the purposes of s122(3) of PA2008 and having regard to the objections made by APs, we are satisfied and recommend to the SoSESNZ that there is a compelling case in the public interest for land to be acquired compulsorily. That is because we consider the public benefits associated with the proposed development, most particularly the capacity to generate additional electricity from a renewable source, would outweigh the private loss that would be suffered by those whose land would be acquired (paragraph 13 in the CA Guidance).

STATUTORY UNDERTAKERS, OTHER UNDERTAKERS AND UTILITY PROVIDERS

- 9.9.12. Our consideration of and conclusions relating to protective provisions for statutory undertakers, other undertakers and utility providers are set out in Chapter 10 of this recommendation.
- 9.9.13. S127 and s138 of PA2008 are variously engaged by the applicant's proposals. We are content that with the inclusion of appropriate protective provisions in any made DCO for the proposed development the powers sought under s127 and s138 of PA2008 would not cause serious detriment to the carrying out of the undertakings or the provision of utilities.

COMMON LAND AND OPEN SPACE

- 9.9.14. No registered common land would be affected by the proposed development.
- 9.9.15. With respect to open space the CA of some rights is being sought in respect of the transition between the proposed offshore and onshore works. While there would be some disruption for users of the shoreline open space that would be of a temporary nature and would concern access to the affected area. We therefore consider that the shoreline open space, when burdened with the CA of the rights sought, would be no less advantageous than before for its owners and members of the public. We are therefore content that there would be no need for either the applicant to provide replacement land under the provisions of s132(4) or SPP to be applied under s132(2) of PA2008.

CROWN LAND

- 9.9.16. At the examination's close there was a lack of clarity as to whether the Crown Estate's consent is required under s135 of PA2008 with respect to some of the land at Orford Ness for which land rights powers are being sought to provide compensatory habitat for LBBG. In that regard the applicant has submitted in the final version of the SoR [\[REP7-015\]](#) that it was seeking the Crown Estate's consent, while the Crown Estate in [\[REP8A-056\]](#) advised that no land owned by it was affected by the proposed development.

- 9.9.17. Given the uncertainty relating to this matter and the provisions of s135 of PA2008 we consider the SoSESNZ needs confirmation from the applicant and the Crown Estate as to whether consent is or not required from the Crown Estate in relation to the applicant's proposals for new rights acquisition in respect of Plots 19-001, 19-002, 19-003 and 20-003 prior to any DCO that might be made which affects those land plots.

NATIONAL TRUST

- 9.9.18. During the examination the applicant sought to remove all of the land inalienably held by the NT from the CA powers it was seeking in connection with providing compensatory habitat for LBBG at Orford Ness. Notwithstanding that, literally at the examination's close, the applicant advised that for Plot 19-001 it agreed with the NT that it had been conveyed to the NT in 1993. Accordingly, the applicant advised it was no longer seeking CA powers for Plot 19-001 [\[AS-075\]](#). Under the provisions of s130 of PA2008 SPP applies to land inalienably held by the NT when CA powers are being sought for inclusion in a made DCO.
- 9.9.19. In [\[AS-075\]](#) the applicant advised that it was willing to submit amended versions of the Onshore Land Plans and the BoR excluding Plot 19-001 from any CA powers being sought. It was not possible for us to request and receive amended versions of the Onshore Land Plans and the BoR before the examination's close and the NT's objection therefore remains extant. We consider this matter is capable of being resolved through the SoSESNZ's receipt of amended versions of Sheet 19 in the Onshore Land Plans and the BoR and then obtaining clarification from the NT as to whether it wishes to maintain or withdraw its objection, having regard to the changes to the plans and the BoR that would have been made.
- 9.9.20. Presuming that the Onshore Land Plans and BoR are revised so that Plot 19-001 is excluded from the CA powers being sought, then no land inalienably held by the NT would be affected by the CA powers being sought by the applicant. We consider that would mean that the SPP would not be engaged under s130 of PA2008.

TEMPORARY POSSESSION

- 9.9.21. In connection with accessing the proposed OnSS zone during the construction phase, we have found that the use of the intended loop road south of Ardleigh Road (Plots 16-022 and 17-005) would be unnecessary to implement the proposed development. We therefore consider that Plots 16-022 and 17-005 should be excluded from the TP powers authorised in any made DCO for the proposed development and that is something we have included in our rDCO.
- 9.9.22. With respect to the seeking of TP powers relating to all of the other Plots shown on the Onshore Land Plans [\[REP7-004\]](#) and listed in Schedule 6 of the rDCO (Appendix E to this recommendation), we are content that the powers sought would be necessary to implement the proposed development.

HUMAN RIGHTS

- 9.9.23. We have had regard to the provisions of the HRA1998. The rights under the HRA1998 are qualified and the weight of national policy in favour of the proposed development and the public benefits arising from it means we consider the interference in the human rights of the affected owners and occupiers would, in most cases, be proportionate and justified in the public interest.

- 9.9.24. However, there are some instances in respect of the CA powers being sought in relation to land plots relating to the proposed OnSS zone which we are not persuaded would be required to deliver the proposed development. We consider the CA of that land does not meet the condition of there being a compelling case in the public interest for its acquisition and that the interference with the human rights of the owners and occupiers of that land would not be justified. Accordingly, those plots are subject to recommendations for their exclusion from the CA powers sought by the applicant, having regard to the provisions of s122 of PA2008 and the CA Guidance.

9.10. THE EXA'S RECOMMENDATIONS ON CA AND TP

- 9.10.1. Should the SoSESNZ be minded to give consent for the proposed development we recommend:
- The exclusion of TP and CA powers from the part of Plot 17-024 to the east of Normans Farm intended for screen planting works in any made DCO and the applicant's submission of revised versions of Sheet 18 in the Onshore Land Plans and the BoR to reflect Plot 17-024's partial removal from the land rights power sought.
 - The exclusion of TP and CA powers from the entirety of Plots 17-015, 17-016, 17-017, 17-018, 18-001 and 18-002 in any made DCO, in line with the changes included in the rDCO, and the applicant's submission of revised versions of Sheet 18 in the Onshore Land Plans and the BoR to reflect the removal of the previously mentioned plots from the land rights powers sought.
 - The exclusion of the entirety of Plot 17-031 from the acquisition of the rights sought, unless it can be demonstrated to the SoSESNZ's satisfaction that there is either no alternative mechanism to the CA of rights for securing a connection between the proposed OnSS and the EACN site or it would currently be impossible to reduce the powers sought within Plot 17-031 to a more proportionate extent.
 - The exclusion of the entirety of Plots 16-022 and 17-005 from the TP powers sought in any made DCO, in line with the changes included in the rDCO, and the applicant's submission of revised versions of Sheet 17 in the Onshore Land Plans and the BoR to reflect the removal of Plots 16-022 and 17-005 from the TP powers sought.
 - Obtaining clarification from the applicant and the Crown Estate about what consent, if any, is required under s135 of PA2008 from the Crown Estate with respect to the applicant's proposals for new rights creation in respect of Plots 19-001, 19-002, 19-003 and 20-003.
 - In respect of Plot 19-001 (land at Orford Ness), pursuant to the submissions made by the applicant in [\[AS-075\]](#):
 - obtain from the applicant revised versions of Sheet 19 in the Onshore Land Plans and the BoR removing Plot 19-001 from the CA powers being sought
 - following the removal of Plot 19-001 from the Onshore Land Plans and BoR, seek clarification from the NT as to whether it wishes to maintain or withdraw its objection to the applicant's request for CA powers.
 - The CA powers included in the rDCO, including the versions of protective provisions in the rDCO, unless alternative protective provisions have been agreed and submitted for the SoSESNZ's consideration since the examination's close) be authorised, subject to the above mentioned clarifications from the Crown Estate and the NT being received.
 - The TP powers included in the rDCO being authorised.

- The authorisation of the CA powers in respect of statutory undertakers', other undertakers' and utility providers' land included in the rDCO.
- The authorisation of powers for the extinguishment of rights and removal of apparatus of statutory undertakers, other undertakers and utility providers included in the rDCO.

10. DEVELOPMENT CONSENT ORDER AND RELATED MATTERS

10.1. INTRODUCTION

- 10.1.1. The application for development consent was accompanied by a draft development consent order (dDCO) [[APP-024](#)] and an explanatory memorandum (EM) [[APP-025](#)].
- 10.1.2. The EM explains the purpose and effect of each article and schedule in the dDCO. The EM also identifies and explains departures from the now repealed Infrastructure Planning (Model Provisions) (England and Wales) Order 2009. The EM makes reference to where the drafting has been taken from other made DCOs. The originally submitted dDCO and subsequent revisions are in the form of a statutory instrument, as required by section (s) 117 of the Planning Act 2008 (PA2008).
- 10.1.3. In this chapter the Examining Authority (ExA) provide an overview of the examination of the dDCO including notable changes made to it during the examination and consider changes made to the final dDCO in order to arrive at the recommended DCO (rDCO) in Appendix E of this report. The finally submitted dDCO [[REP8A-004](#)] was accompanied by an editable version, as is normal practice, for the ExA's use to compile its rDCO. However, following the original submission of [[REP8A-004](#)] and the accompanying editable version the applicant became aware of formatting errors in the version of the dDCO submitted at Deadline 8A. The applicant therefore submitted a corrected editable version on the final day of the examination, which addressed the extensive earlier formatting issues.
- 10.1.4. In compiling our rDCO we have used the amended editable version of the dDCO, however, in doing that it has become apparent there are some paragraph numbering discrepancies between it and [[REP8A-004](#)]. Those discrepancies affect, most particularly, some of the parts in Schedule 9 (Protective provisions) and the second parts in Schedules 10 and 11 (the Deemed marine licences (DML) respectively for the generation and transmission assets).
- 10.1.5. For Schedules 10 and 11 in the amended editable version of the dDCO consecutive paragraph numbering has been introduced from the beginning to the end of each DML so that their second parts have paragraph numbers commencing at 10. However, in [[REP8A-004](#)] the paragraph numbering is internal to each part of the DMLs, with the first parts each running between 1 to 9 and their second parts having paragraphs beginning with 1 rather than 10. In this chapter where it has been necessary for us to refer to a paragraph number in the affected parts of Schedules 9, 10 and 11 we have referred to the paragraph numbering used in the final version of the dDCO and the rDCO.
- 10.1.6. Changes resulting from: typographical or grammatical errors; minor changes in the interests of clarity, consistency or updates following discussion between the applicant and relevant interested parties (IPs); or responses to our written (ExQ) or oral questions, are not reported on. Unless otherwise stated, all future references to the dDCO and EM in this Chapter are to the applicant's final dDCO [[REP8A-004](#)] and EM [[REP8A-007](#)].

10.2. THE ORDER AS APPLIED FOR

- 10.2.1. This section records the structure of the dDCO. It is based on the Applicant's final dDCO and is as follows:

- Part 1: Preliminary
 - Article 1 – Citation and commencement
 - Article 2 – Interpretation
- Part 2: Principal powers
 - Article 3 – Development consent granted by the Order
 - Article 4 – Operation of generating station
 - Article 5 – Deemed marine licence (DML) under the Marine and Coastal Access Act 2009
 - Article 6 – Power to maintain the authorised development
 - Article 7 – Benefit of the Order
 - Article 8 – Application and modification of legislative provisions
 - Article 9 – Defence to proceedings in respect of statutory nuisance
- Part 3: Streets
 - Article 10 – Street works
 - Article 11 – Application of the New Roads and Street Works Act 1991
 - Article 12 – Construction of and maintenance of new or altered highway
 - Article 13 – Temporary closure of public rights of way
 - Article 14 – Temporary restriction of use of streets
 - Article 15 – Access to works
 - Article 16 – Traffic regulation
 - Article 17 – Power to alter layout of streets
- Part 4: Supplemental powers
 - Article 18 – Discharge of water
 - Article 19 – Authority to survey and investigate the land
 - Article 20 – Protective work to buildings
 - Article 21 – Removal of human remains
- Part 5: Powers of acquisition
 - Article 22 – Compulsory acquisition of land
 - Article 23 – Time limit for exercise of authority to acquire land compulsorily
 - Article 24 – Compulsory acquisition of rights
 - Article 25 – Compulsory acquisition of land: minerals
 - Article 26 – Private rights
 - Article 27 – Application of the Compulsory Purchase (Vesting Declarations) Act 1981
 - Article 28 – Acquisition of subsoil only
 - Article 29 – Modifications of Part 1 of the Compulsory Purchase Act 1965
 - Article 30 – Rights under or over streets
 - Article 31 – Temporary use of land for carrying out the authorised development
 - Article 32 – Temporary use of land for maintaining the authorised development
 - Article 33 – Statutory undertakers
 - Article 34 – Recovery of costs of new connections
 - Article 35 – Funding
- Part 6: Miscellaneous and general
 - Article 36 – Application of landlord and tenant law
 - Article 37 – Felling or lopping of trees and removal of hedgerows
 - Article 38 – Trees subject to tree preservation orders

- Article 39 – Abatement of works abandoned or decayed
- Article 40 – Saving provisions for Trinity House
- Article 41 – Crown rights
- Article 42 – Protective provisions (PPs)
- Article 43 – Application of the Town and Country Planning Act 1990
- Article 44 – Certification of plans
- Article 45 – Service of notices
- Article 46 – No double recovery
- Article 47 – Requirements, appeals
- Article 48 – Arbitration
- Article 49 – Compensation

10.2.2. There are 16 Schedules to the Order:

- Schedule 1 – Authorised development
- Schedule 2 – Requirements
- Schedule 3 – Streets subject to street works
- Schedule 4 – Traffic regulation
- Schedule 5 – Access to works
- Schedule 6 – Land of which temporary possession may be taken
- Schedule 7 – Land in which only new rights may be acquired
- Schedule 8 – Modification of compensation and compulsory purchase enactments for creation of new rights and imposition of restrictive covenants
- Schedule 9 – Protective provisions
- Schedule 10 – DML for generation assets
- Schedule 11 – DML for transmission assets
- Schedule 12 – Trees and hedgerows
- Schedule 13 – Compensation
- Schedule 14 – Arbitration rules
- Schedule 15 – Documents to be certified
- Schedule 16 – Offshore coordinates

10.2.3. The structure of the dDCO is set out in its contents section and is therefore listed on its face. We are content that the dDCO's structure is fit for purpose and does not require any changes.

10.3. EXAMINATION OF THE DEVELOPMENT CONSENT ORDER EVOLUTION OF THE dDCO

10.3.1. During the examination the dDCO was revised by the applicant on eight occasions responding to issues raised in our ExQ, hearings and written submissions. For each revision made to the dDCO, the applicant supplied a clean copy of the updated dDCO and a copy showing changes from the previous version as tracked changes. Each time the dDCO was revised the revision was accompanied by a freestanding schedule of changes. Updated clean and tracked versions of the EM were submitted on six occasions.

NOTABLE CHANGES MADE TO THE dDCO DURING THE EXAMINATION

10.3.2. The applicant's final Schedule of Changes to the dDCO [[REP8A-006](#)] identifies all of the changes made within each revision of the dDCO.

10.3.3. We do not report on every change made to the dDCO during the examination, with some being minor changes resulting from typographical or grammatical errors or

made to improve precision, consistency and enforceability. In the interests of brevity, we focus on the notable changes made to the dDCO in the following table.

Table 10.1 Notable changes made to the dDCO during the examination

Changed version of the dDCO	Notable changes made
Examination Deadline 1 [REP1-008]	- Article 2 (Interpretation) definition for foundations amended removing references to gravity base foundation types for wind turbines. - Article 7 (Benefit of Order) changes made in response to submissions made by the Marine Management Organisation (MMO). - Article 16 (Traffic regulation) wording changed to more precisely set out the power and to better align with the dDCO for the proposed North Falls Offshore Wind Farm (NFOWF). - New Article 17 (Power to alter layout of streets) to better align with the provisions of NFOWF's dDCO - Requirement 2 (offshore design parameters) in Part 1 of Schedule 2 various parameters for offshore works amended to reflect the removal of gravity base foundation types and to secure the reduction in the maximum tip height rotor diameter for wind turbine generators, as agreed with the Ministry of Defence to prevent an adverse radar impact. - Schedule 1 (Authorised development) amendments made to the numbering and formatting for the proposed authorised works. - Schedule 10 (DML generation assets) changes variously made in response to submissions made by the Ministry of Defence, MMO, Natural England (NE) and Trinity House.
Change Request [AS-031]	Revisions made in various parts of the dDCO, principally to address changes arising from the submission of the applicant's change request.
Examination Deadline 3 [REP3-005]	Multiple minor changes made, particularly in response to submissions made Essex County Council (ECC).
Examination Deadline 4 [REP4-004]	- New Part 9 in Schedule 9 (PPs), adding PPs in favour of the Port of London Authority (PLA) in respect of the PLA's onshore infrastructure. - Schedule 10 (DML generation assets) and Schedule 11 (DML transmission assets) new conditions added in response to controls sought by the MMO.

Changed version of the dDCO	Notable changes made
Examination Deadline 5 [REP5-007]	A small number of minor changes made.
Examination Deadline 6 [REP6-007]	- Article 2 (Interpretation) “<i>discharging authority</i>” added, with ECC to have that role for the purposes of the discharging the requirements included in Schedule 2 of the dDCO. Consequent changes made throughout Schedule 2 to delete references to “<i>relevant planning authority</i>” and replace with discharging authority. - Requirement 2 (offshore design parameters) in Part 1 of Schedule 2 wording for deep water route (DWR) parameters added further to the ExA’s suggestion to accommodate dredging to a level of 22 metres (m) below chart datum (CD) to allow for the passage of deep draught commercial vessels. - Requirement 13 (groundwater monitoring) in Part 1 of Schedule 2, wording amended following the completion of groundwater investigations and the preparation of an outline groundwater monitoring plan. - Part 3 of Schedule 9 (PPs for the Environment Agency (EA)), extensive changes made to this set of PPs in response to representations made by the EA. - Part 10 of Schedule 9 (PPs for ECC as local highway authority), a new set of PPs added in favour of ECC which has subsequently become Part 11 of Schedule 9 in later versions of the dDCO.
Examination Deadline 7 [REP7-008]	- Requirement 9 (onshore archaeology) in Part 1 of Schedule 2, wording amended to preclude works being commenced until final archaeological written schemes of investigation have been submitted to and approved by the discharging authority, further to representations made by Historic England. - Schedule 9 (PPs): - Changes made to varying degrees to the PPs in Parts 1 to 9 (inclusive) and including the introduction of consecutive paragraph numbering throughout this schedule. - Introduction of an additional set of PPs in favour of the PLA relating to offshore matters as Part 10 of Schedule 9. - Renumbering of the PPs in favour of ECC as Part 11 of Schedule 9 and amendments to this set of PPs. - Introduction of new sets of PPs, Part 12 for Anglian Water Services Limited (AWSL) and Part 13 for Affinity Water Limited (Affinity)

Changed version of the dDCO	Notable changes made
	Amendments to the PPs made in this version of the dDCO reflect the ongoing discussions the applicant had been having with IPs and Affected Persons.
Examination Deadline 8A [REP8A-004]	▪ Requirement 5 in Part 1 of Schedule 2 (onshore substation (OnSS) works, design and landscaping), introduction of wording relating to there being a design review process, which through the provisions of section 2.3 of the OnSS Design Principles Document [REP8-020], would involve a Design Guide for the proposed development being reviewed by an independent external body prior to details for the OnSS's design being submitted for the discharging authority's approval. ▪ Schedule 9 (PPs): ○ Amendments to Part 3 for the PPs in favour of the EA, following agreement to their wording by the parties. ○ Amendments to Part 12 for the PPs in favour of AWSL to narrow the differences between the parties. ○ Amendments to Part 13 for the PPs in favour of Affinity to narrow the differences between the parties. ○ Addition of Part 14 for agreed PPs in favour of National Grid Electricity Transmission Plc (NGET) ○ Addition of Part 15 for agreed PPs in favour of Cadent Gas Limited (Cadent Gas) ▪ Schedule 10 (DML generation assets) and Schedule 11 (DML transmission assets) various amendments made in response to submissions made by the MMO.

10.4. MAIN ISSUES CONSIDERED IN THE EXAMINATION

- 10.4.1. The applicant sought to address matters raised by the ExA and IPs relating to the dDCO's provisions by making drafting amendments throughout the examination. The applicant generally explained the reasons and/or provided further clarification or justification within the EM or the relevant management plans where changes were or were not made to the dDCO.
- 10.4.2. We held three issue specific hearings (ISH), ISH2, ISH4 and ISH7 in which the provisions of the dDCO were considered. We also included questions relating to the dDCO in our ExQ1 [\[PD-011\]](#), ExQ2 [\[PD-014\]](#) and ExQ3 [\[PD-026\]](#) and issued a schedule of proposed changes to the dDCO [\[PD-028\]](#). Additionally, some of the requests for further information we issued concerned drafting matters or dDCO related representations made by IPs.
- 10.4.3. In this section we consider the main issues arising in the examination relating to the dDCO's drafting, primarily those provisions which were not agreed between specific IPs and the applicant or that the ExA consider notable to our reporting. Where matters arose regarding provisions in the dDCO which were material to the

consideration of specific planning issues, these have been considered in the relevant sections in earlier chapters and are not repeated here.

ARTICLES

Article 5 (DMLs) and Article 7 (Benefit of the order)

- 10.4.4. The MMO in its relevant representation [[RR-070](#)] and thereafter reiterated in various written submissions made during the examination, including at its close [[REP8A-046](#)], objects to the DMLs in Schedules 10 and 11 being made the subject of the transfer of DCO powers that would be available to the Secretary of State for Energy Security and Net Zero's (SoSESNZ) under proposed Article 7. The MMO contends that a DML granted in a DCO should be regulated by the provisions of the Marine and Coastal Access Act 2009 (MCAA2009), and in respect of this DCO application, specifically by all provisions of s72 of MCAA2009. The MMO considers transferring the benefits of the DMLs under Article 7 would duplicate the MCAA2009's provisions.
- 10.4.5. In responding to the MMO's relevant representation the applicant indicated it did not agree with the MMO, with the drafting of Article 7 reflecting established precedent for transferring DCO powers and DMLs, which the SoSESNZ has considered to be acceptable many times [[PD4-006](#)]. In that regard, in responding to our ExQ2 DCO.2.03 [[REP4-039](#)], the applicant cited six examples for which DMLs having been incorporated into transfer of powers articles in recently made DCO. Those other made DCOs being:
- Hornsea Four Offshore Wind Farm Order 2023
 - East Anglia One North Offshore Wind Farm Order 2022
 - Hornsea Three Offshore Wind Farm Order 2020
 - Norfolk Vanguard Offshore Wind Farm Order 2022
 - Norfolk Boreas Offshore Wind Farm Order 2021
 - Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024
- 10.4.6. The applicant further submitted in [[REP4-039](#)] that some of the articles and requirements in the dDCO would overlap with matters covered within the DMLs and that it would be inappropriate for different parts of a made DCO to be transferred separately by the SoSESNZ and the MMO, with that having the potential to cause inconsistency [page 100 in [PD4-006](#)]. The applicant has also drawn attention to the consultation that the SoSESNZ would have to undertake with the MMO under Article 7(6) of the dDCO prior to giving any consent to the transfer of the provisions of the DMLs to any person other than the named undertaker [page 102 in [PD4-006](#)].
- 10.4.7. Given the multiple precedents for made DCOs including transfer powers relating to DMLs, our ExQ3 DCO.3.03 [[PD-026](#)] requested the MMO to explain why its continued objection concerning this matter remained tenable. In response the MMO advised that the stance it was taking with consistent with its position in respect of all of the other offshore wind farms that were being examined at that time and the submissions made by the applicant in [[REP4-039](#)] did not alter its views [[REP7-097](#)].
- 10.4.8. The MMO's and the applicant's final¹⁹ statement of common ground (SoCG) [[REP8A-031](#)] recorded continuing disagreement at the examination's close.

¹⁹ Preceded by [[REP5-060](#)]

ExA's considerations

- 10.4.9. From the submissions made by the applicant, most particularly in [REP4-039], it is evident that there is recent precedent for DCOs being made that include an ability for the SoSES NZ to transfer the benefits of DMLs to persons other than the undertaker named in an order, should that be requested. It is of note that the wording of Article 7(6) in the dDCO [REP8A-004] would require the SoSES NZ to consult with the MMO prior to consenting to a transfer of the benefits of the DMLs included in Schedules 10 and 11. We consider that consultation mechanism would enable the MMO to raise any concerns it might have about transferring the benefit of the DMLs in advance of any such transfer being consented.
- 10.4.10. Given multiple recently made DCOs have included powers for the benefit of DMLs being transferred from the undertaker to another person, we are not persuaded that this power should be excluded from any made DCO for the proposed development. Having regard to the recent history of DCOs being made inclusive of the transfer powers that the MMO objects to and the intention for the consenting regime for nationally significant infrastructure projects to serve as a 'one stop shop', whenever possible, we consider the MMO's objection in this respect to be untenable.
- 10.4.11. Accordingly, we therefore recommend that the transfer powers sought by the applicant in Article 7 in respect of the DMLs included in Schedules 10 and 11 of the dDCO [REP8A-004] should be retained. That is something reflected in our rDCO in Appendix E.

Articles 22 (Compulsory acquisition of land), 24 (Compulsory acquisition of rights), 31 (Temporary use of land for carrying out the authorised development) and 32 (Temporary use of land for maintaining the authorised development)

- 10.4.12. In Chapter 9 (Land Rights) we have made recommendations for some land plots to be excluded from the compulsory acquisition (CA) or temporary possession (TP) powers sought by the applicant. Those recommended exclusions of themselves do not affect the wording of Articles 22, 24, 31 and 32 in the dDCO, but some of do have implications for the wording of Schedules 6 and 7 in our rDCO, which we refer to later in this chapter.

Article 49 and Schedule 13 (Compensation)

- 10.4.13. Article 49, in combination with Schedule 13 of the dDCO [REP8A-004] would secure the provision of compensatory habitat for Lesser Black Backed Gulls (LBBG) at Orford Ness. That is because the proposed development, in combination with other projects, has been identified as having an adverse effect on the integrity (AEoI) of Alde-Ore Estuary Special Protection Area (AOE SPA) and Alde-Ore Estuary Ramsar site, sites forming part of the national sites network (NSN). With LBBGs being a qualifying feature of the AOE SPA and Alde-Ore Estuary Ramsar site.
- 10.4.14. As we have explained in Chapter 7 we also consider there would be AEoI for other elements of the NSN, namely:
- Kittiwake, Guillemot and Razorbill, as qualifying features of the Flamborough and Filey Coast Special Protection Area (FFC SPA), in combination with other projects.
 - Guillemot, as a qualifying feature of the Farne Islands Special Protection Area, in combination with other projects.

- Physical habitat loss or disturbance to the sandbank qualifying feature within the Margate and Long Sands Special Area of Conservation (MLS SAC).

10.4.15. Given the finding of AEoI for the above listed NSN qualifying features, the ExA considers those AEoI need to be addressed by compensatory measures. Although the applicant was of the view during the examination that there would be no AEoI for the above listed qualifying features, it did, on a without prejudice basis, submit wording for additional compensatory measures in [[REP5-090](#), [REP7-089](#) and [REP8A-042](#)] to be incorporated by the SoSESNZ into Schedule 13 for any made DCO for the proposed development, should that be concluded to be necessary in undertaking the competent authority's appropriate assessment²⁰.

10.4.16. In our rDCO we have recommended that Schedule 13 be expanded to comprise compensation in four parts as follows:

- Part 1, compensation for the LLBG qualifying feature of the AOE SPA and Alde-Ore Estuary Ramsar site. The compensation secured under this part would take the form of land being set aside and managed as habitat suitable for LBBGs.
- Part 2, compensation for the Kittiwake qualifying feature of the FFC SPA. The compensation secured under this part would take the form of:
 - the allocation of nesting spaces for Kittiwakes at a nesting tower in Gateshead; or
 - implementing a Kittiwake Implementation and Monitoring Plan, which would not utilise the nesting tower in Gateshead;
 - or the making of a financial contribution, as strategic compensation, to the proposed Marine Recovery Fund (MRF).
- Part 3, compensation for the Guillemot and Razorbill qualifying features of the FFC SPA. The compensation secured under this part would take the form of:
 - making of a financial contribution to the proposed MRF; or
 - via a Guillemot and Razorbill Implementation and Monitoring Plan to be submitted to the SoSESNZ for approval, providing funding, provision or support for small scale management measures at Guillemot and Razorbill colonies in the southwest of England including: recreational disturbance reduction; wardening; signage; education; visitor access statements; and engagement with local businesses and organisations.
- Part 4, compensation for the sandbank qualifying feature of the MLS SAC. The compensation secured under this part would take the form of:
 - making of a financial contribution to the proposed MRF; or
 - via a Benthic Implementation and Monitoring Plan to be submitted to the SoSESNZ for approval, providing funding, provision or support of measures to remove anthropogenic pressures from the MLS SAC, including but not limited to removal of redundant infrastructure or removal of aggregate pressure as identified in the MLS SAC benthic mitigation plan.

10.4.17. The wording for Parts 2, 3 and 4 included in the rDCO is based on the without prejudice text for those parts included by the applicant in [[REP8A-042](#)]. We have further recommended in Chapter 7 that compensation for guillemot, as a qualifying feature of the Farne Islands SPA, should be secured through the provisions of

²⁰ Under the Conservation of Offshore Marine Habitats and Species Regulations 2017 and the Conservation of Habitats and Species Regulations 2017.

Schedule 13 in any made DCO for the proposed development, following the applicant's submission of suitable wording the SoSESNZ.

PART 1 OF SCHEDULE 2 (REQUIREMENTS)

Requirement 1 (Time limits)

- 10.4.18. During ISH2 the applicant explained that a commencement time limit of up to seven years was being sought under Requirement 1 because a Contracts for Difference (CfD) award from the Government would be required before the applicant could make a final investment decision (FID) about proceeding with the proposed development. The frequency and competitive nature of the CfD process means that it is uncertain if and when a successful award might be achieved. Other uncertainties relate to contractor and equipment supply chain availability, which affect the timing of the applicant's FID. Given those uncertainties a seven year commencement period is being sought, a period of time that has been accepted by the SoSESNZ when making DCOs for other offshore wind farms [paragraphs 3.2.11 to 3.2.13 and 3.2.19 in [REP1-059](#)].
- 10.4.19. We consider there is some inconsistency between the applicant submitting on the one hand that there is an urgent need for the proposed development, which is supported by national policy (see for example [REP8A-038](#)), and a seven year time limit for commencement. With that commencement period it is possible that construction works would not begin until sometime in the 2030s, presuming a DCO is made for the proposed development. The proposed development would also have a high dependency on the proposed East Anglia Connection Node (EACN) being available to transmit its generated electricity, as discussed later in this chapter. The proposed EACN has not reached its application stage and there is therefore uncertainty about its availability to serve the proposed development.
- 10.4.20. We therefore recognise that there would be uncertainties relating to: a CfD bid being successful; the availability of contractors and equipment; and the availability of the proposed EACN. Taking account of those uncertainties, on balance, we consider that a commencement time limit of up to seven years would be acceptable and we have therefore retained that period in our rDCO.

Requirement 2 (Offshore design parameters)

- 10.4.21. As explained in section 4.4 (Navigation and Shipping) in Chapter 4 above, the PLA, London Gateway Port Limited (LGPL) and the Harwich Haven Authority (HHA) variously made representations about sufficient water depth being retained within the DWRs in the approaches to their various ports, following the undertaking of the proposed works in the offshore export cable corridor (OfECC). The applicant accepted at early stage in the examination that the proposed works in the OfECC affecting the DWRs would be implemented to allow for future dredging to a level of 22m below CD. There was, however, disagreement between the applicant and the other IPs about how that parameter should be secured in any made DCO, with the applicant's preference being for its inclusion in a Cable Specification and Installation Plan (CSIP), the final version of which would be for the MMO's approval, pursuant to a condition included in the DML for transmission assets (Schedule 11 in the dDCO).
- 10.4.22. Following the discussion of this matter during ISH7 we requested [\[PD-024\]](#) the applicant, MMO, Maritime and Coastguard Agency, HHA, LGPL and PLA to consider our suggested wording for a parameter to either be added to Requirement 2 or the conditions in Schedule 11 or both. We were of the view that

including such a parameter on the face of any made DCO for the proposed development would be the most effective way of securing the agreed depth of water in the DWRs within the OfECC throughout the construction, operational and decommissioning phases for the proposed development.

- 10.4.23. In response to our request for further information the applicant [[REP6-001](#)], MMO [[REP6-063](#)], PLA [[REP6-059](#)], LGPL [[REP6-080](#)] and HHA [[AS-073](#)] indicated general support for the inclusion of a parameter within a requirement, albeit alternative wording was suggested variously by the applicant and the other IPs (excluding the MMO). The port IPs also favoured the inclusion of the parameter in the transmission assets DML to avoid the parameter being overlooked by those who might have a primary interest in the DML rather than requirements included in Schedule 2. With respect to that latter point the applicant considers incorporating this parameter into the DML would be unnecessary because it has already been added to the outline CSIP, the final version of which would be for the MMO's approval in discharging a DML condition.
- 10.4.24. The PLA in [[REP6-059](#)] also promoted the inclusion of wording in Requirement 2 clarifying that the parameter would apply to the maintenance, operation and decommissioning of the proposed development. In [[REP7-085](#)] the applicant contended that the while it accepted the parameter should apply to maintenance, the operation of the cables within the OfECC would have no bearing on compliance with the requirement and similarly argued that would be the case during decommissioning.
- 10.4.25. LGPL submission [[REP8-045](#)] considered the wording for the parameter favoured by the applicant to be too narrow and would not stop works being undertaken immediately adjoining the parts of DWRs subject to the parameters defined in Requirement 2(3). LGPL consider that could impede dredging in the DWRs and boulders and archaeological remains could be disposed of within the DWRs.
- 10.4.26. We consider it is necessary within the DWRs that the proposed transmission asset's presence would not impede the passage of deep draught vessels and that there is a need for any made DCO for the proposed development to include a requirement specifying dredging would be possible to a level of 22m below CD. That level would enable vessels with the greatest draughts now (and expected in the future) to make use of the ports under the jurisdictions of the HHA, LGPL and the PLA. In that regard we are content that the wording of Requirement 2(3) in the final version of the dDCO [[REP8A-004](#)], inclusive of its reference to a plan [[REP6-055](#)] defining the extent of the area where Requirement 2(3) would apply, would adequately secure the free movement of large vessels within the DWRs.
- 10.4.27. We agree with the applicant that with inclusion of "*maintained*" in the wording of Requirement 2(3) there is no need for it also to refer to "*operated*" because this requirement would apply throughout the proposed development's operational phase and it would have to be maintained so as not impede dredging to the specified levels. We consider the wording of Requirement 2(3) would preclude the disposal of boulders and archaeology that could impede dredging to the specified depths because it specifies the dredging levels that must be possible at all times. We also consider that there is no need for Requirement 2(3) to refer to decommissioning, because future decommissioning works would be governed by the approval of a decommissioning plan by the SoSESNZ, pursuant to the provisions of the Energy Act 2004 [[REP6-045](#)].

- 10.4.28. With the inclusion of Requirement 2(3) in any made DCO for the proposed development, we consider there would be no need in effect to restate its wording in the transmissions asset DML (Schedule 11). That is because what was stated in Requirement 2(3) would form part of any made DCO's 'face' and would therefore be applicable to the proposed offshore works. In that regard we note that the HHA, LGPL and the PLA have indicated that restating the parameter included in Requirement 2(3) in the DML would, in effect, be a matter of convenience not necessity.
- 10.4.29. The wording for Requirement 2(3) included in the final version of the dDCO has been included in our rDCO.

Requirement 6 (Code of construction practice) (CoCP)

- 10.4.30. The CoCP [REP8A-015] has been submitted as a final, rather than an outline, document, which the ExA considers to be very unusual for a development of this scale. We say that because the applicant has sought to maximise flexibility at the consenting stage. In the event of the proposed development being consented and a FID being made for it to proceed [paragraph 3.1.2 in REP8-029], the design for this project would be refined and finalised, following the undertaking of additional survey work, amongst other things, and contractors would be appointed. Given that chain of events the contents of the CoCP might need to be revisited to address matters that may only become apparent once the design has been finalised and/or contractors had been appointed.
- 10.4.31. Requirement 6²¹ in the dDCO [REP8A-004] would require the proposed onshore construction works to be undertaken in accordance with the last version of the CoCP submitted during the examination [REP8A-015], unless any revision was approved by the discharging authority. That in effect is a 'tailpiece' mechanism for altering the CoCP post the making of any DCO for the proposed development. Tailpiece mechanisms in requirements or conditions are generally discouraged because they "... *might allow the discharging authority to approve a change to the scope of the Authorised Development applied for and examined, thus circumventing the statutory process ...*" under s153 and Schedule 6 of PA2008²².
- 10.4.32. We were informed by the applicant during the course of ISH2²³ that the originally submitted CoCP was a final document [APP-253], with enough information being available "... *at this time for a full plan to be produced*" [paragraph 3.2.26 in REP1-059]. In ISH2 ECC advised that it was generally content with the provisions of the CoCP and it would prefer it to be treated as a final document. Suffolk County Council (SCC) commented that it usually preferred CoCP's be treated as outline documents at this stage, but was content to leave this issue to ECC and Tendring District Council (TDC).
- 10.4.33. However, during examination the CoCP was revised on four occasions, with the second iteration [REP5-033], amongst other things, including an entirely new section relating to water resources. The CoCP's sections addressing construction traffic and archaeology were subject to quite significant revisions during the

²¹ Originally Requirement 8 in the submitted version of the dDCO [APP-024]

²² Paragraphs 17.3 and 17.4 in the Planning Inspectorate's [Nationally Significant Infrastructure Projects - Advice Note Fifteen: drafting Development Consent Orders](#) (March 2025)

²³ The first of the dDCO specific hearings

examination in response to discussions being held between the councils and the applicant. At ISH7 the applicant explained:

“... it never intended that the CoCP submitted with the Application would be the ‘final’ version, rather it was always intended to be a ‘full’ document which would evolve [sic] throughout the examination not an outline. The fact that changes have been made to this document shows that the Examination process is working as intended to get engagement on this document, and that various comments from the parties are being incorporated to [sic] manage potential impacts. The Applicant remains of the view that the final version will be submitted at the close of Examination which would become the certified document.” [paragraph 3.2.13 in [REP6-045](#)]

10.4.34. The final and signed version of the SoCG between TDC, ECC and the applicant [[REP8A-027](#)]²⁴ records the councils had agreed the content of the CoCP. The applicant in its closing submissions reiterated that the last submitted version of the CoCP [[REP8A-015](#)] is a full document [paragraph 7.2.13 in [REP8A-038](#)]. Notwithstanding that the inclusion of the tailpiece mechanism in the wording of Requirement 6 suggests that the applicant considers there might be a need to revise the CoCP following the making of any DCO for the proposed development. We consider the potential for needing to revise the CoCP to be unsurprising, given:

- by the close of the examination the proposed development’s design had not been finalised; and the finalisation of the design could have implications for the contents of the CoCP; and
- through the discharging of management plan requirements, such as Requirements 7 (Traffic and access plans), 8 (Onshore archaeology), 10 (Landscape and Ecological Management Plan) and 11 (Soil Management Plan), inconsistencies between the provisions of the CoCP and approved management plans might arise, which could give rise to uncertainty for the enforcement of some of the requirements in Part 1 of Schedule 2 included in any made DCO for the proposed development.

10.4.35. The ExA is firmly of the view that the finally submitted version of the CoCP [[REP8A-015](#)] should be treated as though it is an outline document. Accordingly, we recommend that following replacement wording for Requirement 6, which is included in our rDCO, is included in any made DCO for the proposed development:

‘6.- (1) The onshore works must not be commenced until a final version of a code of construction practice, has been submitted to and approved by the discharging authority.

(2) The code of construction practice submitted under sub-paragraph (1) must be substantially in accordance with application document number 9.21 Revision E certified under this Order.

(3) The onshore works must be carried out in accordance with the approved final version of the code of construction practice.’

10.4.36. Our recommended changes to the wording for Requirement 6 have implications for the wording of Requirement 11 (Soil Management Plan) because of its cross reference to the CoCP. Recommended changes for Requirement 11 are addressed in section 10.5 of this chapter below.

²⁴ Preceded by [[REP5-054](#)]

Requirement 17 (Onshore build options)

- 10.4.37. The application for the proposed development, amongst other things, seeks consent to undertake some onshore works that would facilitate the construction of the proposed NFOWF, for example the installation of a second set of cable ducts and OnSS enabling works. Two build options have identified for the proposed development, with “*build option 1*” being a scenario that includes the undertaking works for both the proposed Five Estuaries Offshore Wind Farm (FEOWF) and the proposed NFOWF. Under “*build option 2*” only the works for the proposed FEOWF would be undertaken. Build options 1 and 2 are defined in Article 2 of the dDCO [\[REP8A-004\]](#) and under Requirement 17(2) the undertaker must notify the discharging authority which build option is to be commenced.
- 10.4.38. During the course of compulsory acquisition hearing (CAH) 1 and CAH2 there were discussions about our concern that under build option 2 there would be a lack of clarity about precisely what that would mean. That is because the submitted plans, most particularly the Onshore Works Plans [\[REP6-005\]](#), do not define the extent of the works under build option 2. ExQ1 DCO.1.14 requested the applicant to incorporate a mechanism within Requirement 17 (Requirement 19 at that time) facilitating the submission of a revised set of Onshore Works Plans to the planning authority if build option 2 was being pursued. The applicant in responding to that written question declined to make an amendment to Requirement 17’s wording [\[REP2-039\]](#).
- 10.4.39. Further to the holding of CAH1 and CAH2 and the receipt of the applicant’s Technical Note Onshore Civils and Electrical [\[REP2-030\]](#), our ExQ2 DCO.2.02 requested the applicant to submit, on a without prejudice basis, wording for a potential requirement defining the parameters for the proposed onshore export cable corridor of sufficient width for the proposed FEOWF alone. In responding to that question the applicant submitted it consider such a requirement would be inappropriate and unnecessary, but it nevertheless submitted without prejudice wording for inclusion either in Requirement 17 or in a standalone requirement [\[REP4-039\]](#).
- 10.4.40. The without prejudice wording provided by the applicant had regard to wording included in Requirement 10(9) of the made DCO for the Sheringham Shoal and Dudgeon Extensions Wind Farm Order 2024 [e-page 1,876 in [REP4-044](#)]. That made DCO is a recent precedent and we consider it would be appropriate for any made DCO for the proposed development to include similar wording in the interest of precision and enforceability. We therefore recommend that the wording for Requirement 17 included in the dDCO is amended to include a new third sub-paragraph as follows, wording which has been included in our rDCO:

“17.-(1) Subject to sub-paragraph (2), the undertaker may commence in relation to only: (a) build option 1; or (b) build option 2.

(2) Other than works 13 and 13A, the onshore works must not commence until notification has been submitted to the discharging authority as to whether the undertaker intends to commence build option 1 or build option 2.

(3) In the event that the undertaker notifies under sub-paragraph (1) that build option 2 is to be implemented, the width (being measured at 90 degrees to the orientation of the cables within each work) of each of Works Nos 4, 5, 6, 7, 8, 9, 10, 11 and 12 must not exceed a total width of 45 metres and Work No. 14, when including Work No.14D, must not exceed a total width of 60 metres; except:

a) where trenchless techniques are to be used to install the cables, where the width may not exceed 90 metres;

b) as necessary to create a transitional (tapered) area between the width for the trenched installation and the width for the trenchless installation compounds, to such extent as is necessary to properly space out the cables approaching the trenchless installation compound, up to the maximum width of the trenchless installation compound concerned in each relevant location; or

c) where necessary to provide connections to accesses, haul routes and temporary construction compounds as authorised by Schedule 1 where the width may extend to that necessary to effect the connection required.”

SCHEDULE 9 PROTECTIVE PROVISIONS (PPs)

- 10.4.41. Schedule 9 of the dDCO [[REP8A-004](#)] comprises 15 sets of PPs set out in Parts 1 to 15. Part 1 (for electricity, gas, water and sewerage undertakers), Part 2 (telecommunication operators) and Part 4 (drainage authorities) are PPs that would apply to unnamed undertakers, operators or authorities. No objections have raised to the terms of the PPs included in Parts 1, 2 and 4 and we are content that the undertakings subject to these PPs would not experience serious detriment. We consider it is unnecessary for us to comment further on those parts of Schedule.
- 10.4.42. In reviewing the content of Schedule 9 we have observed a discrepancy with the paragraph numbering included in [[REP8A-004](#)] as compared with the corrected editable version used by the ExA to compile its rDCO. In [[REP8A-004](#)] in Part 6 (PPs for National Highways) there is an errant paragraph “74.(6)” rather than being sub-paragraph (6) in paragraph 115 [page 11 in [REP8A-004](#)]. That errant paragraph number was removed from the corrected version of the editable version of the dDCO. The effect of that is that in [[REP8A-004](#)] from paragraph 74.6 onwards some of the paragraph numbering in Schedule 9 is one number higher than in our rDCO. Where necessary in reporting below on the PPs cases being made by the parties we refer to the relevant paragraph number in both the dDCO and the rDCO, with the first number used being derived from the dDCO and the rDCO’s number being shown in brackets, for example paragraph 100 (rDCO 99).
- 10.4.43. At Deadline 8A the applicant submitted a position update note relating to the sets PPs it had been negotiating with statutory undertakers, other undertakers and utility providers [[REP8A-037](#)]. In that note it is recorded that the following sets of PPs had been agreed between the relative party and the applicant:
- Part 3 – Environment Agency, confirmed as being agreed in the SoCG between the Environment Agency and the applicant [[REP8A-025](#)]
 - Part 4 – ECC as a drainage authority, confirmed as being agreed in the SoCG between ECC, TDC and the applicant [[REP8A-027](#)]
 - Part 6 – National Highways, confirmed as being agreed in the SoCG between the National Highways and the applicant [[REP8A-033](#)]
 - Part 8 – North Falls Offshore Wind Farm
 - Part 9 – PLA (onshore) confirmed as being agreed in the SoCG between the PLA and the applicant [[REP5-066](#)]
 - Part 14 – NGET
 - Part 15 Cadent Gas Limited
- 10.4.44. Given the agreed position with respect to the sets of PPs included in Parts 3, 4, 6, 8, 9, 14 and 15 of Schedule 9, we consider there is no need for us to consider those sets of PPs in detail. We are, however, satisfied when regard is paid to the provisions of s127 of PA2008 the PPs included in Parts 3, 4, 6, 8, 9, 14 and 15 of

Schedule 9 would ensure that powers sought by the applicant affecting the respective undertakers land would not cause serious detriment to their undertakings. We therefore recommend that the agreed sets of PPs included in Parts 3, 6, 8, 9, 14 and 15 of Schedule 9 of the rDCO are included in any made DCO for the proposed development.

10.4.45. At the examination's close the following sets of PPs had not been agreed between the applicant and:

- Part 5 – Network Rail (NR)
- Part 7 – LGPL
- Part 10 – PLA offshore
- Part 11 – ECC as highway authority
- Part 12 – AWSL
- Part 13 – Affinity

10.4.46. Below we consider the disagreement concerning the above listed sets of PPs in turn. As a general matter the applicant has submitted it accepts “... *that where [sic] there is a risk of detriment arising to a statutory undertaking it has sought to agree protective provisions with the relevant undertaker. Not all protective provisions have been agreed, however the Applicant is confident that its drafting is sufficient to prevent serious detriment arising*” [paragraph 6.4.2 in [REP8A-038](#)].

10.4.47. The applicant in its closing submissions has further submitted “*It is noted that the DCO drafting guidance explicitly provides that ‘standard’ protective provisions “must be adapted as necessary so they accurately reflect the proposed development. They should also not simply negate other provisions of the DCO, particularly concerning proposed compulsory acquisition of statutory undertakers’ land ...”* [paragraph 6.4.6 in [REP8A-038](#)].

Part 5 – PPs in favour of Network Rail

10.4.48. The applicant is seeking to undertake works on, under or in close proximity to operational railway land controlled by NR (Plots 05-014, 05-016, 05-017 and 05-019) and in respect of that land powers for the CA of rights and/or TP powers are sought. NR in its written representation submitted that it objected to the acquisition of rights in respect of the previously mentioned plots because without necessary PPs in place the proposed works would interfere with the safe and efficient operation of the railway [[REP2-065](#)]. In responding to ExQ3 DCO.3.09 NR advised it was in discussion with the applicant in respect of including its standard PPs in the dDCO [[REP7-111](#)].

10.4.49. NR submitted just before the examination's close that the key outstanding matter between it and the applicant related to:

“... the longstanding principle that any exercise of compulsory acquisition powers pursuant to the DCO in respect of railway property must be subject to NR's prior consent and a restriction to this effect must be included in the Protective Provisions. Network Rail's position is that an absence of such protection in the Protective Provisions will have a detrimental effect on Network Rail's ability to carry out its statutory undertaking, comply with its Network Licence and safely operate the railway network.

... Network Rail has not issued technical or business clearance for the proposed works and has therefore not established that the proposed development and the

proposed use of compulsory acquisition powers on railway is acceptable in the context of ensuring a safe and efficient railway.” [REP8A-055]

- 10.4.50. In [REP8A-055] NR lists all of the proposed powers in dDCO requiring its consent prior to the undertaker being able to undertake works to the affected railway land. NR contends that without the prior consent mechanism sought under a set of PPs in its favour there would be a significant unacceptable risk that the undertaker could acquire rights or use railway land temporarily affecting NR’s ability to operate a safe and efficient railway, which could lead to it breaching its Network Licence and that would not be acceptable to either the Office of Rail and Road or NR. In support of its case NR has drawn attention to six made DCOs that have included the prior consenting mechanism sought. NR contends without the inclusion of the prior consenting mechanism in the proposed PPs in its favour there would be serious detriment to its undertaking under the provisions of s127 of PA2008. NR further submitted in [REP8A-055] that it was hopeful that its PPs would be agreed in three to four weeks following 14 March 2025.
- 10.4.51. The applicant objects to the inclusion of the prior consent mechanism in the proposed PPs because in the absence of a suitable land rights agreement, the seeking of the disapplication of CA powers at this stage would place the applicant in a ransom position on the voluntary agreement that it has been seeking to negotiate over a considerable period of time, with NR having declined to engage in negotiations pending the giving of technical approval for the proposed works. Not having access to the CA powers sought could impede the timely delivery of the proposed development [paragraph 5.7 in [REP8A-037](#)].
- 10.4.52. The applicant commented:
- the disapplication of the CA powers in this context was not appropriate and would be contrary to the guidance which indicates that PPs should not be used to negate other provisions in DCOs
 - the disapplication of the CA powers sought would not be necessary to prevent serious detriment because NR’s technical approval for the proposed works would still be required and the applicant has agreed to the PPs further securing the need for approval of works outside the separate technical approval process [paragraphs 5.8 and 5.9 in [REP8A-037](#)].
- 10.4.53. Although the prior consenting mechanism sought by NR would potentially disapply the CA powers sought in respect of the NR’s land, we note that what NR is seeking has been included in at least six made DCOs (including energy projects, as referred to on page 4 of [REP8A-055](#)). Given that consenting history and NR’s desire to ensure that the railway affected by the proposed works would be able to operate efficiently and safely to avoid serious detriment to the undertaking, we recommend that the PPs in favour of NR should include the prior consenting mechanism that has been requested, as reflected in our rDCO. We consider that would accord with the provisions of s127 of PA2008.
- 10.4.54. The comments made by NR in the introductory section of [REP8A-055](#) suggest that the matters in disagreement between the parties may have been resolved since the examination’s close. We therefore recommend that the SoSESNZ obtains updates from the applicant and NR as to the current state of the negotiations between them.

Part 7 – PPs in favour of LGPL

- 10.4.55. To minimise the effect of the proposed development on the passage of vessel to and from the London Gateway Port, the PPs in favour of LGPL would provide it with

an opportunity to “*approve*” or “*refuse*” a draft cable specification and installation plan (CSIP) for the area or areas of proposed Work No. 2 within the jurisdiction of London Gateway Port Harbour Empowerment Order 2008 (the HEO). That process would take place prior to the undertaker submitting an application for the CSIP’s approval, pursuant to Condition 13 of the transmission assets DML (Schedule 11 of the dDCO).

- 10.4.56. Although the PPs in favour of LGPL refer to it making a decision to approve or refuse the draft CSIP, we consider in practice this set of PPs would amount to a consultative process, allowing LGPL to make representations to the undertaker about a draft CSIP’s content prior to the latter submitting a final version to the Marine Management Organisation (MMO) for approval.
- 10.4.57. In considering the draft CSIP’s provisions LGPL would have the ability to approve (raise no objection) or refuse (raise an objection) rather than actually approve or refuse the draft CSIP. The undertaker would then be able to consider any representations made to it by LGPL prior to the CSIP’s submission to the MMO and potentially make amendments to address matters raised by LGPL. Should there be a dispute between LGPL and the undertaker about the contents of the CSIP under paragraph 95 (rDCO 94) of the PPs that dispute could be referred to an arbitrator under Article 48 of the dDCO.
- 10.4.58. LGPL in [\[REP6-080\]](#) and [\[REP8-045\]](#) has raised various concerns about the drafting of the PPs. Amongst other things, it has requested that the CSIP should include details of how any impacts on shipping sailing to and from London Gateway Port would be minimised so far as reasonably practicable during the carrying out of works covered by the draft CSIP, via a new sub-paragraph (e) in paragraph 89 (rDCO 88) of the PPs. LGPL in [\[REP6-080\]](#) also sought the inclusion of the following provision:
- “13. 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.”*
- 10.4.59. In [\[REP8-045\]](#) LGPL explained that it was seeking the inclusion of that provision to avoid the potential for the proposed development to fetter the powers it can exercise under the terms of the HEO, albeit LGPL acknowledged that the applicant was not seeking to expressly disapply powers under the HEO.
- 10.4.60. The applicant made a detailed response to LGPL’s Deadline 6 comments about the PPs in section 7 of [\[REP7-090\]](#) and in advised in [\[REP8A-039\]](#) that it had nothing further to add to LGPL’s response in [\[REP8-045\]](#). The applicant has submitted that it considers the proposed development would not cause serious detriment to the operation of the London Gateway Port and it is not seeking to disapply any provisions of the HEO under s145 of PA2008. In that regard the current HEO allows dredging to 17m below CD, with there being a future ambition to dredge to a depth of 22m below CD, which the parameters included in the dDCO would accommodate [paragraph 4.4 in REP7-090]. Accordingly, the applicant considers there would be no need to include the additional provision sought by LGPL quoted above. The applicant also opposes the inclusion of LGPL’s proposed extra sub-paragraph (e) for inclusion in paragraph 89 (rDCO 88) because it considers it would be inappropriate for impacts concerning the London Gateway Port to take priority over

all other impacts and is a demonstration for potential conflicts to arise if multiple parties had the ability to approve the CSIP.

- 10.4.61. As explained above, we would characterise the set of PPs in favour of LGPL as ones enabling LGPL to be consulted on a draft version of the CSIP prior to it being submitted for the MMO's determination as to whether that plan would or would not be acceptable. We are therefore generally content that the wording of this set of PPs proposed in the dDCO would achieve their intended purpose.
- 10.4.62. However, paragraph 92 (rDCO 91) as currently drafted includes a provision whereby the decisions (representations) made by the LGPL "may" be provided to the MMO by the undertaker. We consider that "may" should be replaced with 'must' in paragraph 92 (rDCO 91) because that amendment would ensure any representations made by LGPL would be available to the MMO. That in turn would ensure that the MMO would be aware of any views LGPL had expressed about the draft CSIP and could take them into account when determining an application for the CSIP's approval. The MMO having sight of LGPL's representations would be particularly relevant if LGPL had objected to the draft CSIP and the concerns raised by LGPL had not been fully addressed in the version of the CSIP submitted for the MMO's approval. That suggested amendment to paragraph 92 (rDCO 91) is included in our rDCO.
- 10.4.63. Having regard to the submissions made by LGPL and the applicant about the PPs in favour of the former and the various relevant proposed controls included in the dDCO, we are content that there would not be serious detriment to the operation of London Gateway Port.

Part 10 – PPs in favour of the PLA offshore

- 10.4.64. Further to: the PLA making regular written submissions throughout the examination; the PLA's attendance at the three rounds of examination hearings; and the discussions between the PLA and the applicant, a set of offshore PPs in the PLA's favour were included for the first time as Part 10 of Schedule 9 in the Deadline 7 version of the dDCO [\[REP7-008\]](#). No changes were made to this set of PPs in the final version of the dDCO [\[REP8A-004\]](#) and, amongst other things, they cover:
- The undertaker consulting the PLA in respect of the CSIP and the navigation installation plan (NIP), insofar as those plans relate to the defined area of the PLA's interest, prior to those plans being submitted for the MMO's approval under condition 13 of the DML in Schedule 11.
 - The CSIP, as it relates to the DWRs being informed by a cable burial risk assessment, and various other matters specified in paragraph 116 (rDCO 115).
 - The PLA and the undertaker notifying each other of cable exposures they identify during surveying.
 - In instances when the installed cables in the area of interest to the PLA are not at the required depth, the undertaker would undertake remediation works.
 - The submission of as built drawings for the completed works to the PLA.
 - Disputes under the PPs being referred for arbitration under Article 48.
- 10.4.65. In responding to ExQ3 DCO.3.09 the PLA submitted a copy of its preferred PPs in [\[REP7-113\]](#), which included a section on indemnity under which the PLA wished the undertaker to be responsible for compensating it for all financial costs, charges, damages, losses and expenses which might be incurred by the PLA resulting from the construction and operation of the proposed development. In its preferred PPs the PLA sought amendments in Part 2 of Schedule 11 of the dDCO which, amongst

other things, would make it a consultee of the MMO and a recipient of some documentation to be made available to the MMO and some other parties.

- 10.4.66. In [\[REP8-056\]](#) the PLA submitted it was seeking powers to approve key documents relating to works in the DWRs because the Order Land includes the northern approaches for deeper draught vessels using the Port of London and the Sunk Pilot Diamond, with pilotage being compulsory for large vessels within the London Pilotage District. The PLA considers it should be indemnified because the proposed works have the potential to affect the ability of vessels to enter or exit the Port of London and important navigational onshore equipment. With respect to indemnifying the PLA, it has submitted it should not be expected to bear the costs of defending a claim brought against it arising from the proposed development that had no legal basis [item 9.31 in [\[REP8-056\]](#)].
- 10.4.67. The applicant in section 9 of [\[REP7-090\]](#) explains why it considers some aspects of the PPs sought by the PLA were unacceptable, highlighting that no part of the proposed development would be within the PLA's jurisdiction and submitting that the MMO would be the appropriate regulator and enforcement authority. With respect to jurisdiction, the applicant submitted if a marine licence was being sought directly from the MMO, rather than via the deeming route in its application, the PLA would have no approval or control over any aspect of the works [paragraph 9.1 in [\[REP7-090\]](#)]. The applicant contends the proposed development would not cause serious detriment to the PLA's statutory undertaking and does not accept that the area of the sea affected by its proposals forms part of the approaches to the Port of London over which the PLA has jurisdiction [paragraph 9.4 in [\[REP7-090\]](#)].
- 10.4.68. The applicant recognises that the PLA is interested in the area affected by the proposed offshore works and that it is reasonable and collaborative for the PLA to be consulted and notified when works were being undertaken, but it is not accepted that the PLA needs a right of approval over the proposed works. It should be accepted that the MMO, as the regulator for the DML, would "competently" discharge its duties when considering applications for the approval of the DML's conditions [paragraph 9.5 in [\[REP7-090\]](#)]. If the PLA was to be included as an approval authority under the provisions of any made DCO for the proposed development that could result in disputes and uncertainty. The primary reason why the PLA has sought PPs was its wish to ensure the offshore cable would not impede future dredging ambitions in the DWRs to allow the passage of vessels with draughts of up to 20m. That commitment has been included in the CSIP and included as a parameter of the dDCO (part of Requirement 2) [paragraph 9.7 in [\[REP7-090\]](#)]. The applicant goes on to explain in the remainder of section 9 in [\[REP7-090\]](#) why it disagrees with aspects of the PPs sought by the PLA that had not been included in the PPs in favour of the PLA and submitted that the PLA had not provided a justification for why it should be indemnified for works to be undertaken some distance away from the port's assets, with there being no reasonable path of causation for a claim arising which would be payable to the PLA [paragraph 9.31 in [\[REP7-090\]](#)].
- 10.4.69. We, however, note that in the final version of the dDCO the applicant, without explanation, included the PLA as a prescribed consultee of the MMO for the purposes of the latter's consideration of applications made under condition 13(1) of Part 2 of Schedule 11 (transmissions assets [page 194 in [\[REP8A-004\]](#)]) (condition 22(1) in rDCO). The PLA's consultee function being limited to the seeking of approvals insofar as those approvals would relate to the DWRs. Amongst other things, that would mean the PLA would be able to make consultative representations directly to the MMO for applications for approvals relating to the

CSIP and the NIP pursuant to Condition 13(1)(g) and 13(1)(j) (respectively 22(1)(h) and 22(1)(k) in rDCO). Given the PPs' wording in paragraph 115 (rDCO 114) of Part 10 of Schedule 9, the PLA would also have the opportunity to make pre-application comments about the CSIP and the NIP to the undertaker prior to an application's submission.

- 10.4.70. We consider it important that to create certainty and aid effective enforceability plans like the CSIP and the NIP should only be subject to approvals by the appropriate regulator, in this instance the MMO. That said we consider the final wording of the dDCO would give the PLA ample opportunity to make its views known about the adequacy or otherwise of the CSIP and the NIP, before any determinations were made by the MMO.
- 10.4.71. We are not persuaded of the need to include offshore indemnity provisions in the PPs in favour of the PLA. That is because the PLA stated it “... *is seeking to ensure that any cost it is put to as a consequence of the scheme is met by the Applicant, which could be defending a claim which has no legal basis but has been brought about because of the Applicant's activities*” [item 9.31 in [REP8-056](#)]. It appears what the PLA is primarily seeking under an indemnity would be the recovery of costs that might be incurred defending claims with no real prospect of being won. Under such a scenario we consider it likely that the PLA would be able to recover any unnecessarily incurred costs from unsuccessful claimants. The PLA has submitted that a vessel using the Port of London could be damaged by the proposed development and resulting in a pollution incident in controlled waters within the port, which the PLA would have to address [\[REP7-113\]](#). However, given the distance between the proposed development and the Port of London, we consider it unlikely that such an incident would result in serious detriment to the PLA.
- 10.4.72. With respect to the need for an onshore indemnity, we are not persuaded of the need for that to be included in the PPs for the PLA. While the proposed construction compound subject to Work No. 4A would be in close proximity to the PLA's radar facility, there would be some physical separation with there being a track between the radar site and the proposed construction compound. We therefore consider it unlikely that activities associated with use of the proposed construction compound would affect the radar site. Nor do we consider that the use of Manor Way as the means of getting to and from both the radar site and the site for the proposed works would interfere with the operation or maintenance of the PLA's radar.
- 10.4.73. Accordingly, we consider that the PPs included in the dDCO would provide a suitable level of protection for the PLA and that there would be no serious detriment to the operation of the Port of London.

Part 11 – PPs in favour of ECC as highway authority

With respect to the proposed PPs in favour of ECC (as the local highway authority, Part 11 of Schedule 9), it is recorded in the SoCG between ECC, TDC and the applicant [\[REP8A-027\]](#) that while this set of PPs had largely been agreed it has not been possible to fully agree them at the examination's close, with discussions ongoing. Reference is also made in the SoCG to ECC wanting the applicant to enter into a “*Framework Highway Agreement*”. The applicant is opposed to that because it would duplicate the provisions of the proposed PPs and the DCO.

- 10.4.74. ECC in its joint closing submissions with TDC [\[REP8A-044\]](#) has explained that a Framework Highways Agreement would be read alongside the PPs in favour of the local highway authority and would: detail the process to be followed by the highway authority when the proposed highway works were being undertaken; and provide a

mechanism to ensure sufficient funding would be available to avoid reliance on the public purse.

- 10.4.75. It appears that ECC takes no issue with the drafting of the PPs included in its favour in the dDCO [REP8A-004]. Instead, it is desirous of there also being a Framework Highways Agreement, however, there is no suggestion that for the purposes of s127 of PA2008 with PPs alone there would be serious detriment to the highway undertaking. We recommend this set of PPs be included in any made DCO for the proposed development.

Part 12 – AWSL

- 10.4.76. AWSL only submissions were made in its relevant representation [RR-004]. It stated it was in discussions about agreeing PPs to protect its sewerage infrastructure. Infrastructure that needs to be accessible to AWSL all the time. The applicant has explained at paragraph 6.4.13 of [REP8A-038] that it does not propose to acquire or extinguish any interest of AWSL. The primary interaction with the proposed development would in respect of the access to the landfall working area, which would be similar to the way AWSL accesses its Manor Way facility. The applicant's drafting of PPs would provide protection for access and AWSL's apparatus within the Order Land. The applicant considers the PPs intended for AWSL would be sufficient to prevent serious detriment to AWSL's undertaking.

- 10.4.77. In section 3.1 in [REP7-090] the applicant explains that the outstanding matters between it and AWSL are:

- Agreeing a stand off distance for works within the vicinity of pipes, with the applicant proposing 6m for pipes with a diameter of 400 millimetres, while AWSL was seeking consideration on a case by case basis, which the applicant considers to be too uncertain.
- In relation to accessing the Clacton-Holland Haven water recycling centre, the applicant has proposed wording that would enable AWSL to access its infrastructure with vehicles and plant, which AWSL has not commented on.
- With respect to costs and expenses under circumstances when the undertaker installed newer or upgrade apparatus than AWSL's, the undertaker would be able to recover from AWSL the cost difference between the new and original plant, so that the overall cost position was neutral.
- Making approvals to be given by AWSL subject to a not being unreasonably withheld or delayed clause, which AWSL objects to. The terminology that the applicant is seeking has precedents.
- With respect to minimising the effect of emergency works by the undertaker, AWSL is seeking wording to requiring to the undertaker to use its best endeavours to minimise impacts on its apparatus, while the applicant wants to use reasonable endeavours to minimise the impact.
- With respect to an indemnity cap, AWSL is seeking an unlimited cap, while the applicant has proposed a cap of £30 million which is considered sufficient to cover any costs arising for AWSL.

- 10.4.78. We consider the PPs included in Part 12 of Schedule 9 in favour of AWSL appear to be reasonable. In the absence of submissions having been received from AWSL,

we are of the view that with the PPs proposed by the applicant there would not be serious detriment for AWSL.

Part 13 - Affinity

- 10.4.79. Affinity in [\[RR-001\]](#) drew attention to the presence of its 0.533m (21 inch) cast iron water main at Horsley Cross which would be affected by the proposed development. In [\[RR-001\]](#) Affinity commented:

“... The Project will affect Horsley Cross 21” Cast Iron water main, which is a key asset belonging to Affinity by both crossing and running parallel to it. This section of main is a strategic main supplying water to our Horsley Cross water treatment works. This is the area’s primary treatment works supplying 70% of the water to the Tendring Peninsula and therefore a critical asset to Affinity’s business. Any interruption to the use of this asset would have a high adverse impact on Affinity’s business and ability to supply water and therefore meet its statutory duties. Affinity requires certainty that this main will be protected to its satisfaction during construction and operation or in the alternative if that is not possible, that a suitable alternative solution can and will be provided. It has not been possible to find any meaningful consideration of these assets in the consultation materials provided. It is worth noting that the close proximity of the Project’s cables may have an adverse impact on the ongoing condition of the asset potentially causing it to fail earlier than would be expected, such corrosive effects are well known. Affinity needs to have a better understanding as to the potential effect that the high-voltage cables to be constructed as part of Project will have on its assets, through independent expert analysis, so that necessary protection measures can be put in place. ...”

- 10.4.80. In [\[RR-001\]](#) Affinity refers to the proposed development’s proximity to its East Clacton Reservoir and Pumping Station to which access is required to undertake weekly maintenance and about the limited level of engagement there has been between the parties.

- 10.4.81. The applicant in responding to [\[RR-001\]](#) advised there had been meetings with Affinity in 2022 and 2023 and there has been engagement between the parties following Affinity submitting its relevant representation [section 4.1 in [PD4-006](#)]. In response to ExQ1 DCO.1.02 Affinity submitted a copy of its preferred set of PPs [\[REP2-073\]](#) at examination Deadline 2 (22 October 2024). In section 2.27 of [\[REP3-024\]](#) the applicant commented that it considered the PPs sought by Affinity were disproportionate to the specifics of the proposed development and that it was seeking to engage with Affinity.

- 10.4.82. In [\[REP5-102\]](#) Affinity submitted that the standard set of PPs for the benefit of statutory undertakers in Part 1 of Schedule 9 of the dDCO fell short of the necessary protection it was seeking. In [\[REP5-102\]](#) Affinity advised, amongst other things, it required bespoke PPs that would:

- Require the submission of details for any potential effects on Affinity’s assets arising from electromagnetism or high voltages and the provision of an approval mechanism to allow Affinity to require such modifications to the design for the purpose of protecting its assets.
- Provide protection for and access to Affinity’s assets during construction and operation, including the submission of detailed plans for Affinity’s approval prior to the commencement of works.
- Provide for access Affinity’s operational sites during construction to ensure continued and unimpeded access to its assets at all times.

- 10.4.83. Affinity submitted an updated version of its preferred PPs in [REP6-075] and advised it was hopeful that a set of PPs would be agreed with applicant by examination Deadline 7. The Deadline 7 submissions made respectively by the applicant [REP7-090] and Affinity [REP7-115] record that there were still significant disagreement between the parties. A bespoke set of PPs in favour of Affinity was added to the dDCO for the first time in [REP7-008]. Amongst other things, Affinity advised in [REP7-115] that the proposed separation between its buried assets and the proposed development should be a minimum of 0.6m and not 0.3m as proposed by the applicant and an approval process would need to put in place where proposed works would be within specified distances of pipes of varying diameters. In [REP7-090] the applicant identified a range of matters of concern to it, ranging between more minor drafting points to more substantive matters, to numerous for us to summarise here.
- 10.4.84. Affinity in [REP8-043], amongst other things advised that it would “... *continue to engage to try to reach an agreed position by 17 March but note that the engagement from the undertaker to date has been sporadic, delayed and without sufficient clarity as to enable considered responses from Affinity*”.
- 10.4.85. The disagreement between Affinity and the applicant persisted to the examination’s close, with the Applicant identifying a number of issues of concern to it in section 2 of [REP8A-037] and the tracked version of the final version of the dDCO [REP8A-008] showed significant changes having been made following the submission of the last version of the dDCO at Deadline 7. On the final day of the examination Affinity made a further submission [AS-076] which repeated its frustrations about the engagement there had been between it and the applicant. Affinity submitted a further amended version of its preferred set of PPs.
- 10.4.86. It is clear there was engagement between the applicant and Affinity in the nine months or so in the period between the expiry of the relevant representations period on 21 June 2024 and the examination’s close on 17 March 2025. However, the submission of alternate sets of PPs at the very end of the examination suggests that the engagement was not particularly effective. In that regard it is unclear to the ExA, what, if any, sight the respective parties had of the other’s finally submitted versions of these PPs. In any event, given the timing of the submission of the revised sets of PPs there was no opportunity for the parties to make submissions about the opposing parties’ revised PPs before the examination’s close. We consider it should have been possible for professionally represented parties, such as these, to have agreed or got much closer to agreeing a set of PPs during a period of around nine months, given this set of PPs runs to approximately 10 pages.
- 10.4.87. Based on the submissions made by Affinity earlier in the examination it appears it is willing to agree a set of PPs with the applicant to avoid serious detriment to its undertaking. In that regard we consider it important and relevant that part of Affinity’s undertaking affected by the proposed development would be a water main supplying water to the Horsley Cross water treatment works, an asset involved in supplying 70% of the water to the Tendring Peninsula. Affinity must provide water to its customers and it is important, given those customers dependency on a reliable water supply at all times, that the proposed development does nothing to compromise Affinity’s ability to supply its customers. We therefore consider that any PPs in favour of Affinity must enable it to maintain a water supply and we are not persuaded that the applicant’s approach to this set of PPs has not been fully cognisant of that.

- 10.4.88. Given the very late submission of what are still a disputed set of PPs in the dDCO [\[REP8A-004\]](#), we are not satisfied for the purposes of s127 of PA2008 that reliance on the version of the PPs included in the final dDCO would avoid potentially serious detriment to Affinity's undertaking. Accordingly, in our rDCO we have made changes to this set of PPs to incorporate the text preferred by Affinity, as included in [\[AS-076\]](#).
- 10.4.89. In incorporating Affinity's preferred wording into our rDCO there appears to be incorrect cross referencing to other paragraphs or sub-paragraphs, now compounded by changes to paragraph numbering we have made in our rDCO to address the inconsistency between the numbering included in the final dDCO [\[REP8A-004\]](#) and the revised editable version. Affinity's preferred PPs, included in [\[AS-076\]](#), in places refer to sub-paragraphs rather than paragraphs and do not readily coincide with numbering used by the applicant. The confusion about paragraph/sub-paragraph cross referencing, we consider is symptomatic of the engagement shortcomings expressed by Affinity.
- 10.4.90. It is very unclear to us which paragraphs or sub-paragraphs are the correct ones to be used in this set of PPs. Accordingly, to avoid further compounding any error that might arise in any made DCO, in our rDCO we have purposefully left some paragraph or sub-paragraph numbering blank. We therefore consider the SoSESNZ obtains clarifications from both the applicant and Affinity about the correct cross referencing that should be used in this set of PPs. Given the need for that clarification, we further recommend that the SoSESNZ seeks clarification from both the Applicant and Affinity as to whether there has been any further progress in agreeing a mutually acceptable set of PPs following the examination's close that could be incorporated into any made DCO. If no progress has been made between the parties, then we further recommend, if the SoSESNZ is minded to make a DCO and agrees the version of the PPs included in the rDCO should be used, then prior to making the order the applicant and Affinity are requested to undertake a 'sense check' of our recommended set of PPs. That would ensure no inaccuracies have arisen in our seeking to incorporate the changes sought by Affinity and would, in any event, enable the paragraph and sub-paragraph cross referencing to be checked for accuracy by the parties.

Harwich Haven Authority (HHA) request for Protective Provisions

- 10.4.91. The HHA has requested the inclusion of PPs in its favour, as explained in [\[RR-043\]](#) and [\[AS-069\]](#), relating to:
- Measures being included in a made DCO that would ensure cables laid within the OfECC would be at a depth allowing future deep draught vessels to navigate the Sunk area, with the cables any protective covering needing to be at least 22m below CD to allow the passage of futures vessels with a draught of 20m.
 - Controlling the development, including construction related marine activities, to ensure there were no concurrent "*Restricted Ability to Manoeuvre*" operations occurring within the Sunk area associated with the proposed NFOWF and Sea Link projects.
 - Precluding the establishment of exclusion zones in the Sunk area or channel that would restrict vessel access or pilot boarding operations at any time.
 - Ensuring any safety zones would not impede vessels movements within the Sunk area or normal operations such as pilot boarding.
- 10.4.92. The applicant in responding to the PPs sought by the HHA submitted in [\[REP5-073\]](#), amongst other things:

- The applicant has committed to a cable burial depth of 22m below CD in the charted DWRs, but that outside the DWRs that burial depth could not be committed to because of the potential impact on the Margate and Long Sands Special Area of Conservation (MLSSAC). The applicant considers it unlikely that the capital dredging required to increase the navigable depth to 22m CD outside the DWRs and in the MLSSAC would be allowed.
- It is unclear why PPs would be needed because the proposed OfECC works within the HHA's jurisdiction would require a works licence from it and that licencing process would not be disapplied in any made DCO for the proposed development.

10.4.93. The final SoCG between the HHA and the applicant records that there were ongoing discussions between the parties concerning the PPs sought by the HHA, with it being agreed that the applicant would need to apply to the HHA for a works licence within the harbour limits under the HHA's jurisdiction [REP5-057]. At the examination's close there was continuing disagreement regarding the need for any PPs in the HHA's favour, with the applicant contending that the HHA's interests would be suitably protected without PPs and no detriment to the HHA would arise from the powers being sought in the dDCO [paragraph 3.10.9 in REP8A-038].

10.4.94. As referred to above, during the course of the examination parameters were added to Requirement 2 in Part 1 of Schedule 2 of the dDCO securing an ability for dredging within the DWRs to be undertaken to a level of 22m below CD for the duration of the proposed development. Those parameters would be secured in the rDCO and when coupled with the licencing controls applicable to the proposed OfECC works within the HHA's jurisdiction, we consider the proposed development could proceed without detriment to the HHA's operations. Accordingly, we recommend no PPs in the HHA's favour be included in any made DCO for the proposed development.

10.5. EXAMINING AUTHORITY'S RECOMMENDED CHANGES

10.5.1. Table 10.2 below sets out the substantive proposed changes included in our rDCO, which can be found at Appendix E of this recommendation. The majority of suggested changes are reported on above or elsewhere in this recommendation. Recommended insertions are shown in bold, with deletions are shown with double strike through. It should be noted that Table 10.2 does not show minor typographic or formatting errors we have found in the dDCO and corrected in the rDCO.

Table 10.2 The Examining Authority’s recommended changes to the applicant’s dDCO

Provision	Wording in the dDCO [REP8A-004]	ExA’s recommended changes	ExA’s comments
Part 1 Schedule 2 Requirements			
Requirement 5 Onshore substation works, design and landscaping	“... (2) The details submitted under sub-paragraph (1) of this requirement must be in accordance with sub-paragraph (3) and substantially in accordance with the onshore substation design principles document, including the design review process set out in section 2.3 “design review process” thereof and any design guide. (3) In relation to Work No. 15B ...”	“... (2) The details submitted under sub-paragraph (1) of this requirement must be in accordance with sub-paragraph ~~(3)~~ (4) and substantially in accordance with the onshore substation design principles document, including with the exception of the design review process set out in section 2.3 “design review process” thereof and any design guide. The design review process must accord with sub-paragraph (3) of this requirement. (3) (3) The details submitted under sub-paragraph (1) of this requirement must not be submitted to the discharging authority for approval prior to an independent design review panel reviewing the details and making any written recommendations to	See section 6.5 in Chapter 6 of this recommendation for the reason for this change to Requirement 5.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
		the undertaker about those details. Any recommendations received by the undertaker from the independent design review panel must accompany the details submitted to the discharging authority for approval under sub-paragraph (1) of this requirement. ~~(3)~~ (4) In relation to Work No. 15B ...”	
Requirement 6 Code of Construction Practice		The status of the last submitted version of the CoCP [REP7-050] to be treated as an outline document. Amended wording for this requirement set out in section 10.4 above.	For the ExA's full reasoning for this change in the status of the CoCP, see section 10.4 above.
Requirement 8 Permanent highway accesses	8.—(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	8.—(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	Changes made to sub-paragraph (2) in the interests of precision and enforceability.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
	design, layout and siting of that new or altered access have been submitted to and approved by the discharging authority in consultation with the highway authority. (2) The highway accesses must be constructed in accordance with the approved plans as applicable in each stage.	design, layout and siting of that new or altered access have been submitted to and approved by the discharging authority in consultation with the highway authority. ~~(2) The highway accesses must be constructed in accordance with the approved plans as applicable in each stage.~~ (2) Any new permanent means of access to a highway or any permanent alteration to an existing means of access to a highway must be constructed in accordance with the details approved under sub-paragraph (1).	
Requirement 10 Landscape and Ecological Management Plan	10.—(1) No stage of the onshore works may commence until for that stage a written landscape and ecology management plan in accordance with the outline landscape and ecology	10.—(1) No stage of the onshore works may commence until for that stage a written landscape and ~~ecology~~ ecological management plan in accordance with the outline landscape and ~~ecology~~ ecological	Changes made to sub-paragraph (2) to introduce a new sub-paragraph (3) to separate the need to submit details of an implementation timetable from the requirement to implement the works in accordance

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
	management plan as appropriate for the relevant stage, has been submitted to and approved by the discharging authority. (2) The landscape and ecological management plan(s) submitted under sub-paragraph (1) must include an implementation timetable and must be implemented as approved as applicable in each stage. (3) Onshore site preparation works must only take place in accordance with the relevant details set out in the outline landscape and ecological management plan as certified.	management plan as appropriate for the relevant stage, has been submitted to and approved by the discharging authority. (2) The landscape and ecological management plan(s) submitted under sub-paragraph (1) must include an implementation timetable. ~~and must be implemented as approved as applicable in each stage.~~ (3) The onshore works must be carried out in accordance with the landscape and ecological management plans approved under sub-section (1), as applicable in each stage. ~~(3)~~ (4) Onshore site preparation works must only take place in accordance with the relevant details set out in the outline landscape and ecological management plan as certified.	with approved landscape and ecological management plans, in the interests of precision and enforceability.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
Requirement 11 Soil Management Plan	11.—(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. 2) The onshore works must be carried out in accordance with the approved soil management plan(s) as applicable in each stage.	11.—(1) No stage of the onshore works may be commenced until, for that stage, a soil management plan ~~in accordance with the measures set out in the code of construction practice~~ substantially in accordance with the measures included in application document number 9.21 Revision E certified under this Order, as appropriate for the relevant stage, has been submitted to and approved by the discharging authority. 2) The onshore works must be carried out in accordance with the approved soil management plan(s) as applicable in each stage.	Changes made to sub-paragraph (1) to ensure consistency with the recommended changes made to Requirement 6 (CoCP), explained in detail in section 10.4 of this chapter.
Requirement 17 Onshore build options		New sub-paragraph (3) added relating the widths for onshore export corridor works in the event of build option 2 (proposed FEOWF only) being implemented.	For the ExA's reasoning and full recommended changes, see section 10.4 above.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
Requirement 22 Onshore decommissioning	22.—(1) A written scheme of decommissioning for the onshore works must be submitted to and approved by the discharging authority not less than 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.	22.—(1) A written scheme of decommissioning for the onshore works must be submitted to and approved by the discharging authority not less than six months prior to any decommissioning works commencing. (2) The written scheme of decommissioning submitted for approval under sub-paragraph (1) for the onshore works must include a code of construction practice. ~~and the (3) The approved scheme~~ approved under sub-paragraph (1) must be implemented as approved in the carrying out of any decommissioning works or relevant part of it.	In the interests of precision and enforceability changes are being recommended to the structure and wording of sub-paragraph (2) and the creation of a new sub-paragraph (3).
New Requirement 23 Migratory bat monitoring and renumbering of		23.- The offshore works must not be commenced until a scheme for monitoring the migration of bats between the United	The ExA's full reasoning for the introduction of this requirement is provided in section 5.5 in Chapter 5 of our recommendation.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
existing 23 and 24		Kingdom and the European mainland has been submitted to and approved by the Secretary of State in consultation with Natural England. Thereafter the monitoring of migratory bats must be undertaken in accordance with the approved monitoring scheme. Existing Requirements 23 and 24 in the dDCO renumbered 24 and 25 in the rDCO.	
Part 2 Schedule 2 Approval of Matters specified in requirements			
Paragraph 2(3) and (4) (applications made under requirements)	"... (3) With the exception of Requirement 5, in the event that the discharging authority or relevant planning authority does not determine an application within the period set out in sub-paragraph (1), the discharging authority or relevant planning authority is to be taken to have granted all parts of the application (without any	"... (3) With the exception of Requirements 5, 12 and 18 in the event that the discharging authority or relevant planning authority does not determine an application within the period set out in sub-paragraph (1), the discharging authority or relevant planning authority is to be taken to have granted all parts of the application (without any	The ExA in its schedule of proposed changes to the dDCO [PD-028] proposed that the discharge for Requirements 5, 10, 11, 12 and 18 should be subject to deemed refusals rather than deemed approvals should applications for the approval of matters specified in those requirements not be determined within eight weeks of their receipt by the discharging

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
	condition or qualification) at the end of that period. (4) With respect to Requirement 5, where an application has been made to the discharging authority or relevant planning authority for any agreement or approval required pursuant to those requirements and the discharging authority or the relevant planning authority has not given notice to the undertaker of their decision within the period set out in sub-paragraph (1), within a period of 8 weeks or by the conclusion of such period as may be extended by agreement under sub paragraph (1)(b), then the application shall be deemed to have been refused consent."	condition or qualification) at the end of that period. (4) With respect to Requirements 5, 12 and 18 where an application has been made to the discharging authority or relevant planning authority for any agreement or approval required pursuant to those requirements and the discharging authority or the relevant planning authority has not given notice to the undertaker of their decision within the period set out in sub-paragraph (1), within a period of 8 weeks or by the conclusion of such period as may be extended by agreement under sub paragraph (1)(b), then the application shall be deemed to have been refused consent."	authority or relevant planning authority. The applicant commented in [REP7-082] it was only agreeable to Requirement 5 (OnSS design) being made the subject to a deemed refusal on the basis of a nationally significant infrastructure projects (NSIP) should not be unnecessarily delayed by a failure to determine applications for approval in a timely manner. The dDCO's wording was amended to accommodate deemed refusals in respect of Requirement 5. Notwithstanding the fact that the proposed development is an NSIP, we consider that Requirements 12 (Protected species onshore) and 18 (Compensatory works) should be subject to deemed refusals rather than approvals should applications for their approval of matters are not determined within eight weeks or after the expiry of an agreed extended period. That is because Requirements 12 and 18

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
			respectively relate to the protection of nationally protected species and the provision of compensatory habitat for a qualifying feature (LBBG) of the AOE SPA and the Alde-Ore Estuary Ramsar site.
Paragraph 6(6) Appeal	"... (6) Any further information required under sub-paragraph (5) 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 or relevant planning 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 ..."	"... (6) Any further information required under sub-paragraph (5) must be provided by the appeal party from whom the further information was requested to the appointed person and the other appeal parties, ~~the discharging authority or relevant planning 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 ..."	The references to the discharging authority or relevant planning authority and any consultee are considered to be unnecessary given the preceding wording in sub-paragraph (6) and the definition for " <i>appeal parties</i> " in paragraph 6(3)(a).

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
Schedule 6 Land of which temporary possession may be taken			
Plots 16-022 and 17-005	“...16-022, 17-003, 17-005 Temporary use for the purposes of carrying out Work Nos. 13 and 13A Work Nos. 14, 14A, 14B, 14C, 14D, 15, 15A, 15B, 15C, 15D, 15E, 16 and 17	“... ~~16-022~~, 17-003, ~~17-005~~ Temporary use for the purposes of carrying out Work Nos. 13 and 13A Work Nos. 14, 14A, 14B, 14C, 14D, 15, 15A, 15B, 15C, 15D, 15E, 16 and 17 ...”	Recommended deletion of Plots 16-022 and 17-005 from the TP powers sought for the reasons set out in Chapter 9 of the ExA's recommendation.
Schedule 7 Land in which only new rights etc. may be acquired			
Plots 17-015, 17-016, 17-017, 17-018, 17-026, 17-027, 17-028, 17-029, 17-030, 17-031, 18-001, 18-002 and 19-001	“...17-015, 17-016, 17-017, 17-018, 17-026, 17-027, 17-028, 17-029, 17-030, 17-031, 18-001 and 18-002 ... 19-001, 19-002, 19-003”	“...~~17-015, 17-016, 17-017, 17-018,~~ 17-026, 17-027, 17-028, 17-029, 17-030, ~~17-031, 18-001 and 18-002~~ ... ~~19-001~~, 19-002, 19-003”	Recommended deletion of Plots 17-015, 17-016, 17-017, 17-018, 17-031, 18-001 and 18-002 from the Compulsory Acquisition (CA) powers sought for the reasons set out in Chapter 9 of the ExA's recommendation. Plot 19-001 deleted because, as explained in the section in Chapter 9 reporting on National Trust land, the applicant advised in [AS-075] that it was no longer seeking CA powers in respect to that plot.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
Schedule 9 Protective Provisions			
Part 5 For the protection of Network Rail		Amendments to paragraph 46 to reflect the changes sought by Network Rail	See section 10.4 above for the ExA's reasoning for this recommended change.
Part 7 For the protection of London Gateway Port Limited	92. (rDCO 91) 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.	91. All decisions of London Gateway under these provisions must be issued in writing and the undertaker may must provide a copy of any such decisions to the Marine Management Organisation or any other regulatory body.	See section 10.4 above for the ExA's reasoning for this recommended change.
Reference to apparatus in stopped up streets in Parts 12 (Anglian Water) and 13 (Affinity Water)	Apparatus in stopped up streets "Regardless of the temporary stopping up or diversion of any highway under the powers conferred by article 14 (temporary restriction of the use of streets) ... take all necessary access across any such stopped up highway ...	~~Apparatus in stopped up streets~~ Apparatus in streets with temporary restrictions of use "Regardless of the temporary stopping up restriction in use or diversion of any highway under the powers conferred by article 14 (temporary restriction of the use of streets) ..." take all	With respect to works affecting apparatus in streets subject to temporary use restrictions, in Parts 12 and 13 reference is made to the temporary stopping up of streets rather temporary closures. For the purposes of the relevant legislation the temporary stopping up of a highway does not exist. Article 14 refers to the temporary restriction in

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
	which at the time of the stopping up or diversion was in that highway."	necessary access across any ~~such stopped-up~~ restricted use highway ... which at the time of the ~~stopping-up~~ restriction in use or diversion was in that highway."	the use of streets and in Parts 12 and 13 of Schedule 9 of the rDCO the ExA has removed all references to temporary stopping up and replaced them with temporary restriction in the use of streets. With respect to the PPs in favour of Affinity, although we have recommended that the applicant's wording in Part 13 be amended by the wording sought by Affinity in [AS-076], there is still a need for the references to temporary stopping up to be changed and that is something we have included in the rDCO.
Part 13 For the protection of Affinity		Incorporation of extensive changes sought by Affinity in [AS-076]	In section 10.4 of this chapter we have explained why we have recommended making the changes sought by Affinity.
Schedule 10 Deemed marine licence – Generation Assets			
Renumbered Condition 21(Equivalent to		Essex County Council as discharging authority for requirements included in	For ExA's explanation for this recommended change see section 6.1 in Chapter 6.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
Condition 12 in [REP8A-004])		Schedule 2 added as a consultee of the MMO's for the purposes of in relation to works relating to the intertidal area	
Renumbered Condition 21(6) (Equivalent to Condition 12(6) in [REP8A-004])	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.	~~No Percussive piling associated with the offshore substation platform foundations together with cable laying or seabed preparation must not may take place between 25th November to 3rd January~~ 1 November to 24 January (inclusive) in any year for the protection of spawning herring unless otherwise agreed in writing with the MMO. For the purposes of this condition "southern array area" means the area identified as having medium to high confidence in terms of suitability for herring spawning within the heatmapping exercise detailed within the Fish and Shellfish Ecology Technical Baseline Report.	The explanation for this recommended change is given in section 4.3 of Chapter 4 of our recommendation.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
Schedule 11 Deemed marine licence – Transmission Assets			
New sub-paragraph in (1)(g) in condition 22 (equivalent to condition 13 in Part 2 in [REP8A-004] Margate and Long Sands special area of conservation benthic mitigation plan and renumbering of following sub-paragraphs in this condition.		22(1)(g) a Margate and Long Sands special area of conservation benthic mitigation plan, substantially in accordance with document number 9.13 Revision G certified under this Order, Thereafter subparagraphs (1)(h) to (1)(l) renumbered (1)(i) to (1)(m)	Recommended change in the status of the Margate and Long Sands Special Area of Conservation – Benthic Mitigation Plan [REP8A-011] from a final version of this plan to in effect an outline document, further to advice provided by Natural England in [REP8A-052] . For a fuller explanation see section 4.1 in Chapter 4 of our recommendation.
Renumbered Condition 22(1)(h)(iv) (equivalent to condition	"... (g) a cable specification and installation plan for the relevant stage which accords with principles of the outline cable specification and installation plan, to include - ...	"... (h) a cable specification and installation plan for the relevant stage which accords with principles of the outline cable specification and installation plan, to include - ...	The change to this sub-paragraph is a consequence of a final approval for the Margate and Long Sands Special Area of Conservation – Benthic Mitigation Plan being

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
13(1)(g)(iv) in Part 2 in [REP8A-004]	(iv) proposals for the cable laying methodology, volume and areas of cable protection within the Margate and Long Sands special area of conservation, and proposals for timing and methodology for reporting on actual volumes and areas post construction, in accordance with the Margate and Long Sands special area of conservation benthic mitigation plan; and ...”	(iv) proposals for the cable laying methodology, volume and areas of cable protection within the Margate and Long Sands special area of conservation, and proposals for timing and methodology for reporting on actual volumes and areas post construction, in accordance with the Margate and Long Sands special area of conservation benthic mitigation plan to be approved pursuant to sub-paragraph 22(1)(g); and ...”	required under new sub-paragraph 22(1)(g).
Renumbered Condition 22(6) (Equivalent to Condition 13(6) in [REP8A-004])	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.	No Percussive piling associated with the offshore substation platform foundations together with cable laying or seabed preparation must not may take place between 25th November to 3rd January 1 November to 24 January (inclusive) in any year for the protection of spawning herring unless otherwise agreed in writing with the MMO. For the purposes of this condition “southern array	The explanation for this recommended change is given in section 4.3 of Chapter 4 of our recommendation.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
		area” means the area identified as having medium to high confidence in terms of suitability for herring spawning within the heatmapping exercise detailed within the Fish and Shellfish Ecology Technical Baseline Report.	
Schedule 13 Compensation			
Schedule 13 changed from a sole part to four parts		Conversion of Schedule 13 into a schedule of four parts as follow: Part 1 compensation for the LLBG qualifying feature of the AOE SPA and Alde-Ore Estuary Ramsar site Part 2 compensation for Kittiwake qualifying feature of the FFC SPA Part 3 compensation for the Guillemot and Razorbill qualifying features of the FFC SPA Part 4 compensation for the sandbank qualifying feature of the MLS SAC	Reasonings given for the recommended change in section 1.4 of this Chapter and in Chapter 7.

Provision	Wording in the dDCO [REP8A-004]	ExA's recommended changes	ExA's comments
		Full text for each of the parts is included in the rDCO in Appendix E	

10.6. MATTERS RAISED DURING THE EXAMINATION WHICH ARE NOT RECOMMENDED FOR INCLUSION IN ANY MADE DCO FOR THE PROPOSED DEVELOPMENT

PHASING RESTRICTION

- 10.6.1. SCC is concerned that the undertaking of proposed offshore works, most particularly the installation of the wind turbine generators (WTGs), might precede consent being given to the proposed EACN. The EACN forms part of NGET's proposed Norwich to Tilbury project (a grid upgrade scheme). The proposed EACN is intended to provide the means by which the proposed development would connect to NGET's transmission system. At the date of submitting this recommendation there is no extant DCO application for the proposed Norwich to Tilbury project, with NGET having advised of its intention to submit an application for examination in mid 2025 [\[RR-078\]](#).
- 10.6.2. SCC's concern is that from within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (SCHAONB) people's experience of the special qualities of that area could be reduced by the proposed WTGs' presence, especially if they had unnecessarily been installed. The unnecessary WTG installation point arising if electricity generated by the proposed development was incapable of being exported to NGET's transmission system, because the proposed EACN had not been consented and would be unavailable. Accordingly, during the course of ISH2 SCC promoted the inclusion of a phasing requirement in in any made DCO for the proposed development, characterised by the applicant as a Grampian type condition, intended to preclude the installation of the proposed WTGs, until there was certainty the proposed EACN would be provided [page 6 in [REP1-071](#)]. SCC provided suggested wording for a phasing requirement in responding to ExQ2 DCO.2.05 [\[REP4-049\]](#).
- 10.6.3. ECC at ISH2 also gave support to the inclusion of a phasing requirement [\[REP1-062\]](#). That would be to avoid any adverse effects from the proposed onshore works being experienced from a development that was commenced, but then remained incomplete because the EACN did not receive consent [\[REP2-044\]](#). The applicant has submitted [page 82 in [REP8A-027](#)] that the imposition of a phasing requirement would not accord with the guidance relating to the tests (necessity, precision and enforceability) for imposing requirements²⁵.
- 10.6.4. AT ISH2 the applicant advised that it was opposed to a restriction being imposed that would qualify the ability to commence or otherwise implement a development authorised by any made DCO. In that regard the applicant referred to there being other instances of generating stations, including offshore wind farms, being consented without a phasing restriction prior to their connection points similarly being consented. With respect to the latter point the applicant drew attention to the Hinkley Point C power station being consented ahead of a consent being issued for its grid connection [paragraphs 3.2.21 to 3.2.23 in [REP1-059](#)].
- 10.6.5. This phasing matter was raised by SCC and responded to by the applicant variously during the examination, most particularly for SCC in [\[REP2-046\]](#), [\[REP4-048\]](#),

²⁵ Paragraph 017 in [Planning Act 2008: Content of a Development Consent Order required for Nationally Significant Infrastructure Projects](#) (April 2024)

[REP4-049](#) and [REP6A-009](#)] and the applicant in [[REP5-073](#) and [REP6-050](#)]. Item 3 in SCC's and the applicant's signed SoCG summaries their respective positions [[REP5-064](#)]. Although some submissions were made after the submission of the SoCG between SCC and the applicant, the underlying positions relating to this issue did not change and we consider it unnecessary for us to provide a commentary on the submission referred to earlier in this paragraph.

- 10.6.6. We consider it highly improbable that the installation of offshore infrastructure, forming part of a proposed development with an estimated total cost of £3.5 billion at the time of the application's submission [paragraph 28 in [APP-029](#)], would be commenced by any undertaker making commercially prudent decisions, whether that be the applicant or any other party benefitting from a transfer under proposed Article 7 of the dDCO, without certainty the electricity to be generated by this NSIP was capable of being exported to NGET's transmission system. In that regard the application has been promoted on the basis of it connecting to the proposed EACN, pursuant to a grid connection offer the applicant has accepted from NGET. The proposed development therefore has a very high dependency on the EACN's availability.
- 10.6.7. Making a connection to NGET's proposed Sea Link transmission reinforcement project²⁶, as an alternative to connecting with the proposed EACN, was discounted by the applicant on viability and deliverability grounds prior to the application's submission [paragraph 4.1.8 in [APP-066](#)]. Following the application's submission, the Government, in any event, announced its decision on 3 September 2024 to cease its funding for the feasibility study that had been exploring the proposed development and the proposed NFOWF making connections with the proposed Sea Link project [[AS-011](#)].
- 10.6.8. Given the proposed development's dependency on the availability of the proposed EACN, we are not persuaded there is a genuine prospect of either the proposed offshore works subject to Work No. 1, most particularly the installation of between 41 and 79 WTGs [[REP3-020](#)], or the proposed onshore works being implemented in the absence of the proposed EACN having been consented. Even if we are incorrect in considering prudent financial planning would prevent substantial offshore works being undertaken prior to there being certainty about the proposed EACN's availability, we consider powers under Article 39 (Abatement of works abandoned or decayed) of the dDCO would be available to the SoSESNZ. Under the provisions of Article 39, the SoSESNZ would have the ability to issue a notice requiring the removal of what would, in effect, be abandoned offshore works forming part of Work No. 1, most particularly the proposed WTGs, were those structures not being used in pursuance of their authorised purpose, the generation of electricity.
- 10.6.9. Accordingly, we consider there is no need for a phasing restriction to be incorporated into any made DCO for the proposed development and no such provision has been included in our rDCO.

10.7. CONCLUSION AND RECOMMENDATIONS

- 10.7.1. The ExA has considered all versions of the draft DCO as submitted by the applicant, from the submission version [[APP-024](#)] to the final version [[REP8A-004](#)] and has considered the degree to which the applicant's final version has addressed outstanding matters.

²⁶ Currently subject to extant application EN020026

- 10.7.2. The ExA is content that the provisions of the final version of the dDCO [\[REP8A-004\]](#) would generally provide adequate mitigation for potential adverse effects identified in the ES and sufficiently address the issues raised during the course of the Examination. However, the ExA considers amendments need to be made to the final version of the dDCO [\[REP8A-004\]](#). Those amendments are referred to in in section 10.4 and 10.5 (including Table 10.2) above and have been included in the ExA's rDCO, which can be found in Appendix E. Numerous relatively minor drafting errors have also been addressed by us in our rDCO, including paragraph renumbering arising from the discrepancy between the numbering used in [\[REP8A-004\]](#) and the revised editable version.

MATTERS FOR THE SoSESNZ

- 10.7.3. We recommend that prior to any DCO being made for the proposed development the SoSESNZ will require the following clarifications or information to be submitted for their consideration:
- In relation to the PPs in favour of NR (Part 5 in Schedule 9) we recommend that the SoSESNZ seeks clarification from both the applicant and NR as to whether there has been any further progress in agreeing a mutually acceptable set of PPs following the examination's close, which could be incorporated into any made DCO for the proposed development.
 - With respect to the PPs in favour of Affinity included in Part 13 of Schedule 9 we have found it necessary to include the changes sought by Affinity in its close of examination day submission [\[AS-076\]](#). Given the considerable disagreement that remained with this set of PPs at the examination's close we recommend that the SoSESNZ seeks clarification from both the applicant and Affinity as to whether there has been any further progress in agreeing a mutually acceptable set of PPs following the examination's close which could be incorporated into any made DCO for the proposed development. We have further recommended that should our recommended changes to Part 13 of Schedule 9 be accepted by the SoSESNZ that both the applicant and Affinity be required to undertake a sense checking exercise for this set of PPs before they are included in any made DCO, given the difficulty we have had in reconciling changes sought by Affinity with what was included in the final version of the dDCO [\[REP8A-004\]](#), not least because of the difference in paragraph numbering used by the parties, compounded by the inconsistency between the numbering used in [\[REP8A-004\]](#) and revised editable version of the dDCO, given the latter forms the basis of our rDCO.
 - With respect to the DMLs in Schedules 10 and 11, we have encountered issues reconciling paragraph and sub-paragraph cross references within those schedules. That is because while the amended editable version of the dDCO addressed formatting issues, including consecutive paragraph numbering throughout Schedules 10 and 11, as opposed to standalone numbering within the individual parts, it appears a cross referencing check within and between paragraphs, sub-paragraphs and conditions was not undertaken by the applicant prior to the amended editable version of the dDCO being submitted. Accordingly, if the SoSESNZ is minded to accept our recommended changes to Schedules 10 and 11, which include seeking to correct cross referencing discrepancies, we recommend that the SoSESNZ obtains corrected versions of Schedules 10 and 11 from the applicant so that the changes we have recommended can be cross checked for accuracy.

- With respect to Schedule 13 (Compensation) we have found that there would be an adverse effect on the integrity for the guillemot qualifying feature of the Farne Islands Special Protection Area and we therefore recommend that the SoSESNZ obtains from the applicant amended versions of Part 3 of Schedule 13 of the rDCO and the Guillemot and Razorbill Implementation and Monitoring Plan, to enable compensatory measures for guillemot as a qualifying feature of the Farne Islands Special Protection Area to be secured within any made DCO for the proposed development.

10.7.4. Having regard to the matters raised in this chapter and taking the matters relevant to the DCO raised in preceding chapters into account, if the SoSESNZ is minded to make a DCO, it is recommended that any made DCO should be made in the form set out in the rDCO, which is in Appendix E, subject to obtaining the clarifications we have referred to above.

11. SUMMARY OF FINDINGS AND CONCLUSIONS

11.1. INTRODUCTION

11.1.1. This chapter summarises the Examining Authority's (ExA) conclusions and sets out our recommendation to the Secretary of State for Energy Security and Net Zero (SoSESNZ).

11.1.2. This is an application where National Policy Statements (NPS) have effect and accordingly falls to be determined under section (s) 104 of the Planning Act 2008 (PA2008). As required by s104(2), in making this recommendation the ExA has had full regard to the relevant NPSs. For this case the relevant NPSs are:

- Overarching National Policy Statement for Energy (EN-1) (NPS EN-1)
- National Policy Statement for Renewable Energy Infrastructure (EN-3) (NPS EN-3)
- National Policy Statement for Electricity Networks Infrastructure (EN-5) (NPS EN-5)

11.1.3. The ExA has also had regard to the Marine and Coastal Access Act 2009 and to the following appropriate marine policy documents, as required s104(2)(aa):

- Marine Policy Statement 2011 (MPS)
- East Inshore and East Offshore Marine Plans 2014 (EIEOMP)
- South East Inshore Marine Plan (June 2021) (SEIMP)

11.1.4. We have also had regard to the National Planning Policy Framework 2024 (NPPF) and the relevant development plan policies identified in the Local Impact Reports (LIR) submitted by: Tendring District Council (TDC) and Essex County Council (ECC) (a joint LIR); Babergh District Council; East Suffolk Council; and Suffolk County Council (SCC).

11.2. CONSIDERATION OF FINDINGS

11.2.1. We conclude that making the recommended Development Consent Order (rDCO), subject to the incorporation of an additional compensatory measure (summarised below and explained more fully in Chapter 7 of this recommendation) would be in accordance with: NPS EN-1; NPS EN-3; NPS EN-5; the MPS; the EIEOMP; and the SEIMP. With regard to all other matters and representations received during the examination, there are no important and relevant matters that would individually or collectively lead to a different recommendation to that below.

11.2.2. We conclude that the very great weight to be attached to the need for the proposed development, as set out in NPS EN-1, EN-3 and EN-5, outweighs the negative effects caused as identified in chapters 4, 5 and 6 (and concluded on in the planning balance in chapter 8) of this recommendation. In so doing, we are content that the regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010 and NPPF paragraph 208 tests with respect to heritage assets and the public benefits test, together with the statutory duties in relation to national landscapes, have been discharged.

11.2.3. Were the SoSESNZ to conclude differently and find that the negative effects outweigh the need for the proposed development in the planning balance, then the Critical National Priority (CNP) policy in NPS EN-1 would need to be considered. We do not consider that any of the exclusions in paragraph 4.2.17 of NPS EN-1

apply in this case, and the mitigation hierarchy would be fully satisfied based on our recommended additions to the rDCO.

- 11.2.4. The SoSESNZ is the Competent Authority under the Habitats Regulations and will need to determine whether an Appropriate Assessment is required. The ExA advises that adverse effects on integrity (AEoI) at the following European (UK national site network) sites cannot be excluded:
- The Margate and Long Sands Special Area of Conservation (MLS SAC) by virtue of physical habitat loss or disturbance to its qualifying sandbank feature under the proposed development's maximum design scenario.
 - The Flamborough and Filey Coast Special Protection Area (SPA) by virtue of in-combination harm to its qualifying kittiwake, guillemot and razorbill features.
 - The Farne Islands SPA by virtue of in-combination harm to its qualifying guillemot feature.
 - The Alde-Ore Estuary SPA and Ramsar site by virtue of in-combination harm to its qualifying lesser black backed gull feature.
- 11.2.5. With regard to the necessary tests of the Habitats Regulations, we are content that there are no alternative solutions to the delivery of the proposed development. Moreover, we consider the benefits of the proposed development, particularly from its contribution to the reduction in United Kingdom carbon emissions and maintaining energy security, would be sufficient to allow the SoSESNZ to conclude that there are imperative reasons of overriding public interest (IROPI) for the proposed development.
- 11.2.6. In terms of compensation, we advise that mechanisms exist to enable suitable compensatory provision for each identified qualifying feature. That is, however, subject to the SoSESNZ being content that strategic compensation (the extension of a SAC or new designation of another SAC with Annex 1 Sandbank feature) is deliverable by the Department for Environment, Food and Rural Affairs (Defra) to compensate for AEoI at the MLS SAC.
- 11.2.7. With respect to the identified AEoI for the guillemot qualifying feature of the Farne Islands SPA, we have further recommended that a compensatory measure for that qualifying feature should be secured in any DCO that might be made for the proposed development. To secure that compensatory measure it would be necessary for the SoSESNZ to obtain from the applicant wording for incorporation into Schedule 13 of the ExA's rDCO.
- 11.2.8. It follows that the ExA advises that there is a potential route through the Habitats Regulations for this proposed development. To enable that we have recommended the inclusion of four parts, Parts 1, 2, 3 and 4, in Schedule 13 of our rDCO, to secure the provision of necessary compensation measures, together with a further part addressing compensatory measure for the AEoI for guillemot as a qualifying feature of the Farne Islands SPA.
- 11.2.9. Were the SoSESNZ to conclude differently in relation to either IROPI or alternatives, then the CNP policy in NPS EN-1 would need to be considered. The ExA considers that this could be met in accordance with Figure 3 of section 4 of NPS EN-1, given the compensatory measures we have recommended.
- 11.2.10. Turning to the application for compulsory acquisition (CA) and temporary possession (TP) powers, the ExA concludes that the proposed development for which CA powers are sought (documented in the Book of Reference [\[REP7-013\]](#))

would generally be in accordance with the conditions/tests in s122, s127 and 132 of PA2008. However, there are some instances where we are not satisfied that the conditions under s122 of PA2008 for the CA of part of a freehold and the acquisition of rights in respect of some land plots have been met. Accordingly, in respect of those plots of land we have recommended that they be excluded from the CA powers sought by the applicant in any made DCO for the proposed development. The land plots identified in chapter 9 that we consider should be excluded from the CA of rights (and associated TP) powers sought by the applicant have been deleted in Schedule 7 of the ExA's rDCO.

- 11.2.11. In chapter 9 we also identified two further land plots for which the applicant is seeking TP powers over. For those plots we consider the need for their use has not been adequately justified by the applicant. Accordingly, those land plots have also been recommended for exclusion from the TP powers sought by the applicant in Schedule 6 in the ExA's rDCO.
- 11.2.12. The full reasons for the recommended modifications to the land rights powers sought by the applicant are set out in chapter 9 of our recommendation. Additionally, in chapter 9, and as summarised below, we have identified the need for the SoSESNZ to obtain clarifications and/or revised documentation from the applicant and some affected persons relating to, amongst other things: the interests of the Crown Estate; the applicant's decision at the examination's close to remove a land plot inalienably held by the National Trust (NT) at Orford Ness from the CA of rights originally sought and the resulting status of the NT's objection under s130 of PA2008; and the sets of protective provisions in favour of Network Rail and Affinity Water Limited.
- 11.2.13. The ExA accepts that the need to secure the land and rights required, and to construct the proposed development within a reasonable commercial timeframe, would represent a significant public benefit. We are satisfied that, with the changes we have proposed, the land to be taken is proportionate and no more than is reasonably required. We are content that the applicant has generally explored reasonable alternatives to the CA of land, rights and interests sought and there are for the most part no alternatives that ought to be preferred. We also consider that adequate and secure funding would be available to enable CA within the statutory period following the making of any DCO for the proposed development.
- 11.2.14. The ExA has had regard to the Public Sector Equality Duty (PSED) throughout the examination and in producing this report. The proposed development would not harm the interests of persons who share a protected characteristic or have any adverse effect on the relationships between such persons and persons who do not share a protected characteristic. On that basis, there would be no breach of the PSED.
- 11.2.15. The ExA has also had regard to 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).
- 11.2.16. The ExA concludes that an Order should be made subject to: the changes included in the rDCO; and the making of further amendments to the compensatory measures included in Schedule 13 of the rDCO following the receipt of revised text and documentation to be provided by the applicant, which would overcome any final concerns with the proposed development, and resolution of the matters identified below.

11.3. MATTERS FOR THE SECRETARY OF STATE

- 11.3.1. The following matters are ones which the ExA recommends that the SoSESNZ considers further with the relevant parties.
- 11.3.2. In relation to the Habitats Regulations Assessment (HRA) and benthic ecology, as described above and in chapter 7, the SoSESNZ should seek confirmation that strategic compensation (the extension of a SAC or new designation of another SAC with Annex 1 Sandbank feature) is deliverable by Defra to compensate for the AEol for the MLS SAC.
- 11.3.3. In relation to HRA and bird species, compensation would be secured by the Guillemot and Razorbill Implementation and Monitoring Plan (GRIMP) under Part 3 of Schedule 13 of the rDCO. However, reference to the Farne Islands SPA was not included in either this part of the dDCO [[REP8A-004](#)] or the applicant's without prejudice wording for Schedule 13 included in [[REP8A-042](#)]. The ExA therefore recommends that the SoSESNZ should obtain from the applicant amended versions of Part 3 of Schedule 13 of the rDCO, together with the GRIMP, to include making provision for compensatory measures for guillemot as a qualifying feature of the Farne Islands SPA.
- 11.3.4. In relation to land rights, we recommend the following changes be made to the CA and TP powers that are being sought by the applicant:
- The exclusion of TP and CA powers from the part of Plot 17-024 to the east of Normans Farm intended for screen planting works in any made DCO and the applicant's submission of revised versions of Sheet 18 in the Onshore Land Plans and the Book of Reference (BoR) to reflect Plot 17-024's partial removal from the land rights power sought.
 - The exclusion of TP and CA powers from the entirety of Plots 17-015, 17-016, 17-017, 17-018, 18-001 and 18-002 in any made DCO, in line with the changes included in the rDCO, and the applicant's submission of revised versions of Sheet 18 in the Onshore Land Plans and the BoR to reflect the removal of the plots from the land rights powers sought.
 - The exclusion of the entirety of Plot 17-031 from the acquisition of the rights sought, unless it can be demonstrated to the SoSESNZ's satisfaction that there is either no alternative mechanism to the CA of rights for securing a connection between the proposed onshore substation and the proposed East Anglia Connection Node substation site or it would currently be impossible to reduce the powers sought within Plot 17-031 to a more proportionate extent.
 - The exclusion of the entirety of Plots 16-022 and 17-005 from the TP powers sought in any made DCO, in line with the changes included in the rDCO, and the applicant's submission of revised versions of Sheet 17 in the Onshore Land Plans and the BoR to reflect the removal of Plots 16-022 and 17-005 from the TP powers sought.
- 11.3.5. We further recommend that the SoSESNZ obtains clarification regarding the following outstanding matters regarding land rights:
- From the applicant and the Crown Estate about what consent, if any, is required under s135 of the PA2008 from the Crown Estate with respect to the applicant's proposals for new rights creation in respect of Plots 19-001, 19-002, 19-003 and 20-003.
 - In respect of Plot 19-001 (land at Orford Ness), pursuant to the submission made by the applicant on the final day of the examination [[AS-075](#)]:

- from the applicant revised versions of Sheet 19 in the Onshore Land Plans and the BoR removing Plot 19-001 from the CA powers being sought.
- following the removal of Plot 19-001 from the Onshore Land Plans and BoR, request the National Trust's confirmation as to whether it wishes to maintain or withdraw its objection to the applicant's request for CA powers.

11.3.6. In relation to the rDCO, the SoSESNZ may wish to consider seeking clarification from both the applicant and Network Rail as to whether there has been any further progress in agreeing a mutually acceptable set of protective provisions (PP) following the examination's close (Part 5 in Schedule 9), which could be incorporated into any made DCO for the proposed development.

11.3.7. With respect to the PPs in Part 13 of Schedule 9 in favour of Affinity Water Limited (Affinity) the SoSESNZ may wish to consider seeking clarification from both the applicant and Affinity as to whether there has been any further progress in agreeing a mutually acceptable set of PPs following the examination's close which could be incorporated into any made DCO for the proposed development. If a set of PPs has not been agreed between Affinity and the applicant, then both parties should be requested to undertake a 'sense' check of the version of this set of PPs recommended by the ExA. This check is needed because of the disparity in paragraph and sub-paragraph numbering there is in the versions of this set of PPs submitted by the parties at the examination's close.

11.3.8. With respect to the Deemed Marine Licences (DML) in Schedules 10 and 11, we have identified errors in paragraph cross referencing, particularly in Part 2 of both schedules. The ExA has sought to rectify those errors in the rDCO. However, given the extensive nature of the amendments, we recommend that the SoSESNZ also obtains corrected versions of Schedules 10 and 11 from the applicant so that the changes we have recommended can be fully cross checked for accuracy.

11.4. RECOMMENDATION

11.4.1. For all of the above reasons, the ExA considers that the proposed development meets the tests in s104 of the PA2008. On that basis, the ExA concludes, subject to addressing the issues set out in the above section, that the case for the development has been made and recommends that the SoSESNZ makes the Five Estuaries Offshore Wind Farm Development Consent Order in the form included in appendix E to this recommendation.

APPENDIX A: REFERENCE TABLES

Table A1 – National Planning Policy Statements

NPSs
National Policy Statement for Energy (January 2024) (NPS EN-1)
National Policy Statement for Energy (January 2024) (NPS EN-3)
National Policy Statement for Energy (January 2024) (NPS EN-5)
National Policy Statement for Ports (January 2012) (NPSfP)

Table A2 – Other Relevant National Policies for the Proposed Development

Relevant National Policies
The National Planning Policy Framework December 2023 (NPPF) National Planning Policy Framework - Guidance - GOV.UK
UK Marine Policy Statement 2011 (MPS) UK marine policy statement - GOV.UK
East Inshore and East Offshore Marine Plans 2014 (EIEOMP) East Marine Plans - GOV.UK
South East Inshore Marine Plan 2021 (SEIMP) The South East Marine Plan Documents - GOV.UK
Marine Strategy Regulations 2010 transposes the Marine Strategy Framework Directive (MSFD) (Directive 2008/56/EC) into UK law The Marine Strategy Regulations 2010

Table A3 – Summary of Relevant Legislation for the Proposed Development

Relevant Legislation
▪ Acquisition of Land Act 1981 ▪ Ancient Monuments and Archaeological Areas Act 1979 ▪ Burial Act 1857 ▪ Climate Change Act 2008 ▪ Compulsory Purchase Act 1965

Relevant Legislation

- Compulsory Purchase (Vesting Declarations) Act 1981
- 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 Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018
- Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020
- Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019
- 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
- Marine and Coastal Access Act 2009
- Marine Works (Environmental Impact Assessment) Regulations 2007
- National Parks and Access to the Countryside Act 1949
- Natural Environment and Rural Communities Act 2006
- Neighbourhood Planning Act 2017 (commencement pending)
- 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 (England) Regulations 2000
- The Air Quality Standards Regulations 2010 (as amended)
- The Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019
- The Construction (Design and Management) Regulations 2015
- The Conservation of Habitats and Species Regulations 2017 (as amended)
- The Conservation of Offshore Marine 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 Espoo and Aarhus Conventions
- The Hedgerows Regulations 1997

APPENDIX A: REFERENCE TABLES

FIVE ESTUARIES OFFSHORE WIND FARM – EN010115

REPORT TO THE SECRETARY OF STATE FOR ENERGY SECURITY AND NET ZERO: 17 June 2025

Relevant Legislation

- 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 Offshore Marine Conservation (Natural Habitats & c.) Regulations 2017
- The OSPAR convention 1992
- The Ramsar Convention 1971
- 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
- The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015
- The Water Industry Act 1991
- The Water Resources (Abstraction and Impounding) Regulations 2006
- The Water Supply (Water Quality) Regulations 2018
- 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(as amended)
- 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 (WFD) (2008/98/EC)

Table A4 - 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)
- Energy White Paper: Powering our Net Zero Future (2020)
- Powering Up Britain (2023)

Table A5 – Relevant Planning Policies for Tendring District Council, Essex County Council, East Suffolk Council, Babergh and Mid Suffolk District Councils and Suffolk County Council

Relevant Local Plan policies
Tendring District Council - Local Plan 2013-2033 (Part 1 adopted 26 January 2021 and Part 2 adopted January 2022) [REP2-042] ▪ Policy SP 1 – Presumption in favour of sustainable development ▪ Policy SP 2 – Recreational disturbance avoidance and mitigation strategy ▪ Policy SP 6 – Infrastructure and connectivity ▪ Policy SP 7 – Place shaping principles ▪ Policy SPL 2 – Settlement development boundaries ▪ Policy SPL 3 – Sustainable design ▪ Policy HP 1 – Improving health and wellbeing ▪ Policy HP 2 – Community facilities ▪ Policy HP 3 – Green infrastructure ▪ Policy HP 4 – Safeguarded open space ▪ Policy PPL 1 – Development and flood risk ▪ Policy PPL 3 – The rural landscape ▪ Policy PPL 4 – Biodiversity and geodiversity ▪ Policy PPL 5 – Water conservation, drainage and sewerage ▪ Policy PPL 7 – Archaeology ▪ Policy PPL 8 – Conservation areas ▪ Policy PPL 10 – Renewable energy generation and energy efficiency measures ▪ Policy PPL 13 – Ardleigh Reservoir catchment area ▪ Policy CP 1 – Sustainable transport and accessibility ▪ Policy CP 2 – Improving the transport network ▪ Policy DI1 – Infrastructure delivery and impact mitigation
Essex County Council - Essex Minerals Local Plan 2014 [REP2-043] ▪ Policy 8 – Safeguarding mineral resources and mineral reserves
East Suffolk Council – Suffolk Coastal Local Plan (adopted September 2020) [REP2-041] ▪ Policy SCLP10.4 - Landscape Character ▪ Policy SCLP10.1 - Biodiversity and Geodiversity
Babergh and Mid Suffolk Joint Local Plan (adopted November 2023) [REP2-040] ▪ Policy LP18 – Area of Outstanding Natural Beauty ▪ Policy LP25 – Energy Sources, Storage and Distribution
Suffolk County Council – Minerals & Waste Local Plan (adopted July 2020) [REP2-046] ▪ Policy MP10 – Mineral consultation and safeguarding areas

Table A6 – Made DCOs

Other Made DCOs Identified by the Applicant	
	▪ Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 ▪ Awel y Môr Offshore Wind Farm Order 2023 ▪ Hornsea Four Offshore Wind Farm Order 2023 ▪ East Anglia ONE North Offshore Wind Farm Order 2022 ▪ Hornsea Three Offshore Wind Farm Order 2020 ▪ Norfolk Vanguard Offshore Wind Farm Order 2022 ▪ Norfolk Boreas Offshore Wind Farm Order 2021

Appendix B: List of Abbreviations Used

Abbreviation or acronym	Reference
AA	Appropriate Assessment
AADT	Average annual daily traffic flow
AD Guidance	Planning Act 2008 Guidance on associated development applications for major infrastructure projects (April 2023)
AEoI	Adverse Effects on Integrity
Affinity	Affinity Water Limited
AIL	Abnormal indivisible load
AIS	Air insulated switchgear
ALA1981	Acquisition of Land Act 1981
ALARP	As low as reasonably practicable
ALC	Agricultural Land Classification
AMS	Archaeological Mitigation Strategy
AOE SPA	Alde-Ore Estuary Special Protection Area
AONB	Area of Outstanding Natural Beauty
AP	Affected person
APFP Regs	The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (as amended)
Applicant	Five Estuaries Offshore Wind Farm Limited
Art.	Article
ARSI	Access required site inspection
AWSL	Anglian Water Services Limited
AyM	Awel y Môr offshore wind farm
BCRCE	Blackwater, Crouch, Roach and Colne Estuaries
BIMP	Benthic Implementation and Monitoring Plan
BMV	Best and most versatile
BNG	Biodiversity Net Gain
BoR	Book of Reference
CA	Compulsory acquisition
CA Guidance	Guidance related to procedures for the compulsory acquisition of land (September 2013)
CAH	Compulsory acquisition hearing
CA Regs	Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (as amended)
CAS	Clean Air Strategy
CCA 2008	Climate Change Act 2008
CCMSWA	Convention on the Conservation of Migratory Species of Wild Animals
CCR	Climate change resilience
CD	Chart datum
CEA	Cumulative effects assessment
CfD	Contracts for Difference
CFWG	Commercial Fisheries Working Group
CNP	Critical national priority
CoCP	Code of Construction Practice
COLREGs	Convention on the International Regulations for Preventing Collisions at Sea
CompA	Competent authority

APPENDIX B: REFERENCE TABLES

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REPORT TO THE SECRETARY OF STATE FOR ENERGY SECURITY AND NET ZERO: 17 June 2025

CoS	Chamber of Shipping
CoPA1974	Control of Pollution Act 1974
CRM	Collision risk modelling
CRoW2000	Countryside and Rights of Way Act 2000
CS	Core Strategy
CSIP	Cable Specification and Installation Plan
CTMP	Construction Traffic Management Plan
DAS	Design and Access Statement
DVANOB	Dedham Vale Area of Outstanding Natural Beauty
DCO	Development Consent Order
dDCO	Draft Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
DfT	Department for Transport
DLUHC	Department for Levelling Up, Housing and Communities
DL	Deadline
DML	Deemed Marine Licence
DMRB	Design Manual for Roads and Bridges
DPD	Development Plan Document
DWR	Deep water route
EA	Environment Agency
EACN	East Anglia Connection Node
EA2	East Anglia Two Offshore Wind Farm
EA2L	East Anglia Two Limited
EAZ	East Anglia offshore wind farm zone
EEAST	East of England Ambulance Service Trust
ECC	Essex County Council
ECHR	European Convention on Human Rights
ECOW	Ecological clerk of works
EIA	Environmental Impact Assessment
EIA Regs	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
EIEOMP	East Inshore and East Offshore Marine Plans 2014
EIP	Environment Improvement Plan 2023
EL	Examination Library
EM	Explanatory Memorandum
EPA1990	Environmental Protection Act 1990
e-page	The electronic page number, rather than a document page number, in either application or examination documents cited by the Examining Authority in its recommendation to SoSESNZ
EPR	The Infrastructure Planning (Examination Procedure) Rules 2010 (as amended)
EPS	European protected species
ES	Environmental Statement
ExA	Examining Authority
ExQ1/2/3	The ExA's first, second, third rounds of written questions
FEOWF	Five Estuaries Offshore Wind Farm
FFC SPA	Flamborough and Filey Coast Special Protection Area
FID	Financial investment decision

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FRA	Flood Risk Assessment
FS	Funding Statement
GEART	Guidelines for Environmental Assessment of Road Traffic 1993
GEATM	Environmental Assessment of Traffic and Movement 2023
GGOWF	Greater Gabbard Offshore Wind Farm
GHG	Greenhouse gas
GIS	Gas insulated switchgear
GOWF	Galloper Offshore Wind Farm
GRIMP	Guillemot and Razorbill Implementation and Monitoring Plan
GW	Gigawatt
GWh	Gigawatt hour
ha	Hectare(s)
HDD	Horizontal directional drilling
HE	Historic England
HEO	London Gateway Port Harbour Empowerment Order 2008
HGV	Heavy goods vehicle
HHA	Harwich Haven Authority
HHFA	Harwich Harbour Fisherman's Association
HoT	Heads of terms
HPAI	Highly pathogenic avian influenza
HPI(s)	Habitat(s) of principal importance
HRA	Habitats Regulations assessment
HRA 1998	Human Rights Act 1998
HRSN	Herring Seasonal Restriction Note
IAP	Initial assessment of principal issues
IEMA	Institute of Environmental Management and Assessment
IHLS	International Herring Larvae Survey
IMO	International Maritime Organisation
IP	Interested party
iPCoD	Interim Population Consequences of Disturbance
IPMP	Offshore In-Principle Monitoring Plan
IP Regs	The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015
IROPI	Imperative reasons of overriding public interest
ISH	Issue specific hearing
JNCC	Joint Nature Conservation Committee
KKE	Kentish Knock East
KIMP	Kittiwake Implementation and Monitoring Plan
kJ	Kilo joule
km	Kilometre
kV	Kilovolt
LBBG	Lesser black-backed gull
LCA	Tendring District Council Landscape Character Assessment of 2001
LCT	Landscape character type
LEMP	Landscape and Ecological Management Plan
LLFA	Local Lead Flood Authority
LGPL	London Gateway Port Limited
LIR	Local Impact Report
LLFA	Lead local flood authority

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LNR	Local Nature Reserve
LPA	Local planning authority
LRN	Local Road Network
LSE	Likely Significant Effects
LURA2023	Levelling Up and Regeneration Act 2023
LVIA	Landscape and visual impact assessment
LWS	Local Wildlife Site
m	Metre
MCA	Maritime and Coastguard Agency
MCAA2009	Marine and Coastal Access Act 2009
MCZ	Marine Conservation Zone
MDS	Maximum design scenario
MHWS	Mean High Water Springs
MLS SAC	Margate and Long Sands Special Area of Conservation
MMO	Marine Management Organisation
MoD	Ministry of Defence
MPS	Marine Policy Statement 2011
MRF	Marine Recovery Fund
MU	management unit
MW	Megawatt
MWh	Megawatt hour
m	Metre
NE	Natural England
NERC2006	Natural Environment and Rural Communities Act 2006
NFFO	National Federation of Fishermen's Organisations
NGET	National Grid Electricity Transmission PLC
NH	National Highways
NLCA	National Landscape Character Area
NMU	Non-motorised user
NFOWF	North Falls Offshore Wind Farm
No/Nos	Number/Numbers
NPA 2017	The Neighbourhood Planning Act 2017
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NPSE	Noise Policy Statement for England
NPS EN-1	Overarching National Policy Statement for Energy
NPS EN-3	National Policy Statement for Renewable Energy Infrastructure
NPS EN-5	National Policy Statement for Electricity Networks Infrastructure
NPSfP	National Policy Statement for Ports
NRA	Navigational Risk Assessment
NR	Network Rail
NSIP	Nationally Significant Infrastructure Project
NSN	National site network
NT	National Trust
OBNGR	Onshore Biodiversity Net Gain Indicative Design Stage Report
OCSS	Offshore Coordination Support Scheme
oCBRA	Outline Cable Burial Risk Assessment
oCSIP	Outline Cable Specification and Installation Plan
oCTMP	Outline Construction Traffic Management Plan

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oPEMP	Outline Project Environmental Management Plan
OfECC	Offshore export cable corridor
OFLCP	Outline Fisheries Liaison and Co-existence Plan
OfSS	Offshore substation
oGWMP	outline Groundwater Monitoring and Mitigation Plan
OFH	Open floor hearing
oLEMP	Outline Landscape and Ecological Management Plan
oMWSI	Outline Marine Written Schemes of Investigation
oMMMP - Piling	Outline Marine Mammal Mitigation Protocol – Piling
OnECC	Onshore export cable corridor
oNIP	Outline Navigation and Installation Plan
OnSS	Onshore substation
oPAMP	Outline Public Access Management Plan
OSP	Offshore substation platform
OTE SPA	Outer Thames Estuary Special Protection Area
OTNR	Offshore Transmission Network Review
OWF	Offshore wind farm
oWSI	Onshore Written Scheme of Investigation
oWTP	Outline Workforce Travel Plan
PA2008	Planning Act 2008 (as amended)
PLA	Port of London Authority
PM	Preliminary meeting
PMA	Private means of access
PP	Protective provision
PRoW	Public right of way
PSED	Public sector equality duty
R	Requirement
REZ	Renewable Energy Zone
TIAA	Report to Inform the Appropriate Assessment
RIES	Report on the Implications for European Sites
RPA	Root protection area
RR	Relevant representation
RSA	Road safety audit
RSPB	Royal Society for the Protection of Birds
RTD	Red throated diver
s	Section within an act of Parliament
SAC	Special Area of Conservation
SCC	Suffolk County Council
SCHAONB	Suffolk Coast and Heaths Area of Outstanding Natural Beauty
SEIMP	South East Inshore Marine Plan (June 2021)
SF6	Sulphur hexafluoride
SLVIA	Seascape, Landscape and Visual Assessment
SMP	Soil management plan
SNCB	Statutory Nature Conservation Body
SNS SAC	Southern North Sea Special Area of Conservation
SoCG	Statement of Common Ground
SoR	Statement of Reasons

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SoS	Secretary of State
SoSESNZ	Secretary of State for Energy Security and Net Zero
SoSLUHC	Secretary of State for Levelling Up, Housing and Communities
SPA	Special Protection Area
SPFL	Strutt and Parker (Farms) Limited and Liana Enterprises
SPP	Special Parliamentary Procedure
sq.m	Square metre
SRN	Strategic road network
SSSI	Site of Special Scientific Interest
SU(s)	Statutory Undertakers
SuDS	Sustainable drainage system
TA	Transport Assessment
TCC	Temporary construction compound
TCE	The Crown Estate
tCO ₂ e	Tonnes of carbon dioxide equivalent
TCPA 1990	The Town and Country Planning Act 1990 (as amended)
TDC	Tendring District Council
T Fairley	T Fairley and Sons Limited
TH	Corporation of Trinity House of Deptford Strond
TJB	Transition joint bay
TMP	Transport Management Plan
TP	Temporary possession
TPO	Tree preservation order
TWh	Terawatt hour
UK	United Kingdom
UKCP18	United Kingdom Climate Projections 2018
USI	Unaccompanied site inspection
UXO	Unexploded ordnance
WCS	Worst case scenario
WFD	The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017
WLA	Wale loss assessment
WMS	Written Ministerial Statement
Work No./Nos.	Work number or Work numbers
WR	Written representation
WTG	Wind turbine generator
Zol	Zone of influence
ZTV	Zone of theoretical visibility

APPENDIX B: REFERENCE TABLES

FIVE ESTUARIES OFFSHORE WIND FARM – EN010115

REPORT TO THE SECRETARY OF STATE FOR ENERGY SECURITY AND NET ZERO: 17 June 2025

APPENDIX C: HRA REPORT

1. FINDINGS AND CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

1.1. INTRODUCTION

This Appendix to Chapter 4 sets out the Examining Authority's (ExA's) analysis and conclusions relevant to the Habitats Regulations Assessment (HRA). This will assist the Secretary of State for Energy Security and Net Zero (SoSESNZ), 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').

1.1.1. This Appendix is structured as follows:

- Section 1.2: Findings in relation to Likely Significant Effects on the UK National Site Network 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: Compensation measures
- Section 1.8: HRA conclusions

1.1.2. 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).

1.1.3. For the purpose of this recommendation, 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 compensatory measures for adverse effects on any of these sites.

1.1.4. Policy considerations and the legal obligations under The Habitats Regulations are described in chapter 2 of the ExA's recommendation.

1.1.5. The ExA has been mindful throughout the examination of the need to ensure that the SoSESNZ 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), through written questions and ISHs.

1.1.6. A number of the HRA matters discussed during the examination were also relevant to the Environmental Impact Assessment (EIA). Therefore, this Appendix should be read alongside the following sections of this Report:

- Section 4.1: Benthic and Intertidal Ecology, Including Effects on Physical Processes and Sediment Quality
- Section 4.2 Offshore Ornithology
- Section 4.3: Marine Mammals and Shellfish Ecology

Report on the Implications for European Sites and Consultation

- 1.1.7. The ExA produced a Report on the Implications for European Sites (RIES) [PD-027] which compiled, documented, and signposted HRA-relevant information provided in the DCO application and examination representations up to Deadline 5 (10 January 2025). The RIES was issued to set out ExA's 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 3 February 2025 and 3 March 2025. Comments were received from IPs, including the applicant [REP7-083], NE [REP7-110], and the Royal Society for the Protection of Birds (RSPB) [REP7-114] at Deadline 7 (3 March 2025). These comments have been taken into account in the drafting of this Appendix.
- 1.1.8. It is noted that at the point of issue of the RIES, several HRA matters remained outstanding. Numerous examination submissions at Deadline 6 onwards included HRA-relevant information. NE advised that the RIES should be updated and issued to the SoSESNZ alongside the ExA's recommendation.
- 1.1.9. In accordance with the Planning Inspectorate's Advice Page 10 (<https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-habitats-regulations-assessments>), the RIES is not revised following consultation and as such the ExA did not republish a revised version. This Appendix considers all HRA representations made by IPs during the examination, including those made after consultation on the RIES.
- 1.1.10. Given the amount of HRA information submitted by both the applicant and NE following publication of the RIES, the SoSESNZ may wish to undertake further consultation to fulfil the 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 European sites is shown in figures 2.1 to 45.1 of the Summary of Designated Sites [APP-044].
- 1.1.13. The proposed development is not directly connected with, or necessary to, the management of a European site. Therefore, the SoSESNZ must make an 'appropriate assessment' (AA) of the implications of the proposed development on potentially affected European sites in light of their conservation objectives.

1.1.14. The applicant's assessment of effects is presented in the following application document(s):

- 5.4 Report to Inform Appropriate Assessment (RIAA) [REP8-004] (superseding application version [APP-040] and versions submitted at Deadline 1 and 7 [REP1-016] [REP7-017]) hereafter referred to as 'the RIAA'
- 5.4.1 HRA Site Integrity Matrices [REP7-019] (superseding application version [APP-041] and [REP2-004])
- 5.4.2 HRA Screening Report [APP-042]
- 5.4.3 HRA Screening Matrices [REP8-006] (superseding [APP-043], [REP5-011] [REP7-021])
- 5.4.4 Summary of Designated Sites [REP7-021] (superseding [APP-044])
- 5.4.5 Lesser Black Backed Gull Habitats Regulations Assessment [REP7-025] (superseding [APP-045] and [AS-039]), hereafter referred to as 'the LBBG HRA'
- 5.5 Habitats Regulations Derogation Case [REP4-007] (superseding [APP-046] and [AS-003])
- 5.5.1 Benthic Compensation Strategy Roadmap [REP8-008] (superseding [APP-047] and [REP7-027])
- 5.5.2 Outline Benthic Implementation and Monitoring Plan [REP7-029] (superseding [APP-048] and [REP5-013])
- 5.5.3 Lesser Black Backed Gull Compensation – Evidence, Site Selection and Roadmap [REP8-010] (superseding [APP-049] [REP2-006] and [REP5-015])
- 5.5.4 Kittiwake – Evidence, Site Selection and Roadmap [REP5-017] (superseding [APP-050] and [REP2-008])
- 5.5.5 Guillemot and Razorbill – Evidence, Site Selection and Roadmap [REP8-012] (superseding [APP-051], [REP2-010] and [REP5-019])
- 5.5.6 Lesser Black Backed Gull Implementation and Monitoring Plans [REP8A-009] (superseding [APP-052], [REP2-012], and [REP5-021])
- 5.5.7 Kittiwake Implementation and Monitoring Plans [REP5-023] (superseding [APP-053] and [REP2-014])
- 5.5.8 Guillemot and Razorbill Implementation and Monitoring Plans [REP8-014] (superseding [APP-054], [REP2-016] and [REP5-025])
- 5.5.9 Lesser Black Backed Gull Compensation Site Suitability Report [APP-055]
- 5.5.10 Compensation Measures Funding Statement [APP-056]
- 5.5.11 Compensation Longlist and Shortlist [APP-057]

1.1.15. The applicant undertook an evidence plan process in relation to various topics related to the EIA and HRA which involved NE, the Marine Management Organisation (MMO), the Environment Agency (EA), and other bodies such as the RSPB, and The Wildlife Trusts (TWT). Details of the aspect topics, the discussions that took place and the associated documentation is provided in the Evidence Plan [APP-034 to APP-037].

1.1.16. Section 6 of the RIAA [REP8-004] includes a summary of the consultation undertaken by the applicant. Table 6.1 summarises

consultation responses relating to HRA received through the pre-application stage. The table summarises the comments from statutory consultation bodies and the action taken by the applicant in addressing comments.

- 1.1.17. The RIAA and supporting documents were updated at various deadlines through the examination in response to representations and written questions. During the examination the applicant submitted a change request comprising 10 proposed changes, and these changes were accepted by the ExA as described in Section 1 of this recommendation. One of the changes resulted in an update to the LBBG HRA Report [AS-039] to provide information to support the change request. See section 1.3 of the RIES [PD-027] for further details. No other documents relating to the HRA were updated in relation to the change request.
- 1.1.18. The applicant identified likely significant effects (LSE) on non-UK European sites in European Economic Area (EEA) States in the RIAA [REP8-004]. Only UK European sites are addressed in this Appendix. The German Federal Maritime and Hydrographic Agency [RR-035] raised the issue of collision risk to migratory bat species. The applicant confirmed in response to ([REP4-039], ME.2.09) that this pathway does not impact European sites designated for bats within the UK National Site Network (NSN) [REP4-039]. This issue is therefore not discussed within this Appendix.

Summary of HRA Matters Considered During the Examination

- 1.1.19. The main HRA matters raised by the ExA, NE and other IPs and discussed during the examination include:
- The adequacy of the applicant's baseline data and mitigation proposals in relation to the LBBG compensation site (Alde-Ore Estuary (AOE) SPA and Ramsar, Orfordness - Shingle Street SAC).
 - The adequacy of the applicant's modelling in relation to disturbance and collision risk to offshore ornithology.
 - The assessment of effects on marine mammals including the use of the interim Population Consequences of Disturbance (iPCoD) modelling and the adequacy of mitigation proposals.
 - The assessment of effects on the Margate and Long Sands (MLS) SAC including the definition of the maximum design scenario (MDS) or worst-case scenario (WCS), conclusions on AEol, and the adequacy of proposed compensatory measures.
 - The range of potential LSE on the Stour and Orwell SPA and Orfordness – Shingle Street SAC.
 - The applicant's conclusions on LSE (nightjar and marsh harrier at Minsmere to Walberswick SPA and harbour porpoise at various North Sea sites).
 - The applicant's conclusions in relation to AEol on the kittiwake, northern gannet, guillemot and razorbill qualifying features of the Flamborough and Filey Coast (FFC) SPA and the red-throated diver feature of the Outer Thames Estuary (OTE) SPA.

- The feasibility, deliverability and likely success of the proposed compensatory measures (against various criteria) in respect of LBBGs, kittiwakes, guillemots and razorbill qualifying features.
- The availability of strategic compensation (being developed by the Department for Environment, Food and Rural Affairs (Defra) with NE and the Joint Nature Conservation Committee (JNCC)) for MLS SAC.

1.1.20. These matters are discussed in the sections below, as appropriate.

1.2. FINDINGS IN RELATION TO LIKELY SIGNIFICANT EFFECTS

- 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 are listed in matrices 1 to 116 of the HRA Screening Matrices [REP8-006]. The RIAA [REP8-004] and LBBG HRA [REP7-026] set out the methodology applied to determining what would constitute a 'significant effect'.
- 1.2.3. In its relevant representation (RR), NE (C23 [PD2-005]) queried the omission of two sites from the HRA Screening Report [APP-042]: Alderney West Coast and the Burhou Islands Ramsar site (located in Guernsey) and the Cote de Granit Rose-Sept Iles SPA (France). This was on the basis that it held pre-application discussions concerning apportioning gannets to these sites with the applicant.
- 1.2.4. The ExA requested that the applicant update its suite of HRA documents to assess the impacts to the Alderney West Coast and the Burhou Islands Ramsar site as part of the RIES (Q2.2.1 [PD-027]). In response, the applicant stated [REP7-083] that the Ramsar site is not underpinned by legislation requiring it to be considered within a HRA because it sits within the Crown Dependency of Guernsey. Impacts to the site have been assessed within the EIA, which concludes that there will not be any significant effects on the site. NE has not commented on this matter further.
- 1.2.5. The ExA sought, as part of the RIES (Q2.2.3 [PD-027]), clarification with NE and all IPs as to whether there were any additional sites or qualifying features that could be affected by the proposed development. NE responded at Deadline 7 [REP7-110] referring to table 5.1 in its RR [RR-081]. This table included sites where there are features for which outstanding concerns remain (no additional sites or features were identified). However, NE (Table 1 ref 4 [REP7-104]) advised that the HRA screening matrix for the Isles of Scilly SPA [REP5-012] did not include all the site's qualifying features and suggested that the applicant should indicate all qualifying features of the SPA and state

why they would be screened in or not. The applicant [REP8-036] has since updated the matrix to include all qualifying features. It states that the features were outside of the mean maximum foraging range +1 standard deviation and were consequently screened out.

- 1.2.6. No additional UK European sites or European site features have been identified by IPs that could be affected by the LBBG compensation works for inclusion within the LBBG HRA Report.
- 1.2.7. On the basis of the evidence provided, the ExA considers that all relevant European sites and features have been identified.

LSE from the Proposed Development Alone

Main HRA Report

- 1.2.8. The applicant identified potential impacts of the proposed development during construction, operation and maintenance and decommissioning considered to have the potential to result in LSE alone in section 4 of the HRA Screening Report [APP-042].
- 1.2.9. Tables in the HRA Screening Report [APP-042] list the sites and qualifying features, the impact pathways which could affect them, and the LSE conclusion and justification, by receptor group as follows:
 - Table 4.10 – subtidal and intertidal benthic ecology
 - Table 4.12 – marine mammals
 - Table 4.14 – offshore and intertidal seabird ornithology
 - Table 4.16 – SPAs and Ramsar sites with non-seabird features, which could be at risk of collision during migration
 - Table 4.18 – migratory fish
 - Table 4.20 – onshore ecology
- 1.2.10. This information should be read in conjunction with section 9.1 and table 9.1 of the RIAA [REP8-004], which summarises various updated LSE conclusions for offshore and intertidal ornithology that were not reflected in the HRA Screening Report [APP-042]. The impacts considered by the applicant to have the potential to result in LSE are shown in the HRA Screening Matrices [REP8-006]. The applicant concluded no LSE for 68 European sites within the UK NSN from the main development but 2 of these sites were then screened in for LSE from the LBBG HRA (Alde-Ore and Butley Estuaries SAC and Orfordness – Shingle Street SAC), as discussed below.
- 1.2.11. In its RR, NE (H20 [RR-081]) advised that all designated sites with harbour porpoise as a feature within the North Sea Management Unit (MU) should be screened into the HRA, rather than designated sites within 26km from the proposed development, as proposed by the applicant. The ExA understands this to refer to sites presented in screening matrix 22 transboundary sites for harbour porpoise [REP8-006]. As these are transboundary sites this issue is not discussed further in this Appendix.

- 1.2.12. NE (J5 and J14 of [PD2-012]) advised that impacts from operational port activities should be included as an impact pathway in the screening (section 3.6 of [APP-042]). NE considered that given the proposed development is an extension to the Galloper Offshore Wind Farm (OWF), there is a higher likelihood of the same operational and maintenance port facility to be used (located adjacent to Harwich port, within the Stour and Orwell SPA). NE noted that impacts to bird qualifying features were greater than predicted for the Galloper OWF operational and maintenance facility. There is a risk that if the same operational port location is proposed, an AEoI may not be excluded. The applicant ([REP1-051] and [REP5-074]) argued that the operational port for the proposed development has not yet been determined and any additional works or traffic within harbour limits would be subject to separate harbour authority licences and/or consents.
- 1.2.13. NE (Table 1 ref 5 and ref 6 [REP7-104]) advised that the Stour and Orwell SPA and Abberton Reservoir SPA waterbird assemblages were not screened into the Migratory Collision Risk Modelling (MCRM) Report [APP-116]. The applicant (NE-14 and NE-15 [REP8-016]) updated the MCRM Report [REP8-016] to include waterbird assemblage species for the Stour and Orwell SPA and the Abberton Reservoir SPA. Note that the HRA Screening Matrices [REP8-006] have not been updated to include the waterbird assemblage for the Abberton Reservoir SPA.
- 1.2.14. NE (C39 [PD2-005]) questioned the applicant's justification for excluding operational displacement and disturbance effects for dispersing auks migrating south from the North Sea east coast colonies (Farne Islands SPA and FFC SPA) during the post-breeding season. The applicant [REP1-051] repeated the justification provided in the RIAA [REP1-016], that the array area is not an important foraging habitat and abundance in the area is low. NE [REP7-110] clarified in response to the RIES ([PD-027] , QT3.3.10) that it questioned the applicant's characterisation of the area regarding it as highly speculative when based on the snapshot of evidence provided by the digital aerial surveys (DAS). Nevertheless, it was not seeking an update to the quantification of impacts, as the DAS data provided meet best practice standards and has been sufficient to assess impacts on Farne Islands SPA and FFC SPA guillemot and razorbill population during the winter. Potential LSE for migratory auks therefore remained screened out.
- 1.2.15. NE (E2 and E18, [PD2-007]) queried the applicant's assessment of pressures and impacts to SPA supporting benthic habitats, and highlighted the red-throated diver (RTD) feature of the OTE SPA specifically, which the applicant screened out for impacts to prey availability. These concerns are set out in further detail in Table 2.1 of the RIES. In response to RIES question QT2.1.5 [PD-027] NE confirmed [REP7-110] that no further action was required from the applicant as an assessment of prey availability on ornithology was screened out for LSE, and that for this project an assessment of the

impacts to supporting benthic habitats would be unlikely to materially change the assessment.

1.2.16. Additionally on RTD, the ExA notes there is a discrepancy between the applicant's documents: the HRA Screening Matrices (matrix 24 [REP8-006]) reported a positive screening conclusion for operational disturbance and displacement, however table 9.1 and paragraph 9.1.5 of the RIAA confirmed that the operational phase has been screened out. Given that the applicant committed to follow NE's best practice guidelines on other vessel movements during all phases of the development (including operation) for both the offshore export cable corridor (OfECC) and array area (see [REP8A-014]), the ExA recommends that this pathway is taken forward to AA to accord with the People Over Wind judgement (Court of Justice of the European Union (CJEU) Case C-323/17 People over Wind and another v Coillte Teoranta [2018]) regarding consideration of mitigation at the screening stage.

1.2.17. Other than this, the applicant's conclusion of no LSE with respect to the sites screened for impacts from the main development were not disputed by the ANCB or ExA during the examination.

LBBG HRA Report

1.2.18. The LBBG HRA Report [APP-045] assessed the potential impacts arising from the works associated with the measures to compensate for impacts to LBBG. This included installation of predator fencing, as well as the operation and maintenance and removal (decommissioning) of the fencing. The applicant [REP7-025] concluded that the proposed development would be likely to give rise to LSE, either alone or in combination with other projects or plans, on one or more of the qualifying features of:

- AOE Ramsar site
- AOE Estuary SPA
- Alde-Ore and Butley Estuaries SAC
- Minsmere-Walberswick Ramsar site
- Minsmere-Walberswick SPA
- Orfordness – Shingle Street SAC

1.2.19. And that there would be no LSE either alone or in combination on all qualifying features of the following European sites:

- Minsmere-Walberswick Heaths and Marshes SAC
- OTE SPA
- Sandlings SPA
- SNS SAC
- Staverton Park and the Thicks Wantisden SAC.

1.2.20. The qualifying features and LSE pathways screened in by the applicant for the LBBG compensation works are detailed in table 3.1 of the LBBG HRA Report [REP7-025] and the HRA Screening Matrices [REP8-006]. Clarity was sought during the examination over which effect pathways were considered for potential LSE to the Minsmere-

Walberswick SPA and Ramsar sites ([PD-027], Q2.2.4), and this is explained in the latest iterations.

1.2.21. During the examination, the applicants' screening conclusions and decision to exclude certain LSE impact pathways were challenged by IPs.

1.2.22. NE advised (J8 [PD2-012]) that the LBBG HRA should include an assessment of climate change impacts noting that the shingle habitats at Orfordness – Shingle Street SAC are likely to be highly sensitive to potential climate change impacts (including sea level rise, and increased storminess, wave heights, temperatures and drought). The applicant [REP1-051] provided additional information about the history of the site, concluding that the area is stable, that the shingle habitat on the site has been highly modified and is not considered to be highly sensitive, and that the proposed works will not impact the habitat's resilience to climate change and therefore an assessment of the pathway is not required. NE [REP4-061] initially sought a pre-construction commitment to checking the National Coastal Erosion Risk Mapping 2 (NCERM2) data to confirm the risk, however it confirmed at Deadline 7 that based on the NCERM2 map the proposed compensation site area is not predicted to erode over the next 50 to 100 years and this issue was therefore resolved [REP7-107].

1.2.23. NE (J16 [PD2-012]) advised that the applicant had not provided sufficient evidence in support of the migratory behaviour of marsh harrier (feature of the AOE Estuary SPA and Minsmere-Walberswick SPA and Ramsar site) to support screening it out of the HRA. Likewise, NE (J17 [PD2-012]) held the same concerns for nightjar (feature of the Minsmere to Walberswick SPA). In response to RIES ([PD-027], QT2.1.3), NE explained that given the arrays are to the south south-east of Minsmere to Walberswick SPA it considers this is well within a broad southward migratory pathway and on this basis should be screened in [REP7-110]. NE [REP6-070] recognised that both species migrate south, but birds can arrive from any sector south of the site's latitude and the applicant does not consider the behaviour of the birds in autumn in particular post-breeding dispersal which it argues can be in any direction before migratory movements are directed south (evidenced by tagging and ringing). The applicant argued that marsh harrier and nightjar migrate to southern Europe and sub-Saharan Africa (in a southerly direction) and therefore considers it highly unlikely that migrating marsh harrier and nightjar from the AOE and Minsmere-Walberswick SPAs have connectivity with the proposed development's array located to the east [REP1-051]. The applicant also clarified [REP8-036] that both species were included in the MCRM Report [REP8-016], and marsh harrier was screened out as the results of the MigroPath modelling predicted that none would fly through the array area (table 5.1 of [REP8-016]). Table 7.5 of the MCRM Report concludes that nightjar would experience an annual collision rate of 0.49 individuals. NE resolved to agree to disagree with the applicant's approach at Deadline 7 [REP7-110] indicating through its red amber green (RAG) rating that for this particular project it is unlikely to make a material difference to the outcome of the decision-making process.

- 1.2.24. The National Trust [RR-080] raised the risk that the proposed LBBG compensation site has the potential for unexploded ordnance (UXO) present (this pathway was not considered in the LBBG HRA). The applicant [REP7-083] explained in response to the RIES ([PD-027], QT2.1.6) that the chosen site has been subject to significant intervention and modification and therefore the risk of finding UXO is not elevated and is therefore not considered as a specific pathway.

LSE from the Proposed Development In Combination

- 1.2.25. The applicant addressed potential in-combination effects arising from the proposed development within section 5 of the HRA Screening Report [APP-042] and section 2.3 of the LBBG HRA Report [REP7-025], which sets out the methodology applied. The other plans and projects included in the in-combination assessment are set out in section 5 of the HRA Screening Report [APP-042] and section 2.4 of the LBBG HRA Report [REP7-025].
- 1.2.26. 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 Report [APP-042]. Paragraph 3.5.2 of the LBBG HRA Report [REP7-025] states that the same European sites screened in for LSE for the Proposed Development alone would also be considered for LSE in-combination with other projects and plans. This approach as far as it has a bearing on the screening for LSE was not a matter for discussion in the examination.
- 1.2.27. Consideration was also given to the potential for effects that were insufficient to lead to LSE alone, to trigger the threshold for in-combination LSE. Due to the precautionary nature of screening alone, the in-combination effects identified by the applicant were the same as the effects from the proposed development alone, as presented in table 6.1 of the HRA Screening Report [APP-042] and supplemented through updated screening information in section 9.2 of the RIAA [REP8-004], and in paragraphs 3.4.15 to 3.4.16 of the LBBG HRA Report [REP7-025].
- 1.2.28. 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 [REP8-004].

LSE Assessment Outcomes

- 1.2.29. The European sites for which the applicant concluded no LSE would occur from the proposed development alone or in combination with other projects and plans are listed in the HRA Screening Matrices [REP8-006].
- 1.2.30. As noted above, IPs raised various concerns about the extent of the applicant's screening for LSE, and the following issues were resolved during the examination:

- impacts to migratory bird species of the waterbird assemblages of Abberton Reservoir SPA and Stour and Orwell SPA
- indirect damage to habitats and impacts from climate change on the LBBG compensation site
- disturbance impacts to migratory auk features of FFC and Farne Islands SPA during the post-breeding dispersal season
- impacts to benthic supporting habitats
- impacts from UXO at the LBBG compensation site

1.2.31. Two issues raised by NE remained unresolved at the close of examination:

- impacts from operational port activities
- collision risk to marsh harrier and nightjar

1.2.32. The ExA is satisfied, on the basis of the information provided, that all relevant European sites and features have been identified. The ExA considers that:

- Operational disturbance and displacement to RTD (feature of OTE SPA) should be screened into the assessment due to the vessel management mitigation measures proposed.
- Impacts from operational port activities need not be assessed on the basis that the operational port for the proposed development has not yet been determined and any additional works or traffic within harbour limits would be subject to separate harbour authority licences or consents.
- LSE from collision risk to marsh harrier and nightjar can be excluded on the basis of the Migropath modelling presented in the MCRM Report [REP8-016].

1.2.33. On this basis the ExA is satisfied that the correct impact-effect pathways on each European site have been assessed and is satisfied with the approach to the assessment of alone and in-combination LSE.

1.2.34. 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 as identified in the HRA Screening Report [APP-042], RIAA [REP8-004], LBBG HRA Report [REP7-025] and HRA Screening Matrices [REP8-006] on the qualifying features of the European sites when considered alone, or in combination with other plans or projects.

1.3. CONSERVATION OBJECTIVES

1.3.1. The conservation objectives for the sites and features screened in for potential LSE are set out in the Summary of Designated Sites [REP7-023] for the main development and in the LBBG HRA Report [REP7-025] (table 3.1) for the LBBG compensation works.

1.3.2. The applicant confirmed at Deadline 7 [REP7-023] that for Ramsar sites, where conservation advice packages are not produced, it has applied the conservation advice for overlapping European designations where qualifying features align.

- 1.3.3. The conservation status (favourable or unfavourable) of the following sites was requested by the ExA in the RIES ([PD-027], Q3.1.3), and the applicant confirmed [REP7-017] that the condition status of the features had not been assessed (according to the NE Designated Sites website): AOE SPA, FFC SPA, Farne Islands SPA, OTE SPA and Minsmere-Walberswick SPA.
- 1.3.4. During the examination, in January 2025, NE published an updated condition assessment for MLS SAC, summarised in [REP7-110]. The sandbank qualifying feature was recorded as being in unfavourable declining status, and the conservation objective is to restore. The sandbank feature is affected by anthropogenic activities with impacts greater than originally perceived to the subtidal and coarse sediment sub-features, including from introduction of hard strata from offshore wind farms and power cables, which are impacting form and function. A risk from further external cable protection is identified due to the highly mobile nature of the site.
- 1.3.5. The applicant updated the RIAA [REP8-004] to reflect the updated condition assessment and restore conservation objective but retained its conclusions of no AEoI to MLS SAC. It stated that the sub-features of subtidal coarse sediment and subtidal mixed sediments are in unfavourable declining condition but the sub-feature of subtidal mixed sediments is in favourable condition. It stated that condition threats were penetration and/ or disturbance of the substratum below the surface of the seabed including abrasion (cables) and abrasion or disturbance of the substrate on the surface of the seabed (aggregate extraction and fishing).

1.4. FINDINGS IN RELATION TO ADVERSE EFFECTS ON THE INTEGRITY

- 1.4.1. The European sites and qualifying features identified in RIES annex 1 tables 1 and 2 [PD-027] were further assessed by the applicant to determine if they could be subject to AEoI from the proposed development, either alone or in combination with other projects and plans. The assessment of AEoI was made in light of the conservation objectives for the European sites [REP8-004]. The outcome of the applicant's assessment is set out in section 11 and summarised in table 14.1 of the RIAA [REP8-004] and section 4.5 of the LBBG HRA Report [REP7-025].
- 1.4.2. The applicant's approach to in-combination assessment is set out in section 5 of the HRA Screening Report [APP-042] and section 12 of the RIAA [REP8-004]. Section 4.2 of the LBBG HRA Report [REP7-025] includes an assessment of in-combination effects from the LBBG compensation at Orford Ness with the Norfolk projects compensation area, which is the only project the applicant considers could affect the same ecological functions.
- 1.4.3. Based on the findings of the examination, the ExA is satisfied that an assessment of AEoI 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.

Sites for which the applicant concluded AEol cannot be excluded

Alde-Ore Estuary SPA and Ramsar site

- 1.4.4. The applicant's RIAA [REP8-004] concluded that the proposed development will result in AEol to the AOE SPA and Ramsar site, owing to in-combination effects of collision risk to LBBG during the operation and maintenance phase.
- 1.4.5. The RIAA estimates the potential impact of collision related mortality that would occur per annum across all bio-seasons from the proposed development alone to range from between 5.70 (applicant's approach) and 11.31 adult birds (NE's approach) (table 11.41 [REP8-004]). The population viability analysis (PVA) estimates that applying a worst-case scenario (NE approach) of 11 mortalities would represent a 0.4% reduction in annual population growth rate, and 0.2% based on the applicant's approach to apportioning. Based on these figures, the applicant concludes that the proposed development alone impacts would be indistinguishable from natural fluctuations in the population regardless of recent population declines, and therefore, the proposed development would not have an AEol of the AOE SPA and Ramsar in terms of the conservation objectives for LBBG (paragraph 11.4.229 [REP8-004]).
- 1.4.6. In combination with other plans and projects, the total number of LBBG from the AOE predicted to be subject to collision resultant mortality from the assessed OWFs, including the proposed development, is 62.1 breeding adults according to the applicant's approach, and 67.7 according to NE's approach. The PVA calculates that this represents a 2.1% and 2.2% reduction in annual population growth rate (based on the applicant and NE approaches respectively). The applicant therefore concludes that taking into account the ongoing decline at this population, the potential for an AEol on the conservation objectives for LBBG at the AOE SPA and Ramsar site cannot be ruled out.
- 1.4.7. NE [PD2-005] and the RSPB [RR-094] supported the applicant's conclusion that AEol cannot be excluded for the LBBG feature of the AOE SPA and Ramsar site, due to the impact of collision mortality from the proposed development in combination.
- 1.4.8. However, NE raised several concerns with the applicant's collision risk modelling methodology. The applicant's assessment is presented at paragraph 11.4.96 of the RIAA [REP8-004] onwards. It was agreed with NE that 40% of adults in the breeding season were to be apportioned to AOE, however there were disagreements relating to
 - the apportioning of adults in the population
 - the use of sabbatical rates (representing the proportion of birds within an adult population not breeding in a given year) and
 - running the model using a 'burn in' period

1.4.9. These disagreements are considered below.

1.4.10. With reference to the Apportioning Note [REP1-020], the RIAA [REP8-004] presents the apportioning of adults in 2 different ways:

- the applicant's approach, using adult proportions based on Furness (2015) with a sabbatical rate of 0.35 applied, which equates to a breeding adult proportion of 0.39, and
- NE's approach using site-specific adult proportions supplied from the DAS data, giving an adult proportion of 0.79

1.4.11. NE (C11 [PD2-005] [REP3-034]) considered that apportioning according to the approach derived from Furness (2015) risks significantly underestimating impacts on adult breeding birds. It considered that the ratio of adults to immature birds over the North Sea and Channel area is likely to be highly spatially variable, and therefore the ratio is unlikely to be applicable at a small project study area. NE further advised that the stable age structure reported in Furness (2015) is unlikely to be representative of the actual proportions of adults present within specific areas at different times of year, especially during the breeding season within foraging range of colonies, when adults are likely to predominate ([REP3-034] [REP8A-051]).

1.4.12. The applicant maintained its position that the data analysed in Furness (2015) was more appropriate for LBBG as it draws from many studies across many years rather than a snapshot of 1 day per month over 2 years ([REP1-051] [REP4-040] [REP7-076]). In addition, the applicant argued that aging from DAS data is not accurate and overestimates the numbers of adults when assuming all 'adult-like' birds are indeed adults ([REP4-040] [REP5-074] [REP7-076]). The applicant argues that the NE approach adds unnecessary additional precaution to the breeding season impact assessment [REP7-076].

1.4.13. With respect to the use of sabbatical rates, the applicant accounted for the fact that a portion of the adult population in any species does not breed by incorporating sabbatical rates into the assessment where available. The applicant applied a 35% rate, as recommended by Marine Scotland for the Seagreen Phase 1 Offshore Project [REP7-076]. NE advice is that there is insufficient evidence to recommend using sabbatical rates for any seabird species, because mean proportions of populations expected to take sabbaticals are poorly understood, and the behaviour of sabbatical birds is unknown, therefore their potential impact exposure is poorly understood. NE also noted that rates applied by the applicant were taken from guidance supplied to a Scottish OWF by Marine Scotland 7 years ago and questions the evidence supporting their relevance for this context [REP8A-051].

1.4.14. NE (C13 [PD2-005]) also noted that the PVA modelling was run excluding a 'burn in' period, against NE best practice. In the context of PVA, a burn-in period refers to an initial span of time in a simulation that is excluded from the final analysis, which allows the model to "settle" into a more realistic dynamic before collecting data for

viability estimates. The applicant stated that no 'burn in' period could be included for LBBG at AOE because the model failed to run over the required timeframe, stating that this is a common issue with the model where the SPA population sizes are relatively small [REP4-040]. The applicant considered the absence of 'burn in' for this species has not altered the conclusions or interpretation of the model outputs, as AEol had not been ruled out for the LBBG feature of AOE and a full derogation case is provided. The applicant also clarified that as the compensation quantum is calculated directly from the impact estimates of the proposed development, which does not require PVA, running the PVA without 'burn in' does not affect this [REP5-091].

1.4.15. NE also raised 2 matters of clarification (C30 and C38 [PD2-005]) noting discrepancies between the applicant's documents, which were resolved early in the examination (see 3.3.1 and 3.3.2 in table 3.3 of the RIES [PD-027]).

1.4.16. For the methodological reasons set out above, NE (C41 [PD2-005]) argued that although it agreed with the conclusion, it was unable to agree the scale of the impact and therefore the scale of compensation required to off-set the losses predicted. The applicant updated the PVA [REP1-022] and the RIAA [REP1-016] to address NE's methodological concerns and, as described above, presented NE's preferred methodology alongside the applicant's preferred approach. At Deadline 5, NE agreed that the impacts had been presented appropriately but the scale of compensation required needed to be agreed based on its preferred approach [REP5-096]. Further discussion of this latter point is provided in section 1.7 of this Appendix (LBBG compensation).

1.4.17. 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 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 NE's preferred level, as it has not seen sufficient robust evidence that would bring into doubt NE's position on this as the ANCB.

Sites and features for which the applicant concluded AEol can be excluded

1.4.18. Aside from the AOE SPA and Ramsar site, the RIAA [REP8-004] and LBBG HRA Report [REP7-025] concluded that the proposed development would not result in AEol to all the remaining European sites considered. Although AEol could not be excluded for the LBBG feature of the AOE SPA and Ramsar site, the sites were assessed for other features for which the applicant did not conclude AEol (see discussion on these sites below).

Sites and features where limited or no concerns were raised

1.4.19. At the close of the examination, the applicant's conclusions had not been disputed by any IP in relation to the features of the sites listed in table 1 below. Furthermore, NE confirmed that (other than a list of

European sites which it could not advise AEoI 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 AEoI to the European sites screened in (ME.1.14 [REP3-034]). There were 2 issues that were resolved in the examination to be noted here, relating to:

- the dunlin feature of the Stour and Orwell Estuaries SPA and Ramsar site, Colne Estuary SPA, Blackwater Estuary SPA and Ramsar site, and
- the dark-bellied brent goose feature of the Deben Estuary, Hamford Water, Stour and Orwell Estuaries, Colne Estuary, Blackwater Estuary, and Dengie SPA and Ramsar sites

1.4.20. The applicant considered the effects of temporary habitat loss and disturbance during construction on the dunlin feature of the Stour and Orwell Estuaries SPA and Ramsar site, Colne Estuary SPA, Blackwater Estuary SPA and Ramsar site (see RIAA [APP-040] paragraph 11.6.335 onwards). The assessment of the proposed development alone concludes no AEoI on the basis that the observed numbers of dunlin were so low that there is no pathway to undermine the conservation objectives of any of the identified sites.

1.4.21. NE (J21 [PD2-012]) requested clarification on the applicant's assessment of the cumulative effect for both disturbance and temporary habitat loss for dunlin. The applicant [REP1-051] clarified that only 5 observations of dunlin were recorded, with a peak count of 4 birds, within 400m of the order limits. Given these low numbers, the applicant considered that there is no possibility for temporary habitat loss and disturbance, from the proposed development alone or in combination, to undermine the conservation objectives for the aforementioned sites. Following this clarification, NE concurred with the applicant's conclusion of no AEoI, either alone or in combination.

1.4.22. The applicant considered the effects of collision during migration on the dark-bellied brent goose feature of the Deben Estuary, Hamford Water, Stour and Orwell Estuaries, Colne Estuary, Blackwater Estuary, and Dengie SPA and Ramsar sites (see RIAA [REP8-004] assessment of migratory waterbirds at paragraph 11.4.230 onwards). The assessment used the MigroPath tool to calculate predicted impacts, which assumed for dark-bellied brent goose, that the birds would fly at rotor height 50% of the time, noting that wildfowl often fly at low levels when migrating, more often a few metres above the sea, and therefore the predicted impacts are likely to be overestimated (paragraph 11.4.239). The assessment concludes that the impacts are minimal and make no material contribution to any changes in population or baseline mortality (11.4.240).

1.4.23. NE (C33 [PD-005]) requested further evidence to support the applicant's assumption that dark-bellied brent goose would fly at rotor height 50% of the time (while other migratory species were assumed to fly at rotor height 100% of the time). The applicant [REP1-051] pointed to academic evidence and noted that 50% is the default rate used for

this species within the NatureScot collision risk modelling tool. In light of this additional evidence, NE considered this issue resolved.

1.4.24. In light of the above, the ExA agrees there is no potential for AEol to the aforementioned sites owing to cumulative effects to dunlin and collision risk to migratory dark-bellied brent goose.

1.4.25. In the absence of any other issues raised, the ExA is satisfied that AEol on all the sites and their qualifying features set out in table 1 can be excluded.

Table 1: Sites for which the applicant concluded no AEoI and for which no IPs raised concerns

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
Abberton Reservoir Ramsar site	gadwall shoveler wigeon waterbird assemblage	Disturbance of birds outside the Ramsar Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Habitat loss	Disturbance of birds outside the Ramsar Water quality: pollution from site run-off affecting habitat quality	Disturbance of birds outside the Ramsar Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Habitat loss	No AEoI
Abberton Reservoir SPA	cormorant coot gadwall great crested grebe mute swan pochard	Disturbance of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Habitat loss	Disturbance of birds outside the SPA Water quality: pollution from site run-off affecting habitat quality	Disturbance of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Habitat loss	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	C O&M D
	shoveler widgeon teal tufted duck waterbird assemblage				
Alde-Ore Estuary SPA	sandwich tern	Invasive non-native species (INNS)	INNS Removal of grazing animals affecting vegetation composition Increase in nutrients from bird faeces affecting water quality Changes in water flows	INNS	No AEoI
	marsh harrier	Damage to qualifying interest habitats or the	Damage to qualifying interest habitats or the	Damage to qualifying interest habitats or the	

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants Disturbance INNS	habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants Disturbance INNS Removal of grazing animals affecting vegetation composition Changes in water flows	habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants Disturbance INNS	
	little tern	Damage to qualifying interest habitats or the habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants	Damage to qualifying interest habitats or the habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants	Damage to qualifying interest habitats or the habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Disturbance Release of suspended solids and other pollution INNS	Disturbance Release of suspended solids and other pollution INNS Removal of grazing animals affecting vegetation composition Increase in nutrients from bird faeces affecting water quality Changes in water flows	Disturbance Release of suspended solids and other pollution INNS	
	avocet redshank ruff	As little tern.	As little tern, plus: Collision risk	As little tern.	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	LBBG	As per sandwich tern, plus: Release of suspended solids and other pollution	As per little tern, plus: Direct mortality of qualifying interest animals and plants	As per little tern, plus: Direct mortality of qualifying interest animals and plants	No AEol (note an AEol was found in relation to operational collision risk, as discussed in the previous section of this report)
Alde-Ore Estuary Ramsar site	little tern	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
			Increase in nutrients from bird faeces affecting water quality Changes in water flows		
	avocet	As per little tern, plus: Direct mortality of qualifying interest animals and plants	As per little tern, plus: Collision risk Direct mortality of qualifying interest animals and plants Removal of grazing animals affecting vegetation composition	As per little tern, plus: Direct mortality of qualifying interest animals and plants	No AEol
	marsh harrier	Damage to qualifying interest habitats or the habitats of the qualifying interest species	Damage to qualifying interest habitats or the habitats of the qualifying interest species	Damage to qualifying interest habitats or the habitats of the qualifying interest species	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Direct mortality of qualifying interest animals and plants Disturbance INNS	Direct mortality of qualifying interest animals and plants Disturbance INNS Removal of grazing animals affecting vegetation composition Changes in water flows	Direct mortality of qualifying interest animals and plants Disturbance INNS	
	mediterranean gull sandwich tern	INNS	INNS	INNS	No AEoI
	greenshank black-tailed godwit shelduck	As per little tern	As per little tern, plus: Removal of grazing animals affecting vegetation composition	As per little tern	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	shoveler spotted redshank teal				
	redshank	As per little tern	As per little tern, plus: Collision risk Removal of gazing animals affecting vegetation composition	As per little tern	No AEol
	LBBG	As per Mediterranean gull, plus: Release of suspended solids and other pollution	As per little tern, plus: Direct mortality of qualifying interest animals and plants Removal of grazing animals affecting vegetation composition	As per little tern, plus: Direct mortality of qualifying interest animals and plants	No AEol (note an AEol was found in relation to collision risk, as discussed in the previous section of this report)

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
Alde-Ore and Butley Estuaries SAC	estuaries mudflats and sandflats not covered by seawater at low tide	Release of suspended solids into surface water which drains into the estuary Introduction of INNS	Release of suspended solids into surface water which drains into the estuary Introduction of INNS Increase in nutrients from bird faeces affecting vegetation composition and water quality	Release of suspended solids into surface water which drains into the estuary Introduction of INNS	No AEoI
	Atlantic salt meadows	Introduction of INNS	Introduction of INNS Increase in nutrients from bird faeces affecting vegetation composition and water quality	No LSE	No AEoI
Berwickshire and North	grey seal	Underwater noise Collision risk	Collision risk Changes to prey	Underwater noise Collision risk	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
Northumberland Coast SAC		Disturbance at haul out Changes to prey Physical habitat loss/ disturbance	Disturbance at haul out	Physical habitat loss/ disturbance Disturbance at haul out Changes to prey	
Blackwater Estuary (Mid-Essex Coast Phase 4) Ramsar site	black-tailed godwit	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity	Collision risk (migration) Impacts on supporting populations of plants and invertebrates outside the Ramsar	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity	No AEoI (see discussion in section below regarding the operational disturbance pathway)

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Impacts on supporting populations of plants and invertebrates outside the Ramsar		Impacts on supporting populations of plants and invertebrates outside the Ramsar	
	black-tailed godwit dark-bellied brent goose dunlin grey plover waterbird assemblage	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity Impacts on supporting populations of plants	Collision risk (migration) Disturbance or displacement of birds outside the SPA Impacts on supporting populations of plants and invertebrates outside the Ramsar	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity Impacts on supporting populations of plants and	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		and invertebrates outside the Ramsar		invertebrates outside the Ramsar	
Blackwater Estuary (Mid-Essex Coast Phase 4) SPA	black-tailed godwit	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity	Collision risk (migration)	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity	No AEoI (see discussion in section below regarding the operational disturbance pathway)
	dark-bellied brent goose	Loss of foraging and roosting habitat outside of the SPA	Collision risk (migration)	Loss of foraging and roosting habitat outside of the SPA	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	dunlin grey plover	Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity	Disturbance or displacement of birds outside the SPA	Disturbance or displacement of birds outside the SPA Decrease in air quality Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity	
	hen harrier pochard ringed plover little tern waterbird assemblage	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality	Disturbance or displacement of birds outside the SPA	Loss of foraging and roosting habitat outside of the SPA Disturbance or displacement of birds outside the SPA Decrease in air quality	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity		Water quality: pollution from site run-off affecting habitat quality Decreases in water quantity	
Colne Estuary (Mid-Essex Coast Phase 2) Ramsar site	dark-bellied brent goose redshank waterbird assemblage	Loss of foraging and roosting habitat outside the SPA Disturbance/ displacement of birds outside Ramsar Pollution (air quality) INNS Pollution from site run-off affecting prey availability	Collision risk (migration) Disturbance of birds outside Ramsar INNS Pollution from site run-off affecting prey availability	Loss of foraging and roosting habitat outside the SPA Disturbance/ displacement of birds outside Ramsar Pollution (air quality) INNS Pollution from site run-off affecting prey availability	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	wetland invertebrate assemblage wetland plant assemblage saltmarsh	INNS	INNS	INNS	No AEoI
Colne Estuary (Mid-Essex Coast Phase 2) SPA	dark-bellied brent goose pochard redshank ringed plover	Habitat loss Direct disturbance and displacement Pollution (air quality) Decreases in water quantity Pollution from site run-off affecting prey availability	Collision risk (migration) Direct disturbance and displacement Decreases in water quantity Pollution from site run-off affecting prey availability	Habitat loss Direct disturbance and displacement Pollution (air quality) Decreases in water quantity Pollution from site run-off affecting prey availability	No AEoI
	waterbird assemblage	Habitat loss	Direct disturbance and displacement	Habitat loss	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	little tern hen harrier	Direct disturbance and displacement Pollution (air quality) Decreases in water quantity Pollution from site run-off affecting prey availability	Decreases in water quantity Pollution from site run-off affecting prey availability	Direct disturbance and displacement Pollution (air quality) Decreases in water quantity Pollution from site run-off affecting prey availability	
Deben Estuary Ramsar site	dark-bellied brent goose	No LSE	Collision risk (migration)	No LSE	No AEoI
Deben Estuary SPA	avocet dark-bellied brent goose	No LSE	Collision risk (migration)	No LSE	No AEoI
Dengie (Mid-Essex Coast)	dark-bellied brent goose grey plover	No LSE	Collision risk (migration)	No LSE	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
Phase 1) Ramsar site	knot				
Dengie (Mid-Essex Coast Phase 1) SPA	dark-bellied brent goose grey plover knot	No LSE	Collision risk (migration)	No LSE	No AEol
Essex Estuaries SAC	estuaries mudflats and sandflats not covered by seawater at low tide <i>Salicornia</i> and other annuals colonizing mud and sand <i>Spartina</i> swards	Physical habitat loss/ disturbance Suspended sediment/ deposition Accidental pollution INNS	Physical habitat loss/ disturbance Suspended sediment/ deposition Accidental pollution INNS Electromagnetic frequencies (EMF) Changes to physical processes	Physical habitat loss/ disturbance Suspended sediment/ deposition Accidental pollution INNS	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	Atlantic salt meadows Mediterranean and thermo-Atlantic <i>halophilous</i> scrubs sandbanks which are slightly covered by sea water all the time				
Hamford Water Ramsar site	black-tailed godwit	Disturbance of birds outside of the SPA Decrease in air quality Habitat loss	Collision risk (migration)	Disturbance of birds outside of the SPA Decrease in air quality Habitat loss Pollution from site run-off affecting prey availability	No AEol (see discussion in section below regarding the operational disturbance pathway)

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Pollution from site run-off affecting prey availability Decreases in water quantity and quality Loss of foraging and roosting habitat outside the Ramsar		Decreases in water quality Loss of foraging and roosting habitat outside the Ramsar	
	dark-bellied brent goose redshank ringed plover	Disturbance of birds outside of the SPA Decrease in air quality Habitat loss Pollution from site run-off affecting prey availability Decreases in water quantity and quality	Collision risk (migration) Disturbance of birds outside of the SPA	Disturbance of birds outside of the SPA Decrease in air quality Habitat loss Pollution from site run-off affecting prey availability Decreases in water quality	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Loss of foraging and roosting habitat outside the Ramsar		Loss of foraging and roosting habitat outside the Ramsar	
Hamford Water SAC	Fisher's estuarine moth	Impacts on supporting populations, food plant and potential habitat outside the SAC Water quality: pollution from site run-off affecting habitat quality Decrease in water quantity Decrease in air quality Increase in lighting In-combination effects	No LSE	Impacts on supporting populations, food plant and potential habitat outside the SAC Water quality: pollution from site run-off affecting habitat quality Decrease in water quantity Decrease in air quality Increase in lighting In-combination effects	No AEoI
Hamford Water SPA	dark-bellied brent goose	Habitat loss	Direct disturbance and displacement	Habitat loss	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	grey plover redshank ringed plover shelduck teal little tern	Disturbance of birds outside the SPA Pollution (air quality) Decreases in water quantity and quality Loss of foraging and roosting habitat outside the SPA		Disturbance of birds outside the SPA Pollution (air quality) Decreases in water quantity and quality	
	black-tailed godwit	Habitat loss Disturbance of birds outside the SPA Pollution (air quality) Decreases in water quantity and quality	(see discussion in section below regarding the operational disturbance pathway)	Habitat loss Disturbance of birds outside the SPA Pollution (air quality) Decreases in water quantity and quality	No AEol (see discussion in section below regarding the operational disturbance pathway)

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Loss of foraging and roosting habitat outside the SPA			
	avocet	Disturbance of birds outside of the SPA Pollution (air quality) Decreases in water quantity Water quality – pollution from site run-off affecting habitat quality	Disturbance of birds outside of the SPA	Disturbance of birds outside of the SPA Pollution (air quality) Decreases in water quantity Water quality – pollution from site run-off affecting habitat quality	No AEol (see discussion in section below regarding the habitat loss pathway)
Humber Estuary SAC	grey seal	Underwater noise Collision risk Changes to prey Physical habitat loss/disturbance	Collision risk Changes to prey Disturbance at haul out	Underwater noise Collision risk Changes to prey Physical habitat loss/disturbance	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Disturbance at haul out		Disturbance at haul out	
Humber Estuary Ramsar site	grey seal	Underwater noise Collision risk Changes to prey Physical habitat loss/disturbance Disturbance at haul out	Collision risk Changes to prey Disturbance at haul out	Underwater noise Collision risk Changes to prey Physical habitat loss/disturbance Disturbance at haul out	No AEoI
Minsmere-Walberswick Ramsar site	great bittern gadwall northern shoveler Eurasian teal bearded tit	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	Collision risk (migration) Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
			INNS Removal of grazing animals affecting vegetation composition Increases in nutrients from bird faeces affecting vegetation composition and water quality Changes in water flows caused by fence lines across ditches		
	avocet	Damage to qualifying interest habitats or the habitats of the qualifying interest species	Collision risk Damage to qualifying interest habitats or the habitats of the qualifying interest species	Damage to qualifying interest habitats or the habitats of the qualifying interest species	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Direct mortality of qualifying interest animals and plants Disturbance Release of suspended solids and other pollution INNS	Direct mortality of qualifying interest animals and plants Disturbance Release of suspended solids and other pollution INNS Removal of grazing animals affecting vegetation composition Increases in nutrients from bird faeces affecting vegetation composition and water quality	Direct mortality of qualifying interest animals and plants Disturbance Release of suspended solids and other pollution INNS	

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
			Changes in water flows caused by fence lines across ditches		
	marsh harrier	Damage to qualifying interest habitats or the habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants Disturbance INNS	Damage to qualifying interest habitats or the habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants Disturbance INNS Removal of grazing animals affecting vegetation composition	Damage to qualifying interest habitats or the habitats of the qualifying interest species Direct mortality of qualifying interest animals and plants Disturbance INNS	No AEoI
Minsmere-Walberswick SPA	avocet great bittern	See below where relevant	Collision risk (migration)	See below where relevant	No AEoI

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	gadwall greater white-fronted goose hen harrier northern shoveler Eurasian teal				
	Eurasian teal great bittern northern shoveler gadwall little tern	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance Release of suspended solids and other pollution INNS	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
			Removal of grazing animals affecting vegetation composition Increases in nutrients from bird faeces affecting vegetation composition and water quality Changes in water flows caused by fence lines across ditches		
	marsh harrier hen harrier	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance INNS	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance INNS	Damage to qualifying interest habitats or the habitats of the qualifying interest species Disturbance INNS	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
			Increases in nutrients from bird faeces affecting vegetation composition and water quality Changes in water flows caused by fence lines across ditches		
Stour and Orwell Estuaries SPA	black-tailed godwit	Disturbance of birds outside the SPA Decrease in air quality Habitat loss Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	Collision risk (migration) (see discussion in section below regarding the operational disturbance pathway)	Disturbance of birds outside the SPA Decrease in air quality Habitat loss Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	No AEol (see discussion in section below regarding the operational disturbance pathway)

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	dark-bellied brent goose dunlin grey plover pintail redshank	Disturbance of birds outside the SPA Decrease in air quality Habitat loss Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	Collision risk (migration) Disturbance of birds outside the SPA	Disturbance of birds outside the SPA Decrease in air quality Habitat loss Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	No AEol
	knot	Habitat loss Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	Collision risk (migration)	Habitat loss Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
	avocet	Disturbance of birds outside the SPA Decrease in water quality Decrease in air quality Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	Disturbance of birds outside the SPA Decrease in water quality	Disturbance of birds outside the SPA Decrease in water quality Decrease in air quality Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	No AEol (see discussion in section below regarding the habitat loss pathway)
	waterbird assemblage	Disturbance of birds outside the SPA Decrease in water quality Decrease in water quality	Disturbance of birds outside the SPA Decrease in water quality	Disturbance of birds outside the SPA Decrease in water quality Decrease in water quality Habitat loss	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEoI
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Habitat loss Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA		Pollution from site run-off affecting prey availability Loss of foraging and roosting habitat outside the SPA	
Stour and Orwell Estuaries Ramsar site	black-tailed godwit	Disturbance of birds outside the SPA Decrease in air quality Loss of foraging and roosting habitat outside the SPA Decreases in water quantity	Collision risk (migration) Decrease in air quality (see discussion in section below regarding the operational disturbance pathway)	Disturbance of birds outside the SPA Decrease in air quality Decreases in water quantity Pollution from site run-off affecting prey availability	No AEoI (see discussion in section below regarding the operational disturbance pathway)

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Pollution from site run-off affecting prey availability			
	dark-bellied brent goose dunlin grey plover pintail redshank	Disturbance of birds outside the SPA Decrease in air quality Loss of foraging and roosting habitat outside the SPA Decreases in water quantity Pollution from site run-off affecting prey availability	Collision risk (migration) Disturbance of birds outside the SPA Decrease in air quality	Disturbance of birds outside the SPA Decrease in air quality Decreases in water quantity Pollution from site run-off affecting prey availability	No AEol
	knot	Disturbance of birds outside the SPA	Collision risk (migration) Disturbance of birds outside the SPA	Disturbance of birds outside the SPA	No AEol

Designated site	Feature(s) screened in	Potential for LSE			Applicant's conclusion (alone or in combination) on AEol
		Construction (C)	Operation and maintenance (O&M)	Decommissioning (D)	
		Loss of foraging and roosting habitat outside the SPA Decreases in water quantity Pollution from site run-off affecting prey availability		Decreases in water quantity Pollution from site run-off affecting prey availability	

1.4.26. The applicant also concluded no AEol for the following sites and qualifying features:

- AOE Ramsar site (qualifying plant and invertebrate features)
- FFC SPA (kittiwake, gannet, guillemot and razorbill)
- Farne Islands SPA (guillemot and razorbill as part of the seabird assemblage feature)
- Hamford Water SPA and Stour and Orwell Estuaries SPA (avocet)
- Hamford Water SPA and Ramsar site, Stour and Orwell Estuaries SPA and Ramsar site, and Blackwater Estuary SPA and Ramsar (black-tailed godwit feature)
- MLS SAC (sandbanks which are slightly covered by seawater all the time)
- Orfordness – Shingle Street SAC (coastal lagoons, annual vegetation of drift lines, perennial vegetation of stony banks)
- OTE SPA (red-throated diver)
- SNS SAC (harbour porpoise)
- The Wash and Norfolk North Coast SAC (harbour seal)

1.4.27. 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. The account of the examination of these matters is set out in the following sections, grouped thematically.

Onshore ecology

Alde-Ore Estuary Ramsar site and Orfordness to Shingle Street SAC

1.4.28. Impacts to the AOE Ramsar site are considered in both the RIAA [REP8-004] (impacts from the main development) and in the LBBG HRA Report [REP7-025] (impacts from the compensation measures). This section focuses on the effects arising from the proposed compensation measures where issues were raised by IPs. These relate to the rare plant and invertebrate species that the sites are designated for. The Orfordness to Shingle Street SAC is only considered in the LBBG HRA and is discussed here as it overlaps with the AOE Ramsar site and the issues raised are common to both sites.

1.4.29. The LBBG HRA Report [REP7-025] includes a description of the AOE Ramsar site and its qualifying features at paragraph 4.1.32 and table 4-5, and the potential effects resulting from the proposed compensation measures are provided in paragraph 4.2.29 and table 4-9 (scarce plant features) and table 4-10 (scarce invertebrate features). A description of the Orfordness – Shingle Street SAC and its qualifying features are provided at paragraph 4.1.41 and table 4-7, and the potential effects resulting from the proposed compensation measures are provided in paragraph 4.2.31, table 4-20 (coastal lagoons feature), table 4-11 (annual vegetation of drift lines feature) and table 4-22 (perennial vegetation of stony banks).

1.4.30. The applicant's LBBG HRA Report provided an assessment which addressed the potential for AEol resulting from the works associated with the proposed compensation measures for LBBG, specifically:

- Damage to qualifying interest habitats or the habitats of qualifying interest features, including topography, during fence installation, maintenance and removal, during the installation of a ditch crossing, and during the management of vegetation.
- Direct mortality of qualifying interest animals and plants during fence installation and removal, and during the installation of a ditch crossing, and during the management of vegetation.
- Disturbance of qualifying interest birds due to the presence of workers during fence installation, maintenance and removal and during the installation of a ditch crossing, and when undertaking vegetation management.
- Release of suspended solids and other pollution into waterways during fence installation, maintenance and removal, during the installation of a ditch crossing, and when undertaking vegetation management.
- Spread of INNS and pathogens by bringing these on to site on construction and maintenance machinery and materials and on workers clothing.
- Removal of grazing animals from the proposed compensation site, affecting vegetation composition.
- Increases in nutrients from bird faeces affecting vegetation composition and water quality.
- Changes in water flows caused by fence lines across ditches.

1.4.31. Mitigation measures are proposed (section 4.4 of the LBBG HRA Report [REP7-025]) and will be set out in a construction method statement and the LBBG Implementation and Monitoring Plan (LIMP). The applicant concludes that with the implementation of these measures, the proposed development would not have an AEol on either site.

Concerns raised

1.4.32. In its RR, NE (J4 and J7 [PD2-012]) advised that seasonally appropriate vegetation and invertebrate surveys should be carried out at Orford Ness prior to determination, to inform the applicant's assessment, as the baseline surveys had not been undertaken at an optimal time. Post-acceptance, the applicant undertook additional botanical surveys in August 2024 and terrestrial invertebrate surveys during August, September and October 2024. Those surveys were undertaken on the land immediately adjacent to the proposed compensation site but not within it due to access restrictions ([REP4-007], paragraph 2.3.9). The LBBG HRA [REP4-007] was revised to incorporate the results, and proposed mitigation measures were also updated. However, due to the geographical and temporal limitations to the surveys, NE ([PD4-007], [REP5-094], [REP5-096] [REP7-110]) continued to argue that the baseline remained incomplete and that a more detailed survey of land included within the compensation site not covered by the current surveys (Cobra Mist land) would be required ahead of any measures being implemented.

- 1.4.33. The applicant [REP6-044] acknowledged the limitations of the data collected but argued that it was nevertheless sufficient to conclude that, with mitigation, neither the proposed works nor the existence of the proposed compensation site could undermine those conservation objectives, and therefore it is possible to conclude, beyond reasonable scientific doubt, there would be no AEoI to any site. Nevertheless, the applicant revised the LIMP at Deadline 8A ([REP8A-009], paragraph 5.3.4) to include a commitment to seasonally appropriate surveys and subsequent review of the proposed mitigation measures, in consultation with NE.
- 1.4.34. Although NE was unable to comment on this wording prior to the close of the examination, it advised such an approach in [REP6-066], recommending that a requirement be secured within the DCO to carry out pre-construction surveys to validate the predictions and inferences made in the LBBG HRA. If the pre-construction survey data indicates the need for further mitigation, then this should be agreed with the relevant ANCB and regulator prior to the commencement of any works by the applicant.
- 1.4.35. NE (J4 and J24 [PD2-012] [REP4-060] [REP4-061]) also advised that a more robust baseline of the shingle morphology needed to be established, and impacts to the shingle sediment morphology and structure needed to be considered and assessed further. NE [REP4-060] expressed concern that machinery would have to operate on the shingle habitat and noted that while the site had already been modified and the delicate matrix already impacted, this does not preclude the presence of rare and sensitive shingle flora and fauna. The applicant [REP1-051] argued the shingle morphology (and therefore sediment structure) had been modified in the past (prior to designation of the SAC) and is now largely flat with no prospect of recovering what may have been its original wave-formed ridge morphology. It further clarified [REP5-074] that the proposed compensation site can be reached using existing tracks until just before the proposed ditch crossing and any vehicles used off the tracks will use an appropriately agreed method to be set out in the final LIMP. The applicant notes also the proposed mitigation outlined in paragraphs 4.4.1 to 4.4.3 of the LBBG HRA Report [REP7-025].
- 1.4.36. NE (J23 [PD2-012]) requested that further details be provided in the outline LIMP [APP-052] regarding mitigation measures to compensate for nutrient increases arising due to the gull colony establishing itself, as the vegetation management measures are described in the LBBG HRA as part of the maintenance phase of the proposed development rather than as additional mitigation. The applicant [REP1-051] added additional detail to describe the vegetation management within the LIMP at Deadline 2 (removal of cut vegetation) ([REP2-012], section 5.4). The applicant [REP5-074] clarified that it described this as 'additional mitigation' because it was not included in the original project design, but principally, any increase in nutrients would be no more than that derived from the stated conservation objective to restore the gull breeding colony within the SPA. The applicant revised the LIMP at Deadline 8A ([REP8A-009], paragraph 5.4.2) to state that if increased nutrients are noted to be having a detrimental impact to on the site,

removal of cut vegetation from the site and any blockages from the fencing will be undertaken where required. NE was unable to comment on this before the close of the examination.

1.4.37. NE (J25 and J13 [PD2-012]) stated it was unable to agree with the conclusions of no AEol for the coastal lagoons habitats, as the LBBG HRA had not considered whether the presence of the predator exclusion fence could interfere with overtopping and sediment transfer processes, which could alter the flora and fauna in the saline lagoons (including scarce invertebrates associated with coastal lagoons, features of the Ramsar citation). The applicant [REP1-051] explained that the lagoons are seepage lagoons primarily recharged by seawater seeping under the large shingle ridge on the seaward (eastern) side and the fence could not interfere with this process or any other natural process supporting the lagoons.

1.4.38. NE noted however that Drawing 4 in [AS-054] identifies 5 saline lagoons within the proposed compensation site area that had been surveyed, of which only 2 are considered percolation lagoons, and considers the potential for an impact remains. NE reiterated the need for the applicant to complete its baseline characterisation of the site pre-construction to close the evidence gap and inform mitigation measures [REP7-110]. NE advised that if the pre-construction survey data indicates the need for further mitigation, then this should be agreed with NE as the relevant ANCB and regulator prior to the commencement of any works by the applicant and the requirement to confirm adequacy of the mitigation should be secured within the DCO.

1.4.39. The applicant maintained that all the lagoons are percolation lagoons – although there are 5 in the survey area only 1 is to the west of the ditch and in the proposed compensation site; aerial imagery indicates there are no obvious lagoons present in the parts of the site that have not been surveyed [REP8-036]. Nevertheless the applicant agreed to carry out additional onshore ecological surveys ([REP8A-009], paragraph 5.3.4) at the appropriate time to validate the existing assessment (either in summer 2025 or pre-construction, depending on access) and mitigation requirements will be reviewed following their completion.

ExA's reasoning

1.4.40. The ExA agrees with NE that the risks need to be understood, considered appropriately and mitigated sufficiently before any development takes place within AOE Ramsar and Orfordness-Shingle Street SAC. Nevertheless, the submission of the relevant mitigation documents in advance of commencement, including requested surveys, would allow this to happen in this instance and ensure proper measures are taken. In reaching this particular finding, the ExA is mindful of the modification and evolution of the proposed compensatory measures site and the relatively limited nature of compensation works proposed within them.

1.4.41. The ExA is therefore satisfied that the pathways listed above will not result in AEol to the scarce plant and invertebrate features of the AOE Ramsar site, and the habitat features of the Orfordness-Shingle Street

SAC from the proposed development alone and in combination with other plans and projects.

Onshore sites with ornithological features

Hamford Water SPA and Ramsar, Stour and Orwell Estuaries SPA and Ramsar and Blackwater Estuary SPA and Ramsar site

1.4.42. For the majority of the onshore sites with ornithological features included in the applicant's assessment, no concerns were raised either by IPs or the ExA in relation to the conclusion of no AEoI. These are set out in table 1 above. However, NE raised concerns in relation to the assessment of the following:

- Effects of habitat loss during construction on avocet, feature of Hamford Water SPA and Stour and Orwell Estuaries SPA.
- Operational noise and visual disturbance impacts to black tailed godwit, feature of Hamford Water SPA and Ramsar site, Stour and Orwell Estuaries SPA and Ramsar site and the Blackwater Estuary SPA and Ramsar site.

Avocet

1.4.43. The applicant's assessment considered the effects of temporary habitat loss (in relation to the landfall and intertidal area) during construction on the avocet feature of Hamford Water SPA and Stour and Orwell Estuaries SPA (see paragraph 11.6.89 of the RIAA [REP8-004] onwards). The applicant proposes the implementation of disturbance-free buffer zones around active nests to mitigate impacts to this feature as well as surveys and oversight of an ecological clerk of works (ECoW) (paragraph 11.6.98 in the RIAA and section 4 of the Outline Landscape and Ecology Management Plan (OLEMP) [REP8A-017]). With this mitigation in place, the applicant concludes no AEoI to the sites in relation to habitat loss and avocet (paragraph 11.6.99 of the RIAA).

1.4.44. NE (J19 [PD2-012] [REP7-110] [REP8A-053]) requested that further detail be provided on the intended methodology if the proposed buffer zones fail. The applicant [REP1-051] [REP8-036] explained that the extent of the buffer zones would be established by the ECoW based on guidance and experience and the ECoW would increase the buffer zone if construction activity disturbs a breeding avocet. The applicant cross referenced to section 4 of the OLEMP and stated that the full detail of the measures in place to protect non-breeding birds at Holland Haven will be included, and expanded upon, in the final LEMP associated with the landfall works once final details of the works are known, including their location and seasonal timings. No change was made to NE's issue log at Deadline 5 [REP5-096] on this matter and it continued to request an updated plan or document to show what actions would be taken if the proposed buffer zones for Schedule 1 bird species and other breeding species fail.

Black-tailed godwit

1.4.45. The applicant considered operational noise and visual disturbance impacts to the black-tailed godwit feature of the Hamford Water SPA

and Ramsar site, Stour and Orwell Estuaries SPA and Ramsar site and the Blackwater Estuary SPA and Ramsar site (RIAA [REP8-004], paragraph 11.6.184 onwards). For scheduled maintenance, the applicant proposes to mitigate effects by scheduling it in weather above freezing and screening the activity in the vicinity of Holland Haven Marshes Site of Special Scientific Interest (SSSI).

1.4.46. NE (J20 [PD2-012] [REP7-110]) advised that mitigation measures also be proposed for black-tailed godwit if unscheduled maintenance is required due to the potential for noise and visual disturbance. The applicant [REP1-051] clarified that although it would not be possible to seasonally timetable unscheduled maintenance, mitigation is proposed, comprising screening of works, in the same way as that detailed for construction (RIAA [REP8-004], paragraph 11.6.128). The applicant also included a section on unplanned maintenance in the OLEMP ([REP8A-017], section 10.2), which states that where unplanned operational maintenance works are required, advice from an ecologist will be sought to determine if ecological impacts are possible and appropriate mitigation measures would be developed and agreed with relevant consultees prior to works taking place.

1.4.47. On the basis of the above information and the mitigation measures proposed, the ExA is satisfied that the onshore works will not result in AEoI to the European sites listed above by virtue of impacts to avocet and black-tailed godwit features from either the proposed development alone or in combination with other plans and projects.

Offshore and Intertidal Ornithology

Flamborough and Filey Coast SPA

1.4.48. A description of the European site and its qualifying features, and the potential effects resulting from the proposed development, are provided in section 24 of the Summary of Designated Sites [REP7-023].

1.4.49. The applicant's HRA Report provided an assessment which addressed the potential for AEoI resulting from:

- operational collision mortality to kittiwake (non-breeding)
- direct disturbance and displacement during construction, operation and decommissioning to guillemot and razorbill
- operational collision mortality and direct disturbance, and displacement during construction, operation and decommissioning to gannet

Overarching methodological concerns

1.4.50. As described in the RIES ([PD-027] , paragraph 3.3.23) NE objected to the fact that the PVA modelling was run excluding a 'burn in' period for all species and sites, against NE best practice (C13 [PD2-005] [REP3-034]). The applicant re-ran the PVA with a 'burn in' period of 5 years for the in-combination impacts to all relevant species in the assessment. For kittiwake (FFC SPA), gannet (FFC SPA), guillemot (FFC SPA and Farne Islands SPA) and razorbill (FFC SPA) ([REP1-022] [REP1-016]) the interpretation of the model outputs and assessment conclusions did not change based on the re-analysis after

PVA was re-run. NE was therefore content that this methodological concern had been resolved.

1.4.51. The RSPB ([RR-094] [REP2-068]) raised concerns that impacts of highly pathogenic avian influenza (HPAI) on UK wild bird populations had not been adequately considered (see RIES [PD-027], paragraph 3.3.28). The applicant [REP1-049] argued that baseline data was collected pre-HPAI and the impacts are calculated based on the larger populations, while the impacts are assessed based on the most recent available affected population (post or during HPAI) counts, therefore the assessment is precautionary with regards to HPAI impacts on populations.

1.4.52. The RSPB ([RR-094] [REP2-068]) also raised concerns with the DAS methodology used to determine the baseline population (see RIES [PD-027], paragraph 3.3.31 for further details on the RSPB's concerns and their partial resolution during the examination). The applicant [REP5-067] considers it has provided appropriate detail on the methodology including potential biases, referring the RSPB to various application documents. In response to the RIES (Q3.3.2) on the implications of these potential biases for the conclusions of the RIAA, the applicant argued that DAS are the most robust method for seabird surveying for large-scale assessments such as OWFs; they have been accepted as such for at least a decade in the UK and are widely supported by regulatory bodies and industry best practice (including NE) [REP7-083]. Therefore, the applicant does not believe there are any biases in the data and there are no implications on the conclusions of the RIAA. No response was received from the RSPB.

1.4.53. Regarding the latter two issues raised by RSPB (consideration of HPAI and the DAS methodology), the ExA considers that the applicant has applied a sufficiently robust methodology (see chapter 4.2 on Offshore Ornithology).

Kittiwake – operational collision mortality

1.4.54. Collision mortality to kittiwake of FFC SPA from the proposed development alone is assessed at paragraph 11.4.192 of the RIAA [REP8-004] onwards. Due to the distance from FFC SPA, kittiwake was screened in for the non-breeding bio-season only, as agreed with NE during the evidence plan. The predicted collision resultant mortality is estimated at 1 (0.82) adult throughout the entire non-breeding bio-season, equating to a less than 1% (0.006%) increase in baseline mortality (considering either the citation or the latest colony count). The applicant concludes that this is indistinguishable from natural fluctuations in the baseline mortality rate of breeding adults from this population per annum, and therefore the potential for an AEoI to the conservation objectives of the kittiwake feature of the FFC SPA in relation to collision mortality effects in the operational and maintenance phase from the proposed development alone can be ruled out.

1.4.55. Other than the methodological concerns described above, IPs did not dispute the conclusion of no AEoI from the proposed development alone.

- 1.4.56. The in-combination assessment of operational collision mortality to kittiwake is presented at paragraph 12.4.84 of the RIAA [REP8-004] onwards. The applicant used collision mortality estimates obtained from the Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects (SADEP) examination to inform the assessment (with some updates and amendments described in the RIAA) (see RIAA table 12.26). The applicant presents in-combination total figures for all projects, both including and excluding those where kittiwake impacts have already been compensated for (including Hornsea Three, Norfolk Boreas, Norfolk Vanguard, East Anglia One North, East Anglia TWO and Hornsea Four). The applicant estimated a total (including compensated-for projects) in-combination collision mortality of 549 breeding adults per annum, equating to a 4.221% increase in baseline mortality, of which the proposed development would contribute 1 (0.82) individual, representing a 0.006% increase in baseline mortality.
- 1.4.57. The applicant undertook PVA to predict the potential impacts on the population over a range of scenarios for both the proposed development alone and in combination with other projects. It estimates a worst-case in-combination annual reduction in population growth of 0.6%. The applicant notes that the population trends at the FFC SPA since 1979 are variable, and therefore an annual reduction in population growth of 0.6% is not expected to be distinguishable from natural fluctuations, and impacts from OWFs are expected to be minimal compared to other ongoing pressures, such as sandeel availability (paragraph 12.4.96). Consequently, the applicant considers it is reasonable to conclude no AEoI to FFC SPA from collision risk to kittiwake, in combination with other projects.
- 1.4.58. NE and the RSPB disputed this conclusion. NE (C41 [PD2-005]) argued that seabirds continue to experience multiple human induced pressures that offshore developments are at risk of accentuating, and that for recently consented OWFs the SoS has already concluded that in combination there is an AEoI at FFC SPA for kittiwake. The RSPB [RR-094] [REP2-068] also concluded that in combination with other projects there will be an AEoI to the FFC SPA owing to the impact of mortality arising from collision and distributional change combined on the kittiwake population. According to the RSPB, after the 40-year lifetime of the proposed development, the kittiwake population size of the SPA is expected to be 74.0% of what it would have been in the absence of the development in combination with other projects [REP2-068].
- 1.4.59. Unable to reach agreement on this matter, the applicant submitted a without prejudice derogation case for kittiwake (see the Kittiwake - Evidence, Site Selection and Roadmap [REP5-017] and the Kittiwake Implementation and Monitoring Plans (KIMP) [REP5-023]).
- 1.4.60. On the basis that the proposed development will be making an additional contribution to the combined total impact to the FFC SPA kittiwake population, already considered by the SoS as an AEoI to the European site for other recently consented OWFs, the ExA considers that AEoI to the kittiwake feature of FFC SPA from the proposed development in combination with other plans and projects cannot be excluded.

Guillemot and razorbill - direct disturbance and displacement during construction and decommissioning

AEol proposed development alone

- 1.4.61. Guillemot was screened in for disturbance and displacement due to work activity and vessel movements within the array area during the non-breeding bio-season (defined as August to February). The assessment of the construction and decommissioning phase is presented from paragraph 11.4.96 onwards of the RIAA [REP8-004]. The applicant apportions 4.4% of predicted guillemots within the project array area plus 2 km buffer to be from the FFC SPA. The applicant predicts a mortality arising from displacement of less than one (0.4) breeding adult during the non-breeding season, representing an increase in baseline mortality of 0.008% of the citation population or 0.004% of the latest population count undertaken in 2022. At the request of NE (C25 [PD2-005]), displacement data was presented in a displacement matrix (table 11.28) displaying displacement consequent mortalities based on the range advocated by NE (15% to 35% displacement, 1% to 10% mortality). Applying a worst-case of 35% displacement and 10% mortality, estimates an increase in baseline mortality (breeding adults) per annum of 5.7, an increase in baseline mortality of 0.113% of the citation population and of 0.083% of the 2022 population count.
- 1.4.62. Razorbill was screened in for disturbance and displacement due to work activity and vessel movements within the array area during the return-migration bio-season from January to March, the post-breeding migration from August to October and the migration-free winter bio-season from November to December. The assessment of the construction and decommissioning phase is presented at paragraph 11.4.106 onwards of the RIAA [REP8-004]. The applicant predicts a total consequent mortality from displacement across the entire non-breeding bio-season of less than one (0.11) breeding adult per annum, which represents an increase in baseline mortality of 0.005% of the citation population or 0.002% of the 2022 population count. Again, in response to NE (C25 [PD2-005]) displacement data was presented in a displacement matrix (table 11.29). Applying a worst-case of 35% displacement and 10% mortality, estimates an increase in baseline mortality (breeding adults) per annum of 1.57, an increase in baseline mortality of 0.071% of the citation population and of 0.250% of the 2022 population count.
- 1.4.63. The applicant therefore considers that the loss of one adult for both the guillemot and razorbill features is so low and the impact temporary and spatially limited, that the potential for AEol to the conservation objectives of either auk feature of FFC SPA in relation to disturbance and displacement effects in the construction and decommissioning phase from the proposed development alone can be ruled out.
- 1.4.64. IPs did not dispute the conclusion of no AEol from the proposed development alone.

- 1.4.65. Given the scale of impact (using either the applicant or NE's preferred methodology) the ExA is satisfied this pathway will not result in AEol for either the guillemot or razorbill features of FFC SPA.

AEol proposed development in combination

- 1.4.66. Table 12.8 of the RIAA [REP8-004] states that in-combination construction and decommissioning disturbance impacts to guillemot and razorbill of the FFC SPA are not considered because the assessments alone concluded potential for trivial and inconsequential levels of effect (0.41 breeding adult guillemots and 0.11 breeding adult razorbills per annum across all bio-seasons). The applicant argues these would be within the error margins of the assessment, and therefore provided no potential for any contribution for an in-combination effect. IPs did not dispute this.

- 1.4.67. On the basis of the information provided, the ExA is satisfied that this LSE pathway will not result in AEol to FFC SPA by virtue of effects to guillemot and razorbill from the proposed development alone and in-combination with other plans and projects.

Guillemot and razorbill - direct disturbance and displacement during operation and maintenance

AEol proposed development alone

- 1.4.68. Guillemot and razorbill were screened in for operational disturbance and displacement within the array area during the non-breeding bio-season (defined as August to February for guillemot and August to March for razorbill) (breeding season connectivity was screened out due to the distance to the FFC SPA).
- 1.4.69. The assessment of effects on guillemot is presented at paragraph 11.4.150 of the RIAA [REP8-004] onwards. The applicant assumes that 4.41% guillemots in the array area are apportioned to FFC and applies rates of 50% displacement and 1% mortality (see displacement matrix 11.33). It predicts a total mortality at less than one breeding adult (0.82 individuals), which is equivalent to an increase in baseline mortality of 0.016% of the citation population or 0.023% of the 2022 population of FFC SPA in the nonbreeding bio-season. The applicant concludes that this level of impact would be indistinguishable from natural fluctuations in the population (comprising a background mortality of 5076 breeding adults per annum). On this basis, the applicant considers the potential for an AEol to the conservation objectives of the guillemot feature of FFC SPA in relation to disturbance and displacement effects in the operational and maintenance phase from the proposed development alone can be ruled out.
- 1.4.70. The assessment of effects on razorbill is presented at paragraph 11.4.158 of the RIAA [REP8-004] onwards. The applicant assumes that 3.38% guillemots are apportioned to FFC and applies rates of 50% displacement and 1% mortality (see displacement matrix 11.35). It predicts a total mortality in the non-breeding bio-season at less than one breeding adult (0.22) individuals per annum, which is equivalent to an increase in baseline mortality of 0.010% relative to the citation population or 0.004% to the 2022 population of FFC SPA. The

applicant concludes on this basis that the potential for an AEol to the conservation objectives of the razorbill feature of the FFC SPA in relation to disturbance and displacement effects in the operational and maintenance phase from the proposed development alone can be ruled out.

- 1.4.71. NE considered that it is more precautionary to apply a range of displacement and mortality rates (as set out in its Best Practice Guidelines) to displacement effects and advised a 70% displacement rate and 2% mortality rate for calculating impacts to auks in this case (C31 and C32 [PD2-005] [REP8A-051]). This resulted in a predicted mortality of 2.28 breeding adult guillemots per annum and 0.63 razorbills.
- 1.4.72. The applicant argued that there is growing evidence from wind farms post-construction that its preferred rates are appropriate, that habituation is possible, and that displacement rates may diminish over the operational life of an OWF [REP7-076]. NE raised various critiques of the evidence presented by the applicant in [REP8A-051], arguing it is inconclusive regarding low displacement or habituation, and maintained that a range-based assessment is more appropriate than relying on a single displacement value, due to the uncertainties and limitations in the current evidence base. Despite the differing approaches, NE did not contest the applicant's conclusion of no AEol.
- 1.4.73. Based on the information provided, the ExA considers applying the displacement and mortality rates advocated by NE is more precautionary. Nevertheless, using NE's preferred approach, the ExA remains satisfied that this LSE pathway will not result in AEol to FFC SPA during the operational phase by virtue of effects to guillemot and razorbill from the proposed development alone.

AEol proposed development in combination

- 1.4.74. The in-combination assessment of impacts from operational phase displacement to guillemot as a feature of FFC is presented at paragraph 12.4.24 of the RIAA [REP8-004] onwards. The applicant presents its preferred displacement rate of 50% and a mortality rate of 1%, as well as NE's preferred displacement range of between 30% to 70% and mortality range of between 1% and 2% (table 12.15) (in response to NE C31 [PD2-005]). The applicant predicts a total in-combination consequent mortality as a result of displacement of 564 (564.2) breeding adults per annum, representing a 11.116% increase in baseline mortality relative to the citation population, or a 6.167% increase relative to the latest 2022 population estimate.
- 1.4.75. The applicant argues that given the contribution of the proposed development to this total is predicted at less than one individual (0.8), equating to a less than 0.105% increase in baseline mortality, the proposed development would provide no material contribution to the in-combination effects to FFC SPA. Nevertheless, the applicant undertook further assessment in the form of PVA as the combined effect exceeded a 1% increase in baseline mortality (as recommended by NE).

- 1.4.76. The PVA of guillemot predicts that a ('worst-case') scenario of 70% displacement and 2% mortality would result in an annual reduction in population growth rate of 1.2%, while the applicant's preferred ('realistic') scenario of 50% displacement and 1% mortality would reduce it by 0.4%. The applicant argues that the latter scenario is the most appropriate (see above), from which an annual reduction of approximately 0.4% would be indistinguishable from natural fluctuations in the population (estimated to be growing at 4% annually). On the basis of the applicant's scenario, and the small contribution made by the proposed development to the in-combination effect, the applicant concludes there is no potential for an AEoI to the conservation objectives of the guillemot feature of FFC SPA in relation to disturbance and displacement effects in the operational and maintenance phase in combination and therefore, subject to natural change, guillemot will be maintained as a feature in the long term.
- 1.4.77. The in-combination assessment of impacts from operational phase displacement to razorbill as a feature of FFC is presented at paragraph 12.4.41 of the RIAA [REP8-004] onwards. As with guillemot, a displacement rate of 50% and a mortality rate of 1% were deemed appropriate by the applicant and based on advice from NE a displacement range of between 30% to 70%, and a mortality range of between 1% and 2% was also presented (table 12.18) (as requested by NE, see C31 [PD2-005]). The applicant predicts, based on its preferred scenario, a total in-combination displacement consequent mortality of 129 (128.78) breeding adults per annum, representing a 5.801% increase in baseline mortality relative to the citation population, or a 1.999% increase relative to the latest 2022 population estimate. As per guillemot, the applicant argues that the proposed development would provide no material contribution to the in-combination effects to FFC SPA (less than a 0.05% increase in baseline mortality). However, because the in-combination impact from other projects exceeds a 1% increase in baseline mortality, PVA was undertaken.
- 1.4.78. The PVA of razorbill predicts an annual reduction in population growth rate of 0.67% under the 70% displacement and 2% mortality scenario and an annual reduction of roughly 0.2% under the applicant's preferred 50% displacement and 1% mortality scenario, which it considers would be indistinguishable from natural fluctuations in the population (estimated to be growing at 6% annually). Therefore, the applicant concludes there is no potential for an AEoI to the conservation objectives of the razorbill feature of FFC SPA in relation to disturbance and displacement effects in the operational and maintenance phase in combination.
- 1.4.79. NE considered that it is more precautionary to apply a range-based approach to displacement effects and advised a 70% displacement rate and 2% mortality rate for calculating impacts to auks in this case (C31 and C32 [PD2-005] [REP8A-051]). This resulted in a predicted in-combination mortality of 1579.9 breeding adult guillemots (Table 12.14) and 360.57 razorbills per annum (Table 12.18). See preceding paragraphs regarding the methodological differences between NE and the applicant on this point.

- 1.4.80. During the examination, NE (C15 and C32 [PD2-005]) disputed the applicant's impact figures from other projects and advised that the assessment should include updated information from Outer Dowsing, Dogger Bank South (DBS) West and East and North Falls, particularly where those values are based on those from preliminary environmental information reports (PEIR). In response to the RIES ([PD-027], QT3.3.4) the applicant updated the RIAA [REP7-018] to include the most recent published numbers from Greenvolt, Outer Dowsing, DBS East and West, North Falls and Ossian OWFs.
- 1.4.81. NE (C5 and C41 [PD2-005]) advised that the in-combination effects on the FFC SPA populations of guillemot and razorbill are already at a level where it has not been possible to rule out AEol and that the proposed development will be adding to this impact. The RSPB [RR-094] [REP2-068] also concluded that in-combination with other projects there will be an AEol to the FFC SPA owing to the impact of mortality arising from distributional change on the guillemot and razorbill populations.
- 1.4.82. On the basis that the proposed development will be making an additional contribution to the combined total impact to the FFC SPA guillemot and razorbill populations, the ExA considers that AEol to these features of FFC SPA from the proposed development in combination with other plans and projects cannot be excluded.

Gannet

- 1.4.83. The RIAA [REP8-004] concludes no adverse effects on the gannet feature of FFC SPA alone and in combination from:
- direct disturbance and displacement during construction and decommissioning
 - operational disturbance and displacement, and
 - operational collision mortality
 - combined operational disturbance and displacement and collision mortality
- 1.4.84. NE (C27 [PD2-005]) initially disputed the applicant's approach to apportioning adult gannets to the FFC SPA, and that as a result it was unable to agree the effects of the proposed development (C41 [PD2-005]). The applicant [REP1-051] [REP5-091] clarified that it had already presented the NE advised approach (using site specific DAS data) for LBBG and has followed a similar approach for gannet in the Apportioning Note [REP1-020]. This issue was considered resolved in the NE Risk and Issues Log [REP4-040] and NE agrees with the apportionment to FFC SPA. In response to the RIES ([PD-027], QT3.3.6) NE [REP7-110] confirmed that it agreed that AEol could be ruled out either alone or in combination.
- 1.4.85. With respect to the assessment of operation collision mortality, the RSPB [RR-094] [REP2-068] provided detailed comments on the applicant's application of additional macro-avoidance to predicted gannet collision mortalities. The RSPB disputed the applicant's choice of avoidance rate for breeding gannets and the use of a 70% correction factor to baseline densities. The RSPB disagreed with the approach of

applying macro-avoidance to baseline densities and using the 'all gull' avoidance rate, as evidence for macro-avoidance during the breeding season is limited and gannets have different flight responses and lower manoeuvrability than gulls. The RSPB also highlighted potential habituation by gannets to turbines, which could reduce macro-avoidance and increase collision risk.

1.4.86. The applicant [REP1-049] [REP5-067] responded that its approach follows NE's guidance and is considered robust. The RSPB recognised that the applicant has followed NE advice and notes that the ANCBs do not have a common position on this correction factor, explaining that the RSPB position aligns with that of NatureScot. For this reason, the RSPB [REP5-067] does not agree that AEol can be excluded, alone or in combination.

1.4.87. 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 gannet of FFC SPA from all pathways, both alone and in combination (including combined operational disturbance and displacement and collision mortality).

Farne Islands SPA

1.4.88. A description of the European site and its qualifying features, and the potential effects resulting from the proposed development, are provided in section 22 of the Summary of Designated Sites [REP7-023].

1.4.89. The RIAA [REP8-004] provided an assessment which addressed the potential for AEol resulting from:

- disturbance and displacement during construction and decommissioning to guillemot and razorbill (not a feature of the site, but part of the seabird assemblage and screened in based on NE advice), and
- disturbance and displacement during operation and maintenance to guillemot and razorbill

Direct disturbance and displacement during construction and decommissioning to guillemot and razorbill

AEol proposed development alone

1.4.90. As with FFC SPA, the guillemot feature of the Farne Islands SPA was screened in for disturbance and displacement due to work activity and vessel movements within the array area during the non-breeding bio-season (defined as August to February). The assessment of the construction and decommissioning phase is presented at paragraph 11.4.121 onwards of the RIAA [REP8-004]. The applicant predicts a total mortality from displacement attributed to Farne Islands at less than one breeding adult (0.35) individuals during the non-breeding bio-season. This equates to an increase in baseline mortality of 0.007% relative to the citation population and of 0.004% relative to the most recent 2017 population count (see Table 11.27). At the request of NE (C25 [PD2-005]), displacement data was presented in displacement matrix 11.30, displaying displacement consequent mortalities based on the range advocated by NE (15% to 35% displacement, 1% to 10%

mortality). Applying a worst-case of 35% displacement and 10% mortality, produces an estimated increase in baseline mortality (breeding adults) per annum of 4.8, an increase in baseline mortality of 0.121% relative to the citation population and of 0.124% relative to the 2017 population count.

1.4.91. The assessment of the construction and decommissioning phase disturbance impacts to razorbill can be found at paragraph 11.4.130 onwards of the RIAA [REP8-004]. This was included at Deadline 7 at the request of the ExA ([PD-027] , QT3.3.8a), and to address concerns raised by NE (C3 and C24 [PD2-005]).

1.4.92. The RIAA explains that razorbill is only an assemblage feature of Farne Islands SPA, and the population is small (427 individuals for the most recent count and 572 individuals for the citation count) and that the estimated displacement mortality is 0.000 (whether applying displacement rates of 50% and a mortality rate of 1%, or 70% displacement and 2% mortality). No displacement matrix was provided, but NE confirmed this was not necessary in this case due to the negligible impacts predicted [REP5-096].

1.4.93. In light of these figures, the applicant concludes that AEol can be ruled out from the proposed development alone on both the guillemot feature and razorbill component of the seabird assemblage feature of the Farne Islands SPA, in relation to disturbance and displacement effects in the construction and decommissioning phase.

1.4.94. NE confirmed [REP7-110] that it agrees with the applicant and considers the estimated scale of the impact on the Farne Island SPA breeding population of guillemot and its effect on their baseline mortality sufficiently low to conclude no AEol alone, and raised no objections to the conclusion of no AEol alone to the Farne Islands razorbill population.

1.4.95. On the basis of the above information, the ExA is satisfied that this LSE pathway acting on guillemot and razorbill will not result in AEol to the Farne Islands from the proposed development alone.

AEol proposed development in combination

1.4.96. Table 12.8 of the RIAA [REP8-004] states that in-combination construction and decommissioning effects to guillemot of the Farne Islands SPA were not considered because the assessment alone concluded potential for a trivial and inconsequential level of effect (0.35 breeding adult birds per annum), that would be well within the error margins of the assessment, and therefore no potential for any contribution for an in-combination effect.

1.4.97. Table 12.8 does not address in-combination impacts to razorbill, as raised by NE (C3 and C24 [PD2-005]). The applicant explained that this is because the predicted impacts were so small (0.000) and NE was content with this [REP5-096].

1.4.98. With respect to razorbill, the ExA is satisfied that this LSE pathway will not result in AEol to the Farne Islands SPA from the proposed

development due to the low magnitude of the predicted impact. Concerning guillemot, given that IPs did not dispute the conclusion of no AEol from the proposed development alone from this phase of the development, the ExA considers that AEol can be excluded.

Displacement during operation and maintenance to guillemot and razorbill

AEol proposed development alone

1.4.99. Guillemot was screened in for operational disturbance and displacement within the array area during the non-breeding bio-season (defined as August to February), and the assessment is presented at paragraph 11.4.169 of the RIAA [REP8-004] onwards (including displacement matrix 11.37). The applicant predicts the consequent mortality from being displaced is estimated at less than one (0.69) breeding adult, representing a 0.017% increase in baseline mortality in the non-breeding bio-season based on the citation population, or a 0.018% increase relative to the recent 2017 population count.

1.4.100. The applicant concludes that this level of impact would be indistinguishable from natural fluctuations in the population and therefore the potential for AEol in relation to disturbance and displacement effects in the operational and maintenance phase from the proposed development alone to the guillemot feature of the Farne Islands SPA can be ruled out.

1.4.101. The HRA Screening Report [APP-042] concludes that there is the potential for LSE to razorbill populations from direct disturbance and displacement in the non-breeding season, for the operational and maintenance phase. However, no assessment is provided in the RIAA [REP8-004]. NE raised this (C3 and C24 [PD2-005]) and the applicant explained that razorbill is only an assemblage feature of Farne Islands SPA and because of the small size of the colony and the distance from the proposed development, the estimated annual mortality is 0.000 (whether the applicant or NE's preferred displacement and mortality rates are applied) [REP1-051] [REP5-091]. At Deadline 5 NE confirmed this issue was resolved agreeing that impacts were too small [REP5-096].

1.4.102. NE confirmed [REP7-110] that it agrees with the applicant and considers the estimated scale of the impact on the Farne Island SPA breeding population of guillemot and its effect on their baseline mortality sufficiently low to conclude no AEol alone. NE raised no objections to the conclusion of no AEol alone to the Farne Islands razorbill population.

1.4.103. On the basis of the above information, the ExA is satisfied that this LSE pathway will not result in AEol to the Farne Islands SPA from the proposed development alone.

AEol proposed development in combination

1.4.104. Table 12.9 of the RIAA [REP8-004] states that in-combination operational phase effects to guillemot of the Farne Islands SPA were not considered because the assessment alone concluded a potential

for a trivial and inconsequential level of effect (0.69) which would provide no material contribution to the in-combination effect at the site.

- 1.4.105. However, with respect to guillemot, NE (C41 [PD2-005] [REP7-110]) disputed the applicant's conclusions. NE argued [REP7-110] [REP7-108] that the predicted contribution of the proposed development to in-combination effects, whilst small at approximately 2 adults from Farne Islands SPA (based on 70% displacement and 2% mortality) (see table 11.37), warrants further consideration, given that NE has advised that AEol cannot be ruled out from the Berwick Bank OWF project alone. NE considers it may not be possible for the SoS to rule out adverse effects in combination for Farne Islands SPA given the Berwick Bank OWF proposal has still not been determined. NE therefore considers that the applicant should include the Farne Islands SPA guillemot in the scope of its compensatory proposals (noting that Rampion 2 OWF has done this) [REP7-110] [REP7-108].
- 1.4.106. The applicant argued that Berwick Bank OWF has not been approved and the connectivity to Farne Islands from the proposed development is tenuous with the colony being over 470km from the array area. Nevertheless, the applicant revised the 'without prejudice' auk compensatory measure roadmap (Guillemot and Razorbill - Evidence, Site Selection and Roadmap [REP8-012]) to include impacts to the Farne Islands and corresponding additional pairs.
- 1.4.107. As above, no assessment of razorbill was provided (alone or in combination) or justification for its omission. NE initially raised this (C3 and C24 [PD2-005]) but subsequently confirmed this issue was resolved agreeing with the applicant's position that the impacts were too small [REP5-096].
- 1.4.108. The ExA agrees with NE that it is not possible to exclude AEol from in-combination disturbance/displacement for the guillemot qualifying feature of the Farne Islands SPA as it has not seen sufficient robust evidence that would bring into doubt NE's position on this as the ANCB.

Outer Thames Estuary SPA

- 1.4.109. As discussed in the section on LSE in this Appendix, the applicant concluded no LSE for operational impacts on the RTD feature of the OTE SPA. However, the ExA recommends that this pathway is taken forward for consideration of AEol due to the mitigation measures proposed (vessel management measures in [REP8A-014]). Given the scale of operational vessel movements and the mitigation proposed, the ExA is satisfied there would be no AEol during the operational phase from the proposed development alone at the OTE SPA by virtue of potential effects to RTD.
- 1.4.110. For the construction and decommissioning phases, the applicant concluded a LSE on the RTD for disturbance and displacement of non-breeding birds resulting from work activity and vessel movements within the OfECC. A description of the site and feature is provided at paragraph 11.4.50 of the RIAA [REP8-004].

Disturbance and displacement of red-throated diver

AEol from the proposed development alone

- 1.4.111. The assessment explains that the proposed OfECC route will overlap with the OTE SPA for approximately 16 km. The laying of export cables will involve cable laying vessels being in situ for the offshore construction period of a maximum of 5 years.
- 1.4.112. The applicant has modelled displacement (ES Chapter 6, Part 5, Annex 4.15: Apportioning Note [REP1-020]). Using the rate of 100% displacement within the area around the cable laying vessel and a 2km buffer the applicant estimates between 42 and 110 RTD would be displaced, resulting in between 0.37 and 1.1 mortalities per annum, representing between 0.040% and 0.106% increase in baseline mortality based on the citation population. On this basis the applicant concludes there is no potential for an AEol to the conservation objective to maintain the population levels of the RTD feature of OTE SPA. The applicant has also presented mortality rates as per NE's preferred approach, considering a range of mortality estimates (1 to 10%) in table 11.18.
- 1.4.113. The applicant also considers the potential for adverse effects from displacement due to changes to their supporting habitats. The assessment argues that the mean densities of RTD in the area of overlap between the OfECC and the SPA are lower than adjacent areas, and as impacts on prey species have been found to be non-significant, any potential indirect effects on RTD are extremely low.
- 1.4.114. The applicant proposed mitigation measures to minimise disturbance, set out in paragraph 11.4.71 of the RIAA [REP8-004]. This includes a seasonal restriction on export cable installation between 1 November to 31 March inclusive within the boundary of the SPA. These measures are presented in section 3.3 'Best practice protocol for minimising disturbance to red-throated diver' in Working in Proximity to Wildlife in the Marine Environment [REP8A-013] secured via condition 13(1)(d)(v) of the deemed marine licence (DML) (Schedule 11 of the dDCO [REP8A-004]). The applicant considers this mitigates against impacts for the wintering RTD at the OTE SPA and should result in almost a complete reduction in the impacts associated with vessel traffic. It concluded no potential AEol of the OTE SPA [REP8-004] [REP6-052].
- 1.4.115. During the examination, both NE (C9, C19 and C21 [PD2-005] [REP4-058]) and the RSPB ([RR-094] [REP2-068]) advised that additional mitigation should be provided to mitigate risk to RTD posed by vessel movements. Both IPs recommended that all vessel activity within the OTE SPA and within a 2km buffer be undertaken outside of a seasonally restricted period during construction and decommissioning of the export cable and follow NE's best practice guidelines on vessel movements during all other phases of the development (for both export cable laying, and construction and decommissioning of the array). Both IPs considered that the applicant had not fully considered the SPA conservation objectives, particularly the objective to maintain or restore 'the distribution of the qualifying features within the site' and, by

reducing the functional size of the SPA, the objectives could be compromised [RR-094] [REP8A-050]. [REP8A-050] also confirms that NE does not challenge the applicant's assessment of likely RTD mortality through displacement or the objective relating to RTD abundance, but that its concerns relate to availability of unimpacted habitat and distribution of birds within the site.

1.4.116. Initially, NE (C34 [PD2-005]) also raised concerns with the methods of estimating displacement mortality but following clarification from the applicant [REP1-051], it concluded that if the seasonal restriction could be secured as advised (see above) then the impacts would be mitigated adequately (see ID 3.3.12 (table 3.3) of the RIES [PD-027] for further details).

1.4.117. The applicant's position was set out in a RTD Note [REP6-052] and figure 2.1 presented RTD densities and distributions (see also [REP2-004] [REP5-074]). The applicant argued that densities of RTD within the OfECC are not high and shipping data overlain onto the OfECC indicates medium to high vessel traffic (shipping lanes). The applicant notes that immediately outside these areas there are high densities of RTD. In light of this, the applicant argues that the OfECC does not cover areas of unimpacted habitat, that any other works in the OfECC outside the SPA would be largely indistinguishable from background traffic given the already high density, that it would not lead to additional impacts on the SPA, and therefore a 2km buffer to the seasonal restriction would be overly precautionary in this location.

1.4.118. Late in the examination, NE and the applicant held a meeting to explore whether a bespoke approach could be developed to facilitate the cable installation whilst giving sufficient protection to the SPA [REP8A-050]. According to NE [REP8A-050], the area of the SPA where the 2km buffer overlaps with areas of higher RTD density, and is therefore of greatest concern to NE, is also where installation difficulties such as other sea-users and burial depth requirements engineering difficulties, and therefore where the applicant is constrained in its ability to commit to seasonal restrictions (referred to as the mid-northern sector) (see figure 3.1 of [REP8A-014]). According to the applicant [REP8A-038], NE has agreed that the seasonal restrictions are not required in the northwestern and northeastern sectors of the buffer where RTD densities are low (see figure 3.1 of [REP8A-014]). The mid-northern sector is more challenging, however the applicant updated the Working in Proximity to Wildlife in the Marine Environment [REP8A-014] at Deadline 8A to include additional mitigation measures to limit disturbance in this area, namely:

- Working in only one deep water route at any time to reduce the area of disturbance at any one time.
- Carrying out work in vessel clusters (maintaining close proximity where possible).
- Working over a duration of 3 months within the restricted season.
- Carrying out the work outside of the seasonal restrictions where feasible.

1.4.119. Given the number of vessels associated with the proposed development, the speed at which they would operate, and subject to

the mitigation set out in [REP8A-014] the ExA finds that additional vessel movements from the proposed development within NE's proposed additional buffer would be unlikely to increase the amount of disturbance or reduce the distribution of RTD compared to the existing situation.

1.4.120. The ExA therefore favours the applicant's seasonal restriction to cable laying activities as set out in [REP8A-014], finding that NE's standard approach would be unduly cautious in this context. Subject to this restriction, together with other identified mitigation, the ExA is content that the conservation objective concerning the availability of unimpacted habitat in the OTE SPA and the maintenance of the distribution of birds would not be contravened.

1.4.121. It follows that the ExA finds that there would be no AEol from the proposed development alone at the OTE SPA by virtue of potential effects to RTD.

AEol proposed development in-combination

1.4.122. Table 12.8 of the RIAA [REP8-004] states that in-combination construction and decommissioning disturbance effects to RTD are not considered because the assessment alone concluded potential for a trivial and inconsequential level of effect (maximum of 3.30 birds), that would be well within the error margins of the assessment, and therefore no potential for any contribution for an in-combination effect. The applicant notes also the mitigation proposed (see above) and that current planned or operational projects with potential impacts to the RTD feature of OTE SPA have mitigated impacts by agreeing to a seasonal restriction to construction.

1.4.123. In light of the above, the ExA agrees there is no potential for AEol to the OTE SPA owing to in-combination effects on RTD.

Benthic ecology

Margate and Long Sands SAC

1.4.124. 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 decommissioning unless otherwise stated:

- Physical habitat loss or disturbance
- Suspended sediment or deposition
- INNS
- EMF (operation only)
- Changes to physical processes (operation only)
- Accidental pollution

1.4.125. A description of the site and feature is provided at paragraph 11.2.2 of the RIAA [REP8-004] and section 3 of the Summary of Designated Sites [REP7-023].

Overarching matter – maximum design scenario or worst-case scenario methodology

APPENDIX C: HRA REPORT FIVE ESTUARIES OFFSHORE WIND FARM EN010115
REPORT TO THE SECRETARY OF STATE FOR ENERGY SECURITY AND NET ZERO: 17 June 2025

- 1.4.126. NE [PD2-004] [PD2-007] raised concerns about whether the MDS used for assessing impacts from installation, maintenance and decommissioning of the offshore cable and associated cable protection were realistic. It requested further information for several components as detailed in the RIES [PD-027] and discussed below.

Cable protection

- 1.4.127. NE (B10 [PD2-004] and E1, E3, E6, E7, E24 and E27 [PD2-007]) requested further detail about the length and volume of cable protection, including scour protection and repair and replacement, over the lifetime of the proposed development. To address NE's concerns, the applicant produced Technical Note – Methodology for Determining MDS (Offshore) [REP2-027]. It was updated several times during the examination in response to NE [REP4-063] [REP5-097] and the ExA (ME.2.05 [PD-014]). The final version was [REP6-037].
- 1.4.128. The applicant [REP2-020] committed to the cable taking the shortest route through the MLS SAC. Based on indicative routes (that would be finalised following further survey and design work), the applicant stated that there would be between 0.4km and 1.5km of cable within the SAC; applying an assumption of 50% of this cable requiring protection to an assumed routeing of 900m per cable (the mid-point between 0.4km and 1.5km), the applicant specified a maximum cable protection volume of 5,400 square metres (sq.m) in the SAC. The applicant [REP5-074] confirmed that this included cable repair or replacement or exposure during operation and was the total figure for all cables in the MLS SAC [REP7-086]. The applicant also provided a breakdown of cable protection required per phase in the MLS SAC Benthic Mitigation Plan ([REP8-022], section 7) and clarified wording in the final version [REP8A-011] that any further placement of cable protection would require a new marine licence. Condition 29 of the DML (Schedule 11 of the dDCO [REP8A-042]) restricts the placement of cable protection to within 10 years from grant of DCO.
- 1.4.129. The Technical Note [REP6-037] explains how the likely failure rate of cables and repair values were determined, which it considered to be conservative. It used the example of Rampion 2 OWF, which assumed a value of 6 repairs for 250km cable. The applicant did not consider it would be appropriate to use operational data from Galloper OWF as suggested by NE, as industry improvements and methods have matured. It cited an example of a well-documented issue relating to systematic cable protection system failure due to abrasion on scour protection that led to multiple array cable replacements at numerous OWF, which was then resolved by industry. It states that the MDS was based on an assumption of 20% assumption of the cable and scour protection requiring replacement over the lifetime of the proposed development; it selected 20% based on operational experience. It also notes that the engineering design seeks to ensure that the cable and scour protection is maintenance free where possible. It confirmed that the replacement allowance was in the assessed MDS for total seabed habitat loss and would occupy the same area and not be additional (as specified in table 11.01 of the RIAA [REP8-004]. Condition 28 of the DML (Schedule 11 of the dDCO [REP8A-042]) requires reporting of the

location and volume of cable protection following completion of construction to the MMO and relevant ANCB.

- 1.4.130. In response to NE [REP4-059] advising that cable protection should readily removable and removed at decommissioning, the applicant committed to remove cable protection at decommissioning in the MLS SAC Benthic Mitigation Plan [REP8A-011]. The RIAA [REP8-004] included an assessment of decommissioning effects based on removal.
- 1.4.131. NE (Point 1, [REP8A-053]) advised that its concerns about the MDS volume and area of cable protection were resolved by [REP6-037] but noted that no updates had been made to the Outline Cable Specification and Installation Plan (OCSIP) [REP6-021] to address other inconsistencies in the MDS for cable protection. It showed this matter as unresolved (amber) at the close of examination. As discussed below, a detailed CSIP would be secured through the DML (Schedule 11 of the dDCO [REP8A-042]).
- 1.4.132. The issues raised by NE with the MDS for cable protection have been considered in detail. Whilst NE noted some outstanding inconsistencies of the MDS in the OCSIP, the ExA notes that there is provision in the DML for a final version of this plan to be agreed and is satisfied that any inconsistencies could be addressed through this process, and would not alter the principle of the measures set out. On the basis of the evidence produced throughout the examination by the applicant, the ExA is satisfied that the MDS provides a reasonable and realistic basis for the assessment of AEoI to the MLS SAC.

Cable installation, including seabed preparation activities

- 1.4.133. NE (B4 and B9 [PD2-004]) highlighted uncertainty about the WCS for sediment disturbed by cable trenching. It requested further evidence and advised the applicant to use an assumption of 100% of material being fluidised and displaced. Initially NE [REP3-033] recorded this matter as resolved based on the applicant [REP1-051] confirming it adopted an assumption of 100% in the sediment plume modelling [REP1-057], but subsequently [REP4-061] sought clarification given contradictory information in the Technical Note [REP2-027]. The applicant [REP6-037] clarified that the MDS for cable trenching in the ES Detailed Offshore Project Design Envelope Chapter [APP-070] was estimated using a typical average burial depth of 1.75m and 100% ejection for the pre-lay method or maximum burial depth of 3.5m and 50% ejection for simultaneous cable lay and bury. It confirmed [REP6-037] [REP8-036] that 3.5m burial depth and 100% ejection was modelled in the sediment plume modelling [REP1-057], providing results consistent with those from other assessment methods. On that basis, it considered that the ExA could have confidence that the realistic worst-case was assessed. NE [REP7-103] [REP8A-053] advised that as the geotechnical properties are yet to be confirmed, and a combination of burial tools may be used, the applicant should use the WCS burial depth and sediment disturbance in its assessment and this matter remained unresolved (amber). In response to NE (E8 [PD2-007]), the applicant also included a commitment to no cable trial

trenching in the MLS SAC in the MLS SAC Benthic Mitigation Plan [REP8A-011].

1.4.134. NE stated (B10 [PD2-004]) that the WCS for potential morphological impacts during construction should consider boulder clearance, UXO clearance and pre-lay grapnel run, and advised (E31 [PD2-007]) that the RIAA should be updated to consider UXO clearance along the OfECC. The applicant [REP1-051] stated that impacts associated with these construction activities were assessed in ES Chapter Marine Geology, Oceanography and Physical Processes [APP-071], which concluded that no activities have potential to cause greater impacts (morphological change or increase in suspended sediment concentration (SSC)) than activities already assessed (sandwave clearance and cable trenching). UXO clearance would be assessed as part of a separate marine licence if needed. In response to the ExA (QT3.1.4 [PD-027]), NE [REP7-110] acknowledged that the applicant had provided an indicative total maximum seabed preparation area and volume for export cable laydown areas from these activities but stated that the indicative total maximum seabed preparation area and volume for sandbanks and designated areas of seabed remained unclear. The applicant [REP8-036] stated it was unable to determine a realistic MDS for these receptors prior to detailed design stage; however, it maintained [REP7-083] that the impacts were fully assessed within the MDS for cable installation. NE [REP8-052] [REP8A-053] recorded progress based on the applicant's further information on boulder clearance in [REP7-079] but was concerned that some methods proposed such as SCAR plough could have a LSE on Annex I sandbank if used in the MLS SAC, for example through creation of a linear formation that disrupts sediment transport. It requested a commitment to ensure boulders cleared in the SAC were deposited in similar habitats and to avoid linear formations, which the applicant incorporated into the final Outline Sediment Disposal Management Plan (OSDMP) [REP8A-035].

1.4.135. NE (E9, E11 and E12 [PD2-007]) advised that parameters used to determine dredge disposal criteria other than within the same sediment type may not be realistic. The applicant [REP1-051] stated that the MDS is a robust characterisation and, as specified in the Dredge Disposal Site Characterisation Report [REP4-017], disposal of soil in situ is the most environmentally robust approach. Disposal of drilled and dredged materials is expected to occur close to disturbance and no or slight change is expected for sediment size and characterisation. This corresponds to a mitigation measure to minimise change of sediment size and characterisation along the OfECC, which the applicant specified in the OSDMP [REP8A-035]. NE [REP8A-052] [REP8A-053] recorded this matter as not agreed (amber) although its outstanding comments related primarily to the applicant's proposed mitigation rather than the assessment parameters (as discussed below).

1.4.136. Cable burial depth was also raised as a concern by Harwich Haven Authority (HHA) and the Port of London Authority (PLA) (including [AS-069] and [REP5-107]) in respect of shipping and navigation. It was confirmed that the deep water routes (DWR) would

be outside of the MLS SAC and accordingly the maximum burial depth of 22m below chart datum (CD) sought by HHA and PLA would not be required in the MLS SAC. The burial level would remain at 19m below CD within the SAC, as assessed within the RIAA [REP8-004].

- 1.4.137. The issues raised by NE with the WCS for cable installation have been considered in detail. On the basis of the evidence produced throughout the examination by the applicant, the ExA is satisfied that the MDS used provides a reasonable and realistic basis for the assessment of AEoI to the MLS SAC, subject to the parameters for dredge disposal being adequately secured in the final OSDMP and MLS SAC Benthic Mitigation Plan as discussed below (under effectiveness of mitigation).

Operational and maintenance activities

- 1.4.138. NE (E25 [PD2-007]) was concerned that a plan that clearly set out activities during operation was not provided. It requested more detail before advising on the sufficiency of the RIAA [REP1-016]. Noting that the applicant had provided an Outline Offshore Operations Maintenance Plan (OOOMP), the ExA (QT3.1.8, [PD-027]) asked what additional information was required and why it was necessary now. NE [REP7-110] was unclear from the OOOMP ([APP-248], section 2.14) how often preventative maintenance would occur and therefore if impacts were fully assessed. It stated that there was no distinction between activities inside and outside of the MLS SAC and it was unclear what the permitted activities would be within the SAC. The applicant [REP8-036] noted NE's concern but stated that the MLS SAC Benthic Mitigation Plan [REP8A-011] contains commitments relating to operational and maintenance activities within the MLS SAC. The final OOMP, which is secured through condition 4(4) of the DML (Schedule 11 of the dDCO [REP8A-042]) would accord with these commitments. NE [REP8A-053] recorded this matter as not resolved (amber) at the close of examination but did not provide any further information to support its position.

- 1.4.139. The issues raised by NE with the WCS for operational and maintenance activities have been considered in detail. The ExA is satisfied that the applicant has set out sufficient information about the expected operational and maintenance activities to provide a basis for the assessment of AEoI to the MLS SAC, and that any such activities would be restricted in the SAC through commitments in the MLS SAC Benthic Mitigation Plan.

Overarching matter – criteria for determining sensitivity of qualifying features to change

- 1.4.140. NE (E35 and E36 [PD2-007]) queried the benchmarks used in the assessment. The applicant clarified [REP1-051] that the RIAA [REP8-004] used benchmarks from the Marine Life Information (MarLIN) Marine Evidence Based Sensitivity Assessment (MarESA). The ES Chapter Benthic and Intertidal Ecology [APP-074] stated that in line with Chartered Institute of Ecology and Environmental Management (CIEEM) guidance, the sensitivities of different biotypes were classified using MarESA, using a scale that considered resistance

and recoverability with specific benchmarks for different impacts such as smothering and habitat alteration. Sensitivity categories are set out in ([APP-074], table 5.4) and summarised as follows:

- High – habitat or species exhibiting no or low resistance (tolerance) to an external factor and is expected to recover over extended timescales of more than 25 years (resilience very low) or between 10 and 25 years (resilience is low).
- Medium – habitat or species exhibiting no or low resistance (tolerance) to an external factor and is expected to recover over medium timescales of between 2 and 10 years (resilience is medium), or it has no resistance (tolerance) and is expected to recover in less than 2 years (resilience is high), or it has medium resistance (tolerance) and is expected to recover over medium to long timescales between 2 and 25 years or not at all (resilience is medium, low or very low).
- Low – habitat or species exhibiting low or medium resistance (tolerance) to an external factor and is expected to recover is less than 2 years (resilience is high), or resistance (tolerance) is high and recovery is expected over medium to long timescales between 2 and 25 years or not at all (resilience is medium, low or very low).
- Negligible – habitat or species exhibiting high resistance (tolerance) to an external factor and is expected to recover over short timescales of less than 2 years (resilience is high).

1.4.141. NE [REP4-061] commented on the applicant's use of MarESA benchmarks as criteria. It stated that these benchmarks are applicable to single discrete events, not events over the project lifetime. It advised the applicant to clarify if the impacts assessed using MarESA benchmarks related to single discrete events or to otherwise justify its position.

1.4.142. The applicant [REP5-074] disputed NE's position and stated that not all MarESA benchmarks refer to a single discrete event. Of the MarESA benchmarks used in the assessment, abrasion and disturbance is not limited to a single discrete event, and changes in SSC relate to a change in one rank on the Water Framework Directive (WFD) scale (from clear to intermediate for 1 year).

1.4.143. The applicant [REP5-074] agreed that the MarESA benchmarks for smothering do relate to a single, discrete event. It explained that the MDS for temporary increase in suspended sediment and sediment deposition ([APP-074], table 5.12) counts each volume of sediment potentially impacted as separate impacts (discrete events). It gave an example of deposition-causing activities such as sandwave clearance for cable installation and cable trenching, where the WCS was based on the maximum volume for each activity. It stated that it was not possible to determine at this stage if there would be little time between sandwave clearance and cable trenching so that that they would be considered 1 discrete event (due to little recovery time), or if there would be longer between each activity, where each activity is then a discrete event. As such, it applied the MarESA benchmarks to double counted volumes of potential impact from deposition causing activities as part of the assessment.

- 1.4.144. In response to a request from the ExA (QT3.1.9, [PD-027]) about alternative criteria, NE [REP7-110] stated that no other accepted benchmarks exist and advised that the degree of acceptable change in sediment character is highly dependent on the communities present. Small changes in given fractions (such as silt and clay) may be insignificant in mixed sediments, but significant in sands where invertebrate or fish communities are sensitive to finer or coarse fractions. It stated that the Wentworth scale is a useful way of presenting data and understanding significance of change in sediment character, but no defined benchmarks for changes exist.
- 1.4.145. The applicant [REP8-036] did not respond directly to NE's comments about the Wentworth scale but stated that only coarser sands and gravels would settle sufficiently rapidly to become redeposited to the seabed in locally measurable thicknesses and quantities. Finer material would naturally remain in suspension for longer, becoming more dispersed before resettlement, in very small thicknesses, not measurable in practice. It considered that there was limited potential for sediment disturbance to measurably increase the proportion of fines in the seabed.
- 1.4.146. NE's final Risk and Issues Log [REP8A-053] welcomed the applicant's clarification on the benchmarks, but its advice on AEoI was unchanged.
- 1.4.147. Based on the evidence provided, the ExA considers that the MarESA benchmarks are an appropriate basis for determining sensitivity and change in the assessment of AEoI to the MLS SAC.

Overarching matter – indirect effects to the MLS SAC

- 1.4.148. NE (E32 [PD2-007]) advised that the Annex I sandbank qualifying feature extends beyond the MLS SAC boundary; it considered there was potential for indirect effects from impacts to sandbank outside of the SAC. The applicant [REP1-051] stated that evidence suggests the sandbank does not extend beyond the boundary other than to the east (closer to the array), where the distance between the proposed development is such that no indirect effects arise (although it did not specify the distance). NE [REP7-110] advised on that basis that the risk of indirect impacts occurring was low and it did not require further action.
- 1.4.149. The ExA is satisfied based on the information provided by the applicant and the advice of NE as ANCB that there would be no AEoI to the MLS SAC from impacts to sandbank located outside of the MLS SAC boundary resulting in indirect effects.

Overarching matter – in-combination assessment

Other projects and plans scoped in for assessment

- 1.4.150. Section 12.2 of the RIAA [REP8-004] lists the projects and plans included in the in-combination assessment, as relevant to each LSE pathway considered for the MLS SAC. The approach for determining project tiers was described in the HRA Screening Report [APP-042].

- 1.4.151. NE (E29 [PD2-007]) requested use of its best practice guidance for scoping projects into in-combination assessments - Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards.
- 1.4.152. The ExA [PD-011] sought clarification from the applicant as to whether using NE's guidance would result in any change to the assessment conclusions. The applicant (ME.1.11 [REP2-039]) stated that the tiers used were adapted from the Planning Inspectorate's guidance but included operational projects not part of the baseline. It stated NE's guidance includes 7 tiers, which are all represented in the RIAA ([REP8-004], Table 9.2). No additional projects would be screened into the assessment based on NE's guidance and there would be no change to the conclusions. There were no operational OWFs within the benthic zone of influence that were not part of the baseline. NE [REP4-061] noted that tier descriptions had been updated but projects considered had not changed.
- 1.4.153. The ExA (QT3.1.12, [PD-027]) sought an explanation from the applicant as to the level of confidence that operational effects associated with several OWFs were accounted for in the baseline. The applicant [REP7-083] stated that residual effects from Greater Gabbard and Galloper OWF would be in the baseline as these projects have been operational since 2012 and 2018. Residual impacts would be highly localised within the array areas and unlikely to impact surveyed areas for the proposed development. Deposition of sediments during Galloper construction were the only impacts considered to have potential to affect the surveyed area for the proposed development. These were predicted to be present within a short timescale after construction, mainly limited to a short distance from sediment disturbance activities and not discernible against background levels. The applicant stated that subtidal baseline surveys for the proposed development were undertaken in 2021, which was 9 and 3.5 years after completion of Greater Gabbard and Galloper OWFs respectively, so any operational effects would be established.
- 1.4.154. NE [REP8A-053] recorded this matter as not resolved (amber) at the close of examination but did not present any further evidence for its position.
- 1.4.155. The ExA is satisfied based on the information provided by the applicant that the correct projects and plans have been considered in the assessment of LSE pathways from the proposed development in-combination to MLS SAC, and that this is an appropriate basis from which to assess AEol.

Cable crossings

- 1.4.156. NE [REP4-061] sought further detail about the likely location and MDS parameters of any proposed cable crossings, which the applicant provided in [REP4-034] (anticipated number (Table 1), location (Figure 1) and type of crossings, together with a table showing the maximum design envelope for cable crossings).

- 1.4.157. NE [REP5-096] [REP5-097] noted the further information but stated that proximity of the cable crossings to the SAC and Annex I sandbank remained unclear. It [REP6-067] sought more information about proximity and orientation of the cable crossings.
- 1.4.158. The ExA (QT3.1.13, [PD-027]) requested the applicant provide any additional information it held about proximity of cable crossings to the Annex I sandbank. The applicant stated that whilst precise cable crossing locations were not identified, it committed in the OCSIP [REP6-020] to undertake cable crossings of known projects to the east of the MLS SAC in deeper water. A detailed CSIP in accordance with the OCSIP is secured through Condition 13(g) of Schedule 11 of the DML in the dDCO [REP8A-042]. Based on the current proposed order limits of the Sea Link DCO, this cable crossing would be more than 5km from the Annex I sandbank. The cable crossing of Neuconnect would be at least 500m from the Annex I sandbank, with the North Falls cable crossing beyond Neuconnect.
- 1.4.159. NE [REP8A-053] recorded this matter as not resolved (amber) at close of examination but did not provide any further reasoning.
- 1.4.160. The ExA is satisfied that the applicant has set out sufficient information about the expected cable crossings, based on current information and using a maximum design envelope, to provide a basis for the assessment of AEoI to the MLS SAC.

Physical habitat loss or disturbance – AEoI from the Proposed Development alone

- 1.4.161. The RIAA [REP8-004] assessed potential for AEoI from physical habitat loss and disturbance during construction and decommissioning at paragraphs 11.2.26 to 11.2.33. It considered effects from seabed preparation, equipment use and burial of inter-array cables. It concluded that there would be no AEoI on the basis that activities would not affect the long-term maintenance of the conservation objectives, because disturbance would be short-term, the benthic habitats have an existing tolerance and predicted medium to high recoverability of the biotypes present in the Annex I sandbank qualifying feature. The applicant stated that the total area of the MLS SAC expected to be disturbed by sandwave clearance is 0.63sq.m (0.09% of the total SAC area). Based on survey data as illustrated on figure 5.4 of [APP-074] the area of overlap between the MLS SAC and OfECC is characterised by circalittoral coarse sediments, which were determined as having low sensitivity to sandwave clearance. In line with MarESA assessments (ES Chapter Benthic and Intertidal Ecology [APP-074]), recovery is predicted within 1 to 10 years.
- 1.4.162. The RIAA [REP8-004] assessed potential for AEoI from physical habitat loss and disturbance during operation at paragraphs 11.2.56 to 11.2.66. It assessed the potential for foundations and associated scour protection, cable protection at cable crossings and where burial was not possible, which could lead to a change from sedimentary habitat to hard substrate and a permanent habitat loss. The assessment was based on no more than 5,400sq.m of cable

protection in the MLS SAC (0.0008% of the total SAC area). As described above, the applicant has committed not to exceed this volume of cable protection in the DCO. The applicant concluded that this area of the MLS SAC would undergo a permanent habitat change during the operational and maintenance phase but, having regard to the conservation objectives, there would be no AEoI during operation based on the loss being small in comparison to the total area of the SAC, and the capacity of the features to recover, as the seabed is dynamic and the cable protection (at a height of 1.1m) could be buried and uncovered through natural migration of bedforms. It stated that there was also potential for beneficial effects from new habitats for different faunal assemblages to colonise, resulting in a likely increase in biodiversity and biomass. The applicant made further mitigation commitments including taking the shortest cable route through the SAC, following a burial hierarchy and use of mattresses or equivalent form of protection that is removable at the end of cable life, which would be secured in through the DCO as described below (under effective of mitigation). It reiterated [REP1-051] that robust mitigation would be applied by only using cable protection after exhausting all options for cable burial.

1.4.163. NE (E4 and E20 [PD2-007] [REP4-061] [REP5-096]) disputed the applicant's conclusion of no AEoI to MLS SAC. It noted that the SoS decisions for Hornsea Project 3, Norfolk Boreas, Norfolk Vanguard and Dudgeon and Sheringham Shoal OWFs determined that placement of cable protection would have a lasting impact over the lifetime of the proposed development, which could extend beyond the operational life due to limitations in ability to remove cable protection. As the overall condition of the Annex I sandbank qualifying feature is similar to the SACs considered in the earlier OWF decisions, NE advised that placement of cable protection is likely to hinder its conservation objectives.

1.4.164. NE (E34 and E35 [PD2-007]) provided advice on small scale losses. It referred to the SoS decision for SADEP, noting that in those cases measures of equivalent environmental benefit (MEEB) were required to compensate for a volume of cable protection proposed at the Cromer Shoal Chalk Beds Marine Conservation Zone (MCZ) (1,800sq.m) that is less than proposed at the MLS SAC. The applicant also identified [REP7-083] several other NSIPs where compensation was secured as a result of AEoI on sandbank qualifying feature habitat.

1.4.165. The applicant provided information about the scale of cable protection delivered or proposed in the other OWFs (Hornsea Three identifying potential for 41.8 hectares and Norfolk Boreas and Vanguard potential for 40 hectares) and reiterated that by comparison, the Proposed Development's extent would be small (0.5 hectares).

1.4.166. In response to ExQ2 [PD-014], the applicant (ME.2.06 [REP4-039]) provided examples of where a conclusion of no AEoI had been accepted on the basis of a small scale habitat loss or disturbance. It stated that the most analogous example is Triton Knoll Electrical System (TKES) DCO, for which the OfECC is in part routed through the Inner Dowsing, Race Bank and North Ridge (IDRBNR) SAC sandbank feature (noting that the SAC was a Site of Community Importance (SCI))

at the time of the DCO's making). The TKES export cable extended into the IDRBNR SCI and over 0.01% of the sandbank feature with potential use of cable protection. The recommendation was that adverse effects could be excluded from the project alone and in-combination, having regard to the mitigation and monitoring measures secured. The applicant noted that, whilst NE's approach to what it considers constitutes an AEoI changed over time, this is not due to legislative change and it is still possible to conclude a direct effect on a qualifying site feature does not automatically equate to an AEoI.

1.4.167. NE (E34 and E5 [REP5-096]) recorded no change and stated (P12 [REP5-096]) it was unlikely to agree with the applicant on scale and significance of impact. It [REP7-110] stated that TKES was not comparable for several reasons, including:

- Knowledge and understanding of impacts from cable protection placement has evolved based on monitoring evidence. NE no longer advises that the structure and function and feature extent of benthic designated site interest features can be maintained where cable protection is placed within a designated site.
- IDRBNR SAC was not designated until 2017 and conservation advice packages were not available to inform decision-making. NE's advice on TKES DCO would have been different if it was being consented now, with it being more likely to follow that of SADEP.

1.4.168. The applicant [REP5-074] confirmed that the Outline In Principle Monitoring Plan (OIPMP) [REP8A-023] included a commitment to monitoring all areas within MLS SAC where cable protection is placed, and this would be reported to the MMO for approval at least 6 months prior to commencement. Condition 14 of the DML (Schedule 11 of the dDCO [REP8A-042]) secured reporting of matters required in Condition 13(1)(g)(iv) and (v), including proposals for monitoring of cable protection and management of unburied or shallow buried cable to be set out in the final CSIP.

1.4.169. At Deadline 7, NE (Q3.3.1 [REP7-110]) advised that it was unlikely that mitigation would be able to minimise the impacts to acceptable levels for this LSE pathway. The applicant [REP8-036] considered that it had committed to all reasonable mitigation measures in the MLS SAC Benthic Mitigation Plan [REP8A-011].

1.4.170. In response to the ExA's request for NE to confirm which LSE pathways it advised that AEoI could not be excluded for, NE (Q3.3.1, [REP7-110]) stated that the physical habitat loss or disturbance LSE pathway should also include alteration of designated subtidal sandbanks or supporting benthic communities and species. It did not specify if its advice was that the name of the LSE pathway needed change, or if it considered that further information was needed in the assessment. The applicant [REP8-036] did not directly respond to NE's comment. The RIAA [REP8-004] states that the OfECC crosses the SAC in an area characterised by circalittoral sediment and the sub-feature of sub-tidal sand, which is heavily influenced by strong tidal currents and as a result sediments are highly mobile forming large sandbanks and sandwaves. It states that the benthic community in this area is characteristic of species poor, mobile sand environments

dominated by polychaete worms and amphipods. As described above, the applicant stated that benthic habitats have an existing tolerance and predicted medium to high recoverability of the biotypes present in the Annex I sandbank qualifying feature. It states that the RIAA should be read in conjunction with ES Chapter Benthic and Intertidal Ecology [APP-074], which assessed permanent habitat loss and alteration and concluded a minor adverse effect (in EIA terms) noting that the sandbank was expected to recover quickly after the cable protection is removed.

1.4.171. The applicant [REP5-074] maintained that the amount of cable protection within the MLS SAC would not constitute an AEoI and NE [REP8A-053] maintained its advice that an AEoI could not be excluded if cable protection was used.

1.4.172. The ExA is satisfied that there would be no AEoI from the proposed development alone during construction and decommissioning, as impacts would be short-term and the sediments present in the area affected have low sensitivity to sandwave clearance. This is on the basis that, whilst cable protection would be placed during construction (if required), the habitat loss or disturbance would arise from presence of the cable protection during operation, as discussed below. The ExA is content that the RIAA includes consideration of alteration of the Annex I sandbank feature as part of the assessment of physical habitat loss or disturbance. The ExA agrees that the habitat loss or alteration arising from placement of cable protection in the MLS SAC represents a small area of the total SAC at 0.0008%. It acknowledges the applicant's commitment to mitigation measures, including use of a burial hierarchy with a view to avoiding the need for cable protection in the MLS SAC, and considers that mitigation options have been fully explored for this LSE impact pathway.

1.4.173. However, the ExA notes that the dDCO would allow for up to 5,400sq.m of cable protection to be placed in the MLS SAC and that the RIAA states that this could result in permanent habitat loss or change (to hard substrate) during operation and maintenance. Based on NE's advice (from monitoring of other OWFs) that cable protection could prevent the structure, function and extent of the Annex I sandbank feature being maintained and in light of the qualifying feature being in unfavourable declining status, with a conservation objective to restore, the ExA is not persuaded by the applicant's position that because this loss would be small in scale it would not result in AEoI and would not undermine the conservation objectives, for example to restore the extent and distribution of the qualifying natural habitats. In reaching this finding, the ExA is mindful of the SoS conclusion in SADEP that MEEB were required for 1,800sq.m of cable protection placed in a MCZ in unfavourable condition, and NE's advice that TKES is not comparable to the proposed development. The ExA concludes that AEoI of the MLS SAC resulting from physical habitat loss or disturbance during operation cannot be excluded from the proposed development alone.

Physical habitat loss or disturbance – AEoI from the proposed development in combination

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1.4.174. The RIAA [REP8-004] assessed the potential for AEol from physical habitat loss and disturbance during all phases from the proposed development in combination with other projects and plans in section 12.2. For construction and decommissioning, it noted that there would be overlap between the proposed development, North Falls and several interconnector projects but concluded no AEol based on the loss or disturbance being short-term, localised and intermittent, and with limited disturbance as described from the proposed development alone. For operation, it concluded no AEol as the other projects assessed would not further add to the habitat loss identified for the proposed development alone.

1.4.175. For the same reasons as set out above in relation to the proposed development alone, NE (E4 and E20 [PD2-007] [REP4-061] and [REP5-096]) could not exclude an AEol beyond reasonable scientific doubt for the proposed development in combination with other projects and plans. It did not specify a view as to whether the scale of the in-combination effect would be greater than from the proposed development alone.

1.4.176. For the same reasons as the proposed development alone, the ExA concludes that there would be AEol of the MLS SAC from the proposed development in combination during operation but not during construction and decommissioning. The ExA considers that the scale of impact would be no greater than for the proposed development alone based on evidence in the RIAA that other projects would not add to the habitat loss of 5,400sq.m (maximum volume of cable protection).

Suspended sediment or deposition – AEol from the proposed development alone

1.4.177. The RIAA [REP8-004] assessed potential for AEol during the construction and decommissioning phases at paragraphs 11.2.34 to 11.2.45. It considered effects from dispersion of suspended sediment and smothering from foundation and cable installation works and seabed preparation, including sandwave clearance. The assessment was informed by sediment plume modelling in the Physical Processes Baseline Technical Report [APP-099] and Physical Processes Model Design and Validation [APP-100], supplemented by further Sediment Plume Modelling [REP1-057]. Modelling showed that deposition and smothering is most likely to significantly disturb benthic receptors within 0m to 50m of construction; whilst there would be a circa 1.26sq.km (0.09%) overlap of the OfECC with the MLS SAC, the applicant considered that elevations in SSC would not reach a scale to significantly alter annual mean values. It referred to NE's Advice on Operations in its determination of impact magnitude. Deposition on Annex I Sandbank from seabed preparation for array foundations was considered unlikely due to the distance from the MLS SAC (minimum of 23.61km), with any suspended material consisting of fines that would be dispersed by tidal currents. It concluded that the short-term and temporary nature of the change in SSC, and predicted lack of significant accumulation of sediment due to high mobility of sediment means that there is no potential for AEol having regard to the conservation objectives.

- 1.4.178. The RIAA [REP8-004] assessed potential for AEol during operation at paragraphs 11.2.67 to 11.2.74. It considered effects associated with dispersion of suspended sediments and associated deposition and smothering from activities such as cable remedial burial, replacement and repair. The assessment was informed by the sediment plume modelling described above. Operation and maintenance works would take place in areas of coarser sediment with suspended sediment being deposited quickly. Deposition on Annex I sandbank from operational and maintenance activities associated with the array was considered unlikely due to the distance from the MLS SAC (minimum of 23.7km). It concluded that there would be no AEol based on the short-term and temporary nature of change in SSC, existing levels of SSC, and the predicted lack of sediment accumulation in the MLS SAC (described as likely to be less than the pressure benchmark of up to 5cm of fine material added to the habitat in a single event) due to high mobility of sediment.
- 1.4.179. The ExA was unclear if NE's advice [PD2-004] [PD2-007] that AEol to the MLS SAC could not be excluded related to this LSE pathway and sought clarification in the RIES (Q3.3.1, [PD-027]). NE [REP7-110] stated that it considered activities and impacts from the proposed development would be short-term and temporary.
- 1.4.180. The applicant proposed mitigation measures for disposal of material in the MLS SAC in the MLS SAC Benthic Mitigation Plan [REP8A-011] and OSDMP [REP8A-035], including a commitment to use a discharge pipe where practicable to minimise suspended sediment and any potential smothering. A final version of the OSDMP is secured through Condition 13(1)(j) of the DML (Schedule 11 of the dDCO [REP8A-042]). Further consideration of the effectiveness of the proposed mitigation is provided below.
- 1.4.181. On the basis of the evidence provided, and the proposed mitigation being adequately secured and implemented, the ExA is satisfied that this LSE pathway will not result in AEol to the European site from the proposed development alone.

Suspended sediment or deposition – AEol from the proposed development in combination

- 1.4.182. The RIAA [REP8-004] assessed the potential for AEol from suspended sediment or deposition during construction and decommissioning from the proposed development in combination with other projects and plans in section 12.2. It concluded no AEol on the basis that any potential increases in SSC and associated deposition would be short-term, temporary and localised, with increased SSC from works associated with the proposed development being restricted to a single tidal excursion. It stated that modelling reported in [APP-074] [APP-099] [APP-100] showed that even if plumes combine, fine grained sediment would be subject to rapid dispersion to near background levels (10s of mg/l) at most a few thousand metres from release. It did not assess this LSE pathway for operation due to the highly localised nature of the impacts and expectation that other projects would have management measures in place.

- 1.4.183. NE [REP3-031] stated that the applicant's sediment plume modelling [REP1-057] showed construction related elevated SSCs along the OfECC at the MLS SAC dissipate quickly but that coarser sand and gravel fractions deposited by construction activities result in average thickness between 50mm to 800mm albeit within a small footprint (of up to 200m). It requested that the WCS due to multiple adjacent or simultaneous construction activities was clarified.
- 1.4.184. The applicant [REP4-040] stated that sediment deposition thickness due to multiple construction activities is not specifically prescribed or limited so cannot be clarified but in each activity assessment, measurable thickness is expected in relatively small distances (10s of metres) from the activity site with a low likelihood of large total area of overlapping measurable local thicknesses. For activities in the OfECC, there are only a limited number of type and occurrences in an area.
- 1.4.185. As noted above, NE (Q3.3.1 [REP7-110]) stated that it considered activities and impacts from the proposed development giving rise to suspended sediment or deposition would be short-term and temporary, and the applicant has proposed mitigation measures.
- 1.4.186. On the basis of the evidence provided, and the proposed mitigation being adequately secured and implemented, the ExA is satisfied that this LSE pathway will not result in AEoI to the European site from the proposed development in combination with other projects and plans.

INNS – AEoI from the proposed development alone and in combination

- 1.4.187. The applicant assessed the LSE pathway of spread of INNS from the proposed development alone in section 11.2 of the RIAA [REP8-004]. It concluded no AEoI based on the lack of evidence of adverse effects from INNS and OWF and project commitments to mitigate risk, which would be managed through a project environmental management plan (PEMP) and biosecurity plan. The conclusion was supported by the small area in which hard substrate would be introduced to the SAC and the distance between the proposed development's array and the SAC's boundary, where most vessel movements would take place. An Outline PEMP (OPEMP) [APP-249] was submitted, which includes principles for the construction and operational phases. Submission and approval of a detailed PEMP (including a marine biosecurity plan) in accordance with the OPEMP is secured through Condition 13(d) of the DML in the dDCO [REP8A-042].
- 1.4.188. The applicant stated in section 12.2 of the RIAA [REP8-004] that impacts from the spread of INNS were excluded from the assessment of the proposed development in-combination with other projects and plans because of the highly localised nature of the impacts, the proposed management measures, which would also be in place for other development, and the predicted negligible impact from the proposed development alone.
- 1.4.189. NE [RR-081] [PD2-007] [REP4-061] [REP5-096] did not dispute the applicant's conclusion for this effect pathway. In response

to the ExA's question in the RIES (QT3.1.15, [PD-027]), NE [REP7-110] confirmed that the matter was agreed, and it had no further comments to make.

- 1.4.190. 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.

EMF – AEol from the proposed development alone and in combination

- 1.4.191. The applicant assessed the LSE pathway of EMF during operation from the proposed development alone in section 11.2 of the RIAA [REP8-004]. It concluded no AEol due to the lack of conclusive evidence of adverse effects from EMF upon benthic communities and project commitments to mitigate risk through cable burial or use of cable protection. The MLS SAC Benthic Mitigation Plan [REP8A-011] sets out the applicant's commitments to cable burial through a burial hierarchy or use of cable protection if needed. It forms an appendix to the OCSIP [REP7-040], which would be secured through the DCO as described above.
- 1.4.192. The applicant stated in section 12.2 of [REP8-004] that impacts from EMF were excluded from the in-combination assessment because of the highly localised nature of the impacts, the proposed management measures, which would also be in place for other development, and the predicted negligible impact from the proposed development alone.
- 1.4.193. NE [RR-081] [PD2-007] [REP4-061] [REP5-096] did not dispute the applicant's conclusion for this effect pathway. In response to the ExA's question in the RIES (QT3.1.17, [PD-027]), NE [REP7-110] confirmed that the matter was agreed, and it had no further comments to make.
- 1.4.194. 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.

Changes to physical processes – AEol from the proposed development alone

- 1.4.195. The RIAA [REP8-004] assessed the potential for AEol from changes to physical processes during operation of the proposed development. It considered the potential for cable protection within the MLS SAC to affect the hydrodynamic and wave regime resulting in changes to sediment transport pathways and associated effects on the Annex I sandbank qualifying feature. It stated that scour and increases in flow rates could change sediment characteristics but any scour at the cable protection would be localised and its depth limited to the diameter of individual rocks used (typically graded between 0.05m and 0.5m). It considered that scour protection would have limited potential to modify sediment transport patterns; small volumes trapped in the rock voids and accumulating on the updrift side of the berms would reach equilibrium before transporting at the baseline rate. It predicted that

indirect changes to sediment transport would be spatially restricted in the order of 10s of metres from the scour protection. Referring to NE's Advice on Operations, the applicant stated that only the subtidal sand sub-feature of the Annex I sandbank qualifying feature is sensitive to this pressure and the benchmark of "change in peak mean spring bed flow velocity of between 0.1m/s to 0.2m/s for more than 1 year" would not be exceeded in a significant way. The RIAA concluded no AEoI from this LSE pathway on that basis.

1.4.196. The RIAA referred to supporting assessment in ES Chapter Marine Geology, Oceanography and Physical Processes [APP-071], which used a numerical model to simulate patterns of reduction of wave height and subsequent recovery of wave height downwind to understand change at Annex I sandbank.

1.4.197. NE (Q3.3.1, [REP7-110]) advised that mitigation measures could be adopted to minimise impacts from this LSE pathway to acceptable levels that would result in no AEoI but it did not consider that these had been fully presented, secured and agreed in the DCO application. It made comments about the applicant's assessment of impacts due to the presence of cable protection and array infrastructure, and use of sandwave levelling, and stated that geomorphological processes should be included in the assessment. The examination of these matters is discussed below.

Cable protection

1.4.198. NE (B1 and B27 [PD2-004]) stated the applicant needed to demonstrate that presence of cable protection (including parallel lengths) within and outside of the MLS SAC would not affect sediment transport processes at the placement location to the detriment of the Annex I sandbank qualifying feature. It was concerned that existing anthropogenic pressures may have reduced the feature's capacity to withstand further impacts and disputed the adequacy of the applicant's evidence to support the conclusions that the sensitivity of the seabed in the MLS SAC is medium, magnitude of change to sediment transport is low and overall effect of scour of minor. It (E36 [PD2-007]) stated that the supplementary advice on conservation objectives includes targets relating to supporting processes including "maintain all hydrodynamic and physical conditions such that the natural water flow and sediment movement are not significantly altered or prevented from responding to changes in environmental conditions."

1.4.199. The applicant [REP1-051] stated that its assessment was underpinned by robust understanding of baseline sediment transport processes developed through high-resolution geophysical datasets and complemented by numerical modelling of sediment transport pathways. The assessment in ES Chapter Marine Geology, Oceanography and Physical Processes [APP-071] draws on relevant data including from analogous projects. It stated that the MLS SAC Benthic Mitigation Plan [REP8A-011] committed to cable protection as a last resort, with use of mattresses rather than rock berms so impacts to sediment transport would be low. It [REP8A-011] committed that, if protection was required, rock dumping would not be used in the SAC and that mattresses or another form of protection with a footprint and impact

equivalent or less than mattresses would be used. It stated that a small amount of sediment accumulation within or adjacent to cable protection is theoretically possible (but does not always happen in practice) but the maximum potential effect is limited by the low height of the protection above the seabed. The OCSIP [REP7-040] states that protection would be a maximum height of 1.1m, as specified in the MDS in ES Chapter Offshore Project Description [APP-069]. In response to ExQ2 [PD-014], the applicant (ME.2.05 [REP4-034], table 2) provided an estimate of maximum sediment volume that may be trapped in rock voids or accumulated on berms, contextualised against the size and proximity of the Annex I sandbank (figure 7). The applicant presented information about historic movement of the sandbank in figure 8 and stated its scale and the wider sediment transport regime are many orders of magnitude larger than potential cable protection.

1.4.200. NE (B1 and B27 [REP5-096] [REP6-067]) welcomed this but stated that further evidence was needed that changes would be very minor, noting that [APP-071] stated that “At the regional scale, sediment transport is broadly in a southerly direction along the offshore ECC although superimposed on this are highly complex localised patterns of sediment circulation around banks and other topographic features.” It considered there was insufficient information to assess the impact of cable protection on complex patterns of sediment circulation around the northern tip of the MLS SAC (P4 [REP5-096]). It [REP6-068] disagreed with the assessment of sediment infilling within rock protection, particularly in the MLS SAC, and noted that numerical rather than site specific data was used.

1.4.201. The applicant [REP5-074] stated that potential impacts of cable protection on sediment transport were assessed in (paragraph 2.11.61 onwards of [APP-071]). It stated [REP7-086] that site specific observations are not generally available and direct quantitative measures would be impracticable to make, as it is not possible to scan the inside of a rock berm and geophysical surveys are not of high enough resolution to image gaps between rocks on the surface of a berm. For far field effects, the assessment used a reasonable assumption that if currents (the main driver for rates and patterns of sediment transport) are not changed then neither is the natural sediment transport regime. More detailed modelling would require a 3-dimensional hydrodynamic model, which the applicant stated there was no reason to suggest would result in different conclusions to its conceptual assessment. It confirmed [REP7-086] [REP8-036] its conclusion that there would only be very minor change to the sediment transport regime around the northern tip, noting that the OfECC is in an area of sediment transport direction convergence but that any complexity is in the order of kilometres, and much larger than the very localised potential effect of any cable protection (in the order of metres).

1.4.202. NE advised [REP5-097] that although it had not commented further on the applicant’s assessment of trapped sediment, it should not be assumed it agreed, especially considering evidence of exposed cable or scour protection at the (operational) London Array OWF. It [REP6-068] requested that empirical data was used where possible

within the MLS SAC. The ExA (QT3.1.9, [PD-027]) asked NE for evidence it held that would suggest the applicant's conclusions were not realistic. NE [REP7-110] confirmed it did not hold monitoring reports associated with marine licence condition discharge but provided extracts from its advice to the MMO on London Array OWF and BritNed monitoring. The London Array OWF Year 1 post-construction monitoring showed a greater degree of scour had occurred at the export cables, wind turbine generator (WTG) foundations, and offshore substations, than was predicted in the ES. The greatest scour observed was at the BritNed cable crossing, where the 2014 seabed level was up to 9m lower than pre-construction levels and resulted in exposed and free-spanning cable. Years 2 and 3 post-construction monitoring also showed levels of localised scour and cable exposure greater than predicted within the ES. Options for cable protection to prevent further scour, or risk to the cables were reviewed, and rock fill was introduced to stabilise the scour, restrict further scour development, and restore sandbank integrity; a second phase of rock placement and third phase of rock dump reprofiling was also carried out.

1.4.203. The applicant [REP8-036] considered that the occurrence of scour was related to the design of the Britned crossing, with an insufficient extent of scour protection at construction. It stated that bathymetry surveys illustrated that scour is localised to the immediate vicinity of the crossing and does not have any apparent effect on the surrounding seabed. Similar surveys of Kentish Flats OWF cable crossing indicated periods of natural sediment accumulation and residual trench infilling and "no statistically significant change in elevation along the sections of rock dump from 2013 to April 2014". It could not comment directly on predictions of scour depth in the London Array OWF ES but stated that using the actual built diameter of monopiles it considered that surveyed dimensions of scour were within uncertainty bounds. It stated that the observations from London Array OWF monitoring illustrated expected scour behaviour where insufficient or no scour protection has been applied, and that the scour dimensions were consistent with normal theory and did not imply environmental conditions, mechanisms of scour or interruption to sediment transport not already assessed for the proposed development. It noted that the sedimentary environment for London Array OWF and the proposed development are different; the greater Thames area has a larger thickness of erodible sediment (allowing deeper scour), whereas the proposed development study area is characterised by a thinner veneer of erodible sediment overlying erosion resistant layers, that would naturally limit the depth of scour.

1.4.204. As described below (under effectiveness of mitigation) the applicant also committed to monitoring cable protection and shallow or unburied cables in the OCSIP [REP7-040] to validate key predictions. As described below (under effectiveness of mitigation), a final CSIP is required through the DML (Schedule 11 of the dDCO [REP8A-042]).

1.4.205. NE (B1 and B27 [REP8A-053]) stated that the applicant's Technical Note [REP6-037] had resolved its concerns about the MDS for cable protection but the matter remained unresolved (amber) and it

was unclear if NE was in agreement with the assessment conclusions for physical process change.

- 1.4.206. The ExA notes NE's concerns about the assessment of sediment transport effects arising from the presence of cable protection, and that it considered information to assess the impact of cable protection on complex patterns of sediment circulation was insufficient. It also notes NE's concerns about existing anthropogenic pressures, which may have reduced the capacity of the MLS SAC to withstand further impact, and that there are condition threats from aggregate extraction and fishing industry.
- 1.4.207. However, the ExA is content that the applicant's approach to assessment is appropriate based on the evidence it presented, including modelling and analysis of the sandbank and its historic movement over time. The ExA notes that monitoring data from London Array OWF demonstrated greater scour than predicted but based on the applicant's explanation that this was likely caused by the design of the scour protection and different sedimentary environments, is satisfied that the applicant's assessment can be distinguished from the London Array OWF outcomes, and is robust in its consideration of sediment transport effects from the proposed development.
- 1.4.208. Whilst the type and height of cable protection is not specified in the dDCO, the ExA notes that the MLS SAC Benthic Mitigation Plan and OCSIP provide commitments to restrict these matters. The ExA also notes that a commitment to monitoring cable protection and shallow or unburied cables would be secured in the OCSIP, with monitoring arrangements to be discussed with stakeholders and set out in a final CSIP, which could provide a mechanism to secure any adaptive management required if the outcomes are not consistent with the applicant's predicted outcomes. Noting that the effect of any cable protection is predicted to be in the order of metres, relative to the sediment circulation patterns that would be in the order of kilometres, the ExA is satisfied that any change in sediment transport pathway would be very minor. Whilst the ExA notes that there are existing pressures on the feature from activity including aggregate extraction, the applicant has demonstrated that the contribution of the proposed development to sediment transport change (if any) is limited in scale. The ExA considers that the proposed development alone would not hinder the conservation objectives including restoration of the extent, distribution, structure and function of the Annex I sandbank feature, and that AEoI from this pathway can be excluded.

Sandwave levelling

- 1.4.209. NE (B25 [PD2-007]) advised it was unable to support the applicant's conclusion of a minor adverse effect (in EIA terms) to the Annex I sandbank from sandwave clearance owing to insufficient supporting information. It (E9, E11 and E12 [PD2-007]) had concerns about parameters for dredge disposal, as described above (under cable installation, including seabed preparation activities) and requested that mitigation should include deposition in areas with the same sediment size and characterisation, and use of a fall pipe rather than surface release. Any disposal should not interrupt sediment transport. It (E33

[PD2-007]) stated that the RIAA did not fully consider sediment deposition from sandwave levelling to ensure it is deposited in the same sediment type. It requested a robust baseline and commitment to pre- and post-installation survey to secure evidence of geomorphological recovery, and inform remedial measures should impacts be greater than predicted.

1.4.210. The applicant [REP1-051] responded to NE's concerns (E9, E11 and E12) as described above (under cable installation, including seabed preparation activities) and below (under effectiveness of mitigation), including mitigation commitments in the OSDMP [REP8A-035]. The applicant [REP1-051] confirmed its assessment was carried out from a robust baseline as presented in the Physical Processes Baseline Technical Report [APP-099], which draws upon project-specific geophysical survey and grab sample data, and bathymetric survey data from this area. It carried out detailed numerical modelling of sediment transport pathways within and nearby to the Proposed Development in [REP1-057]. It stated that no further supporting evidence was available but it considered its assessment to be robust and retained its conclusion of no AEoI. The applicant confirmed that the Schedule of Mitigation [REP5-041] includes a commitment that all sediment removed from the SAC would be deposited in the SAC or same sediment cell.

1.4.211. NE [REP7-110] advised that the change to physical process LSE pathway was capable of mitigation but was concerned that this was not sufficiently secured (as described above). Noting that the applicant was proposing to commit to sandwave levelling as a mitigation measure to reduce the likely need for cable protection, NE [REP8A-052] advised that it did not believe the associated risks from seabed activity preparation were adequately addressed and that there was a lack of information about the location and level of sandwave levelling proposed along the OfECC within the SAC, which meant it could not advise on the scale and significance of impact. It was concerned about potential caveats in the applicant's mitigation commitments, which are discussed below (under effectiveness of mitigation). It highlighted the SoS conclusion on the Round 4 Plan Level HRA for DBS that compensation was required for damage to Annex I sandbank from cable installation. Due to the timing of these comments at the final examination deadline, the applicant did not have an opportunity to respond to NE.

1.4.212. The applicant assessed morphological change to sandbanks and designated areas of seabed including from sandwave clearance for the OfECC (resulting in interruption of sediment transport) in ES Chapter Marine Geology, Oceanography and Physical Processes [APP-071], concluding a minor adverse effect (in EIA terms) for the MLS SAC as no sediment is removed from the local sediment transport system and net rates would remain unaltered from the baseline. The assessment was based on the MDS specified in table 2.8 of [APP-071], which is replicated in table 2.1 of the OCSIP [REP7-040] (a final version of which is secured in the DML (Schedule 11 of the dDCO [REP8a-042])).

- 1.4.213. The ExA is satisfied that the applicant has assessed the effects of sandwave levelling to sediment transport based on project-specific survey and other available survey data, using modelling to demonstrate that there would be no significant effects based on the MDS secured in the OCSIP. The ExA notes that locations and level of sandwave clearance along the OfECC are not yet confirmed but is content that the applicant has assessed the potential effects based on the MDS and that the MLS SAC Benthic Mitigation Plan (subject to suggested amendments, discussed below) provides a framework for these matters to be reviewed and finalised in consultation with the MMO and NE on completion of further survey and design work. Noting the advice of NE as ANCB that the physical process change LSE pathway could be mitigated to avoid AEol, and subject to amendments to the dDCO to secure a final MLS SAC Benthic Mitigation Plan as set out in the rDCO, the ExA considers there is sufficient commitment to retaining sediment within the local sediment transport system such that the conservation objectives would not be hindered and AEol from this pathway can be excluded.

Array area infrastructure

- 1.4.214. NE (B17 and B18 [PD2-004]) requested an assessment of the likely extent and significance of impacts upon SAC supporting habitats from impacts to seabed morphology related to tidal regime change from the presence of WTG and offshore substation platform (OSP) foundations during operation. The applicant [REP1-051] stated that it assessed this and no measurable change in residual sand transport rate or direction is predicted, as verified through modelling in [APP-101]. Changes to seabed morphology are similarly limited as changes to sediment transport are negligible.
- 1.4.215. NE [REP4-061] [REP5-096] [REP8A-053] continued to advise that pre- and post-construction monitoring of seabed morphology should be carried out to ensure no unexpected changes occur although it was unclear if its advice related only to the EIA or also the impacts to SAC supporting habitats (and the HRA). The applicant's Outline OIPMP [REP8A-023] commits to pre-construction surveys of the final array area and refined OfECC to provide full sea floor coverage swath-bathymetric and side-scan data where construction works are proposed and survey post-construction to assess any changes in seabed topography. The survey scope and method would be submitted to the MMO at least 6 months before commencement in line with Conditions 13(1)(e), 14 and 18 of the DML (Schedule 11 of the dDCO [REP8A-042]).
- 1.4.216. The ExA is satisfied that the applicant has assessed potential effects to the MLS SAC from impacts to seabed morphology related to tidal regime change due to presence of array infrastructure and considers that AEol from this pathway can be excluded based on the assessment conclusion of no measurable change in residual sand transport rate or direction. The ExA notes that the applicant has committed to monitoring of the OfECC to validate the predicted effects from change in seabed topography and is content, subject to suggested amendments to the MLS SAC Benthic Mitigation Plan described below,

that there is a framework to enable additional mitigation to be identified and implemented if required based on the monitored effects.

Changes to physical processes – AEoI from the proposed development in combination

1.4.217. The applicant stated in section 12.2 of the RIAA [REP8-004] that impacts from changes to physical processes were excluded from the assessment of the proposed development in combination with other projects and plans because of the highly localised nature of the impacts, the proposed management measures, which would also be in place for other development, and the predicted negligible impact from the proposed development alone.

1.4.218. NE (B1 and B27 [REP1-068]) advised that there was insufficient evidence to support the impact assessment of sediment transport disruption arising from the presence of cable protection for the proposed development in combination with other projects and plans. NE (B2, B11 and B20 [PD-004]) advised that the applicant should consider potential impacts from construction activities in combination, in particular sediment disruption from multiple crossings of the proposed development's cables with other plans and projects, for which it did not consider sufficient information was provided. It considered that cumulative impacts from other projects, plans and activities including aggregate dredging may push the SAC further away from the desired trajectory, noting that existing anthropogenic activities were already hindering its conservation objectives. In response to the ExA's request (Q3.1.9, [PD-027]) for any evidence it held to suggest that applicant's conclusions on sediment transport are not realistic, NE [REP7-110] advised (in the context of cumulative impacts) that there are marine activities that may alter the extent, natural composition and processes of the SAC but there is currently insufficient monitoring data to ascertain the full extent of impact from anthropogenic activities.

1.4.219. The applicant [REP1-051] stated that it had undertaken a detailed assessment in ES Chapter Marine Geology, Oceanography and Physical Processes [APP-071], which included the WCS for construction activities from the proposed development in combination with the WCS for other projects and plans that might realistically occur at the same time, as well as the WCS for 13 cable crossings per circuit. For construction activities, it concluded that redistribution or displacement of sediment volume would be kept largely in the local sedimentary system. No measurable effects to the MLS SAC were identified from the proposed development alone and as such the cumulative assessment did not explicitly consider impacts on regional scale sediment volume or distribution. No measurable effects were predicted to extend to the SAC from the cable crossings, which the applicant concluded would result in localised impacts on currents, waves and sediment transport within metres of the protection.

1.4.220. NE [REP8A-053] recorded these matters (B1, B2, B11, B20 and B27) as unresolved (amber) at the close of examination).

1.4.221. As described above (under cable crossings), the ExA is content that the WCS for cable crossings used in the applicant's

assessment is suitable. For the same reasons as set out above for the proposed development alone, and based on the applicant's assessment conclusions of no measurable effects from cable crossings, the ExA is satisfied that this LSE pathway will not result in AEol to the European site from the proposed development in combination with other plans and projects.

Accidental pollution – AEol from the proposed development alone and in combination

- 1.4.222. The applicant assessed the LSE pathway of accidental pollution from the proposed development alone in section 11.2 of the RIAA [REP8-004]. It concluded no AEol based on implementation of measures in a PEMP. As described above, an OPEMP [APP-249] was submitted with the DCO application. A final PEMP is secured through Condition 13(d) of the DML in the dDCO [REP8A-042].
- 1.4.223. The applicant stated in section 12.2 of the RIAA [REP8-004] that impacts from accidental pollution were excluded from the assessment of the proposed development in combination with other projects and plans because of the highly localised nature of the impacts, the proposed management measures, which would also be in place for other development, and the predicted negligible impact from the proposed development alone.
- 1.4.224. NE [RR-081] [PD2-007] [REP4-061] [REP5-096] did not dispute the applicant's conclusion for this effect pathway. In response to the ExA's question in the RIES (QT3.1.16, [PD-027]), NE [REP7-110] confirmed that the matter was agreed, and it had no further comments to make.
- 1.4.225. 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.

Effectiveness of mitigation proposed

- 1.4.226. The applicant proposed mitigation to avoid and reduce the impact from cable installation and protection in the MLS SAC in the MLS SAC Benthic Mitigation Plan [APP-243]. It stated that these commitments informed its assessment of AEol in the RIAA [APP-040]. The Plan included a review of mitigation options suggested by NE, a summary of the seabed characteristics, a burial hierarchy to ensure cable protection is the last form of protection considered, a summary of cable protection options and a list of mitigation commitments and their expected ecological benefits.
- 1.4.227. As described above, whilst NE (Q3.3.1, [REP7-110]) advised that mitigation measures could be adopted to minimise impacts from all LSE pathways other than habitat loss or disturbance to acceptable levels to exclude AEol it did not consider that these had been fully presented, secured and agreed. NE (E13 and E30 [PD2-007]) queried the mitigation proposed and stated that further measures should be explored, noting that the MLS SAC Benthic Mitigation Plan [APP-243]

repeated information from the derogations case. It (F48 [REP2-008]) stated that a Cable Burial Risk Assessment (CBRA) would be key to determining mitigation. It considered (E30 [PD2-007] and F10 and F45 [PD2-008]) that there was insufficient detail to have certainty that cables could be buried and remain buried without protection and advised that geotechnical data is required prior to determination to inform burial likelihood, consistent with the approach on other OWFs including Hornsea Project Three, Norfolk Vanguard, Boreas and SADEP. It advised that the shortest route through the SAC would not necessarily reduce impacts and consideration should be given to avoiding the most sensitive habitats to enable recovery. It requested that impacts from all proposed cable protection types were addressed to allow for a realistic WCS.

1.4.228. In response to ExQ1 [PD-011] seeking clarification from NE as to whether the applicant should assess alternative cable routes through the SAC and if this could result in a change to its advice, NE (ME.1.12 [REP2-059]) explained that the most impactful environmental mitigation would be to move the cable corridor out of the SAC. If this is not possible, there should be effort to reduce, avoid and mitigate impacts as much as possible. This would include limiting the length of cable route through the SAC and identifying a route that avoids features and reducing lasting impacts. Notwithstanding this, NE confirmed that, having discussed these matters with the applicant during the pre-application, it was satisfied that the applicant had considered its advice in selecting the cable route and it did not believe there would be merit in assessing alternative routes through the SAC as the environmental impacts would be equal to or greater than the proposed development.

1.4.229. The applicant set out a cable burial hierarchy in the MLS SAC Benthic Mitigation Plan [APP-243], with the required depth being typically determined through a CBRA and set out in a CSIP. The burial hierarchy confirms primary, secondary and tertiary burial methods. The applicant (ME.1.08 [REP2-039]) provided further detail to support its assertion that it had a high confidence the cable could be buried and remain buried [REP1-051]. It stated that available ground conditions data and outline CBRA [APP-239] work illustrates that the cable would be buried into sand or London clay, which sits below surficial sediments. It was not possible to rule out cable protection if burial fails for example due to unexpected boulders or cobbles in the London clay but obtaining geotechnical data (at discrete point sources typically 1km to 2 km apart) would not assist in determining the likelihood of encountering equipment breakdown and unexpected boulders. Soils information was sufficient to confirm that the cable can be buried. The applicant noted that detailed design undertaken post-DCO would determine the final route and burial method, informed by geotechnical survey. The applicant (ME2.0.8, [REP4-039]) cited Awel y Mor as a project that received a recommendation of approval but did not have geotechnical data along the OfECC. The applicant noted that Galloper and Greater Gabbard OWFs had the same ground conditions and were able to install cables.

- 1.4.230. NE [REP4-059] provided comments on the MLS SAC Benthic Mitigation Plan. It noted that no commitments were made to reduce potential impacts from dredge disposal and cable exposure. It considered mitigation should be informed by specific pre-construction surveys. It advised that cable routing should consider impact duration and maximising recoverability of the Annex I sandbank. The applicant further updated the MLS SAC Benthic Mitigation Plan [REP5-027] to include a commitment to consider potential to reduce recoverability time during routing. It [REP5-074] reiterated that works would be informed by pre-construction surveys and that the OSDMP [REP4-041] included several mitigation measures for sediment disposal (a final iteration of which would be secured through Condition 13(1)(j) of the DML (Schedule 11 of the dDCO [REP8A-042])). Sections 7 and 8 of the MLS SAC Benthic Mitigation Plan [REP5-027] presented commitments addressing duration and recoverability that it stated function cohesively to explain its position on cable protection in the SAC. Duration would be determined by the cable installation programme and, noting it was the preference of NE and the applicant to bury the cable, the applicant was not clear what realistic commitments to minimise impacts could be made.
- 1.4.231. NE requested (P2, A2 and A14 [REP5-096]) that the MLS SAC Benthic Mitigation Plan [REP8A-011] was secured through a DML condition, to which the applicant [REP5-074] responded that compliance would be secured through the DML (Schedule 11 of the dDCO [REP8A-042])). Condition 13(1)(g)(iv) requires the CSIP to comply with the MLS SAC Benthic Mitigation Plan, which the applicant described as a final plan. NE maintained [REP7-110] that an updated MLS SAC Benthic Mitigation Plan should be submitted for approval following completion of pre-construction surveys based on bespoke design details prior to works commencing to ensure that the mitigation would be effective. It [REP8-052] suggested that the ExA may wish to consider a change to the DML condition to require final approval of the plan from the MMO in consultation with NE.
- 1.4.232. NE [REP6-067] noted a commitment to place material removed from MLS SAC in the OfECC within the SAC to ensure that sediment is retained in the same sedimentary system (in the MLS SAC Benthic Mitigation Plan and OSDMP). It advised that to maximise the potential for seabed recovery and limit the effects on the wider sediment transport process, dredged material should be deposited updrift of levelling, seabed preparation and cable trenching operations within same sediment types to encourage natural backfill and reworking of material (except where an upstream deposition may have an adverse impact on another feature). Initially, the applicant responded [REP7-086] that this was not a realistic prospect as it would potentially require deposition outside of the order limits, together with an unachievable level of precision. The applicant considered that it would provide limited benefit given the time between operations, during which natural processes would render the benefit null. However, the applicant subsequently incorporated this commitment into the MLS SAC Benthic Mitigation Plan [REP8A-011] but on a caveated basis ('where it is possible to do so whilst keeping material within the SAC'). NE [REP8A-052] advised that the caveat created uncertainty about the measure's

effectiveness, and a risk of the SAC's conservation objectives being hindered by cable installation. It did not include the same commitment in the final OSDMP [REP8A-035].

1.4.233. The applicant provided a commitment to monitoring cable protection and shallow or unburied cables in the OCSIP [REP7-040]. Details of monitoring and surveys proposed during, and pre- and post-construction to validate the key predictions in the environmental statement, are required by Conditions 18, 19 and 21 of the DML (Schedule 11 of the dDCO [REP8A-042]) further to Condition 13(1)(e). Consultation on the monitoring plans is required with the MMO and relevant ANCB.

1.4.234. NE (E19 [PD2-007]) noted that the option to adopt HVDC within the OfECC was ruled out. It considered that use of HVDC could be employed to further mitigate impacts on the sandbank feature, for example by reducing the number of cables. The applicant [REP1-051] stated that the reasonable worst-case with non-HVDC cables was assessed in the RIAA [REP1-016] and that use of HVDC is not financially viable given the distance to shore and project capacity. NE [REP7-110] noted the applicant's reasoning but considered a coordinated approach with North Falls had not been considered as potential mitigation. The applicant stated [REP8-036] that it had investigated an offshore connection and concluded it was not a suitable or deliverable alternative (section 2 of [PD4-006]). It considered that the ExA could be satisfied the tests required for HRA were met in this regard.

1.4.235. NE [PD2-007] [PD2-008] [REP4-059] raised comments about other matters in the MLS SAC Benthic Mitigation Plan [APP-0243], including the absence of a commitment not to use jack-up barges or undertake trial trenching in the SAC, and requests for consideration of low ordnance detonation, use of a discharge or downpipe to place dredged sediment, and a commitment to using removable cable protection and removing it during decommissioning. By the close of examination, the applicant had made updates to the MLS SAC Benthic Mitigation Plan [REP8A-011] to incorporate the commitments requested.

1.4.236. The ExA is satisfied that the applicant considered NE's advice about mitigating impacts associated with routing the cable through the MLS SAC, and that the effects of the cable installation and protection (if required) could not be further mitigated through a different cable route in the MLS SAC. The ExA is also satisfied that the DML (Schedule 11 of the dDCO) secures monitoring and surveys that will enable the applicant's assessment conclusions and effect predictions to be validated.

1.4.237. Whilst several of NE's concerns on the MLS SAC Benthic Mitigation Plan were resolved by close of examination, the ExA notes that there were outstanding issues and that NE advised for some issues that if mitigation was not effective there was a risk of the conservation objectives being hindered. Similarly, although the applicant provided evidence to support its assertion that in all likelihood the cable can be buried, including information about existing ground

conditions and from other completed OWFs with similar ground conditions, pre-construction surveys would be required to confirm the assumptions.

- 1.4.238. Further baseline data and design is also required to finalise the cable routing to minimise impacts to the MLS SAC, as well as the development of detail relating to other mitigation proposals such as sandwave levelling prior to cable installation. Given the further information needed, and the outstanding concerns of NE, the ExA agrees that the MLS SAC Benthic Mitigation Plan should not be considered final. The ExA considers that it would require review and potential updates to confirm final details when the further survey and design information is available. The ExA considers that the DML should be amended to require submission and approval of a final version that is substantially in accordance with the current version, following consultation with the MMO and relevant ANCB, and has incorporated this condition into the recommended DCO (rDCO) at Condition 13(1)(g) (with later parts of Condition 13(1) reordered accordingly). Subject to that amendment, and noting NE's advice that all LSE pathways aside from habitat loss or disturbance were capable of being mitigated, the ExA is satisfied that the mitigation is appropriately secured and capable of being effective to avoid AEoI to the MLS SAC, aside from that LSE pathway. The ExA is content that there is a mechanism in place to secure a final iteration of the OSDMP.

Marine Mammals

- 1.4.239. The applicant concluded LSE on the harbour porpoise feature of the SNS SAC and the harbour seal feature of The Wash and North Norfolk Coast SAC. NE [PD2-010] [REP7-110] raised concerns about the applicant's modelling for these sites, and its conclusion of no AEoI to the SNS SAC. A description of the European sites and their qualifying features, and the potential effects resulting from the proposed development, are provided within the applicant's RIAA [REP8-004] and Summary of Designated Sites [REP7-023].

Overarching Issue - Interim Population Consequence of Disturbance (iPCoD) modelling

- 1.4.240. Throughout the course of the examination, a number of methodological issues were raised by the MMO and NE. Several matters have now been resolved, as is evident within NE's Risk and Issues Log [REP8A-053].
- 1.4.241. Nevertheless, NE [PD2-010] originally requested the use of interim Population Consequence of Disturbance (iPCoD) modelling to support the applicant's HRA (and EIA) conclusions. The applicant carried out the requested modelling for the proposed development alone and modelling outputs were submitted at Deadline 1 [REP1-056]. iPCoD modelling was also updated at [REP5-070]. Outputs supported the applicant's conclusions in relation to its assessment of disturbance from piling reached in the ES. NE appeared satisfied in this regard [REP4-062].

1.4.242. The ExA sought to confirm NE's position on this matter from a HRA perspective in the RIES ([PD-027], QT3.2.1 and QT3.2.4). Responding to this, NE [REP7-110] reversed its position and stated that it had concerns around the variability of the outputs for the proposed development alone (particularly in relation to harbour seal, where the starting population is small and therefore it would expect some variation between impacted and unimpacted populations). It acknowledged that outputs could be the same for larger population sizes, noting that the applicant's modelling did show slight variation for harbour porpoise, whose population was significantly larger than that of seals. As such, NE advised that there was value in undertaking in-combination iPCoD modelling, which may indicate a greater level of variation and potential population level impacts warranting further investigation.

1.4.243. Given the timing of NE's revised issue, the applicant was unable to run an in-combination iPCoD assessment. In any event, the applicant has explained [REP1-056] that such an assessment could not be performed as this would require detailed piling schedules for every project included in the assessment. This data is not available. Moreover, the applicant's iPCoD modelling [REP5-070] addresses issues relating to variability of outputs in detail.

1.4.244. Consequently, the ExA is satisfied that it was not realistically practicable for the applicant to submit an in-combination iPCoD assessment and that its current assessment has been carried out according to best practice and the best available scientific data. In reaching this conclusion, the ExA notes that NE (as ANCB) advised that for larger population sizes (for example relevant to harbour porpoise), there might not be any variation in the modelling outputs, which is consistent with the applicant's prediction of a slight variation.

Southern North Sea SAC

1.4.245. The applicant's RIAA ([REP8-004], section 11.3) provided an assessment which addressed the potential for AEoI to the harbour porpoise qualifying feature resulting from:

- underwater noise, including barrier effects (construction and decommissioning)
- collision risk (construction, operation and decommissioning)
- physical habitat loss or disturbance (construction, operation and decommissioning)
- accidental pollution and changes in water quality (construction and decommissioning), and
- changes to prey (construction, operation and decommissioning)

1.4.246. NE [RR-061] [PD2-010] [REP7-016] [REP8A-053] did not agree with the applicant's conclusions of no AEoI from underwater noise disturbance during construction from the proposed development in combination with other projects. This was based on concerns about the applicant's modelling and its lack of commitment to mitigation that would reduce sound at source, for example noise abatement systems (NAS). It did not dispute the applicant's conclusions of no AEoI from the other LSE pathways.

Underwater noise from seismic activity – AEol proposed development in-combination

1.4.247. The applicant discussed the methodology for the in-combination assessment in its RIAA [APP-040]. NE initially raised a query regarding whether seismic surveys had been included in the in-combination assessment (H21 [PD2-010]). The applicant provided a response [REP1-051] and updated the RIAA [REP1-016] to confirm seismic surveys were included and assigned as tier 7. The ExA asked NE to confirm if this matter had been resolved in the RIES ([PD-027] , QT3.2.2). NE [REP7-110] stated that no additional information had been provided and recorded [REP8A-053] this matter as not resolved (amber) at the close of examination.

1.4.248. The ExA notes that the applicant confirmed that seismic surveys were included in the in-combination assessment. The ExA is satisfied based on the information provided by the applicant that the correct methods have been used in the in-combination assessment, and that this is an appropriate basis on which to assess AEol.

Underwater noise (general disturbance) – AEol proposed development in combination

1.4.249. In the absence of a commitment within the dDCO to implement NAS, NE [REP8A-053] advised that AEol to the SNS SAC could not be excluded. This is based on potential in-combination impacts to harbour porpoise alongside other developments that may undertake noise generating activities in the same winter season.

1.4.250. NE [PD2-010] raised concerns that the current approach to implementing site integrity plans for piling impacts to the SNS SAC from offshore wind development does not allow sufficient time for mitigation such as NAS to be procured prior to construction, increasing the risk of AEol. It set out detailed comments on its broader concerns with site integrity plan implementation across projects and stated that the number of offshore wind developments due to undertake piling in the SNS SAC from now to 2030 means disturbance thresholds are likely to be exceeded without further mitigation. It advised that commitment to NAS would minimise the risk of AEol with the outcome of the revised site integrity plan determining pre-construction if mitigation is necessary or can be removed.

1.4.251. NE [REP6-066] advised that Defra published a Marine Noise package, with a suite of new and updated policy for reduction and mitigation of underwater noise. It stated that a joint statement was also published by Cefas, JNCC and NE on noise reduction methods when piling. Together with the JNCC guidelines on UXO clearance, NE advised that these documents set out an expectation that from January 2025 all offshore wind pile driving activity in English waters would be required to demonstrate best endeavours to deliver noise reductions through primary and/ or secondary methods in the first instance. The joint statement identified that site integrity plans should consider quieter installation methods and/ or NAS as a measure.

- 1.4.252. The applicant [REP1-051] disagrees with NE's position, stating that committing to NAS at this stage would be premature. It stated that NAS were not required given its conclusion of no AEoI, including from underwater noise. Section 12.3 of the RIAA [REP8-004] identifies that there could be disturbance within the SAC that (unmitigated) results in an exceedance of the 20% daily threshold (above which an effect would be significant, in accordance with JNCC guidance) in the winters of 2025 to 2028; the exceedance risk increases in combination if concurrent piling is carried out. Similarly, there is a risk of the 10% seasonal threshold being exceeded, as described in table 12.5. The RIAA sets out proposed mitigation, and states that the SNS SAC Site Integrity Plan (SIP) provides for timing controls to keep noise emissions within agreed thresholds (where driven or partly driven piling is used) and, if required, additional mitigation such as NAS.
- 1.4.253. The applicant submitted an outline of the SNS SAC SIP [REP6-022], with a final version secured through the DML in the dDCO [REP8A-004] [REP8A-042] (to be approved by the MMO after consultation with NE). The Outline SNS SAC SIP noted that the RIAA identified a need to address uncertainty regarding potential in-combination effects, particularly to harbour porpoise of the SNS SAC. The main source of uncertainty was described as construction schedules of other projects, which could lead to a combined effect. Mitigation options were reviewed in section 4 of [REP6-022] with primary mitigation being identified as management measures including restrictions on activity through scheduling to prevent the disturbance threshold being exceeded. Secondary mitigation options identified included air bubble curtains, pile casings and resonator-based noise mitigation systems. A commitment to demonstrate how best endeavours to deliver noise reductions for pile driving, in line with Defra policy, was provided. The applicant also stated that iPCoD modelling and in-combination assessment would be reviewed as part of finalising the SNS SAC SIP to review assumptions made about other projects.
- 1.4.254. 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.
- 1.4.255. Consequently, 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. There is therefore no reason to secure a NAS at this stage under the DCO. Indeed, to do so would inappropriately preclude the exploration of avoidance and reduction of impacts prior to seeking to apply mitigation.
- 1.4.256. Additionally, following comments from NE [REP6-066] and the MMO [REP7-097], the applicant has updated the OMMMP – Piling [REP7-044] and the OMMMP – UXO [REP7-046] to reflect the Defra Marine Noise Package published in January 2025. This included a policy paper on reducing marine noise (Defra, 2025) and a UXO Joint Position Statement (UK Government, 2025).

1.4.257. NE [REP8A-053] maintained its position at close of examination that AEol could not be excluded from the proposed development in-combination without a commitment to NAS in the SNS SAC SIP and MMMP, which it advised could be removed if it could be demonstrated in the final SNS SIP that it was not required.

1.4.258. The ExA is satisfied based on the evidence presented by the applicant, and noting that NE (as ANCB) did not dispute the applicant's conclusions, that AEol from all LSE pathways assessed other than underwater noise during construction from the proposed development in combination can be excluded. Overall, the ExA is content that suitable mitigation could be deployed to avoid AEol from underwater noise disturbance to the SNS SAC. This is particularly so noting that noisier activities associated with the proposed development could take place in the summer season without restriction. Moreover, any post-consent information provided to the MMO would contain live information across all developments within the Southern North Sea Offshore Wind Farm developer group (of which the applicant is a member).

Wash and North Norfolk Coast SAC

1.4.259. The RIAA [REP8-004] provided an assessment which addressed the potential for AEol to the harbour seal qualifying feature resulting from:

- underwater noise, including barrier effects (construction and decommissioning)
- collision risk (construction, operation and maintenance, and decommissioning)
- changes to prey (construction, operation and maintenance, and decommissioning)
- habitat loss (construction and decommissioning), and
- disturbance at haul out (operation and maintenance)

1.4.260. Whilst NE [RR-081] [PD2-010] [REP7-110] [REP8A-053] raised concerns about the modelling used by the applicant for as a basis for assessing underwater noise effects, it did not dispute the applicant's conclusion of no AEol for The Wash and North Norfolk Coast SAC (ME.1.14 [REP3-034]).

1.4.261. The ExA has no reason to dispute the applicant's modelling results given the justification provided in the report [REP5-070] (as described above). The ExA is also content with the applicant's approach to in-combination iPCoD modelling as the availability of information is not obtainable, particularly regarding the timing of the end of the examination, and notes that the applicant provided commitments to mitigate impacts from piling to marine mammals including harbour seal in the OMMMP – Piling [REP7-044].

1.4.262. The ExA is satisfied that there would be no AEol from LSE pathways assessed including collision risk, changes to prey, habitat loss and disturbance at haul out, noting that NE as ANCB did not dispute the conclusions in the RIAA. The ExA is satisfied based on the

information provided by the applicant that the correct modelling has been used to identify the HRA conclusions, and that this is an appropriate basis from which to assess AEol. The ExA is content that, with implementation of the proposed mitigation, AEol from underwater noise can be excluded. The ExA is content that there would be no AEol to The Wash and North Norfolk Coast SAC.

AEol Assessment Outcomes - Summary

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), guillemot and razorbill (in-combination disturbance and displacement)
- Farne Islands SPA – guillemot (in-combination disturbance and displacement)
- MLS SAC - sandbanks which are slightly covered by seawater all the time (alone and in-combination habitat loss).

1.4.264. Whilst the ExA cannot exclude an 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 qualifying plant and invertebrate features of the AOE Ramsar site, gannet of FFC SPA and razorbill (assemblage species) of Farne Islands SPA.

1.4.265. 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 chapter:

- Orfordness to Shingle Street SAC - perennial vegetation of stony banks, annual vegetation of draft lines, coastal lagoons
- OTE SPA - RTD
- SNS SAC - harbour porpoise
- Hamford Water SPA and Stour and Orwell Estuary SPA - avocet
- Hamford Water, Stour and Orwell Estuary, Blackwater Estuary SPA and Ramsar sites - black-tailed godwit, and
- The Wash and North Norfolk Coast SAC - harbour seal

1.4.266. The applicant's RIAA [REP8-004] concluded that AEol can be excluded for the features and impact pathways listed for each European site listed in table 1 of this appendix from the proposed development alone, or in combination with other plans and projects. These conclusions were agreed with NE [REP1-016]. The ExA has no reason to recommend that AEol cannot be excluded for these features and impact pathways on this basis.

Engaging with the HRA Derogations

1.4.267. If the competent authority cannot conclude the absence of an AEol, such that no reasonable scientific doubt remains, then under The Habitats Regulations the proposed development can proceed only if there are no alternative solutions and there are imperative reasons of

overriding public interest (IROPI) why it must be carried out. Suitable compensatory measures must also be secured to ensure the overall coherence of the UK NSN.

1.4.268. The applicant submitted a HRA Derogation Case [AS-003] for the LBBG feature of AOE SPA and Ramsar site. Schedule 13 of the dDCO [REP8A-042] provides the necessary legal mechanisms for the consideration, implementation and monitoring of compensatory measures for LBBG. The applicant described the legal framework and guidance that the derogation case is based on in section 2 of [AS-003].

1.4.269. Despite its position that AEoI could be excluded for the kittiwake, guillemot and razorbill features of the FFC SPA and the sandbanks which are slightly covered by sea water all the time feature of the MLS SAC, the applicant also submitted a 'without prejudice' derogations case for these features [AS-003]. This did not consider guillemot of the Farne Islands SPA, although provision for compensation was made on a 'without prejudice' basis in the Guillemot and Razorbill Roadmap [REP8-012]. The applicant submitted a 'without prejudice' version of the dDCO [REP8A-042] which contained wording that, if found necessary, could become part of Schedule 13 of the DCO to secure compensatory measures for these features.

1.5. CONSIDERATION OF ALTERNATIVES

1.5.1. The wider examination of alternatives to the proposed development in terms of the NPSs 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. The applicant provided its 'no alternative solutions' case in section 4 of the HRA Derogation Case [AS-003], structured around 4 stages (or steps):

- step 1 project need and objectives (paragraphs 4.1.8 to 4.1.49)
- step 2 risk of harm (paragraphs 4.1.50 to 4.1.54)
- step 3 consideration of alternatives (paragraphs 4.1.55 to 4.1.137), and
- step 4 would be a comparison of any feasible alternative solutions but as the Applicant did not identify any, this was not required (paragraph 4.1.138)

Project objectives and need for the proposed development

1.5.3. The objectives of the proposed development are summarised as:

- generating low carbon electricity from an OWF in support of decarbonisation of the UK electricity supply
- exporting electricity to the UK National Grid to support UK commitments for offshore wind generation and security of supply
- optimising generation and export capacity within the constraints of available UK sites and onshore transmission infrastructure, and
- delivering a significant volume of UK offshore wind before 2030

- 1.5.4. The applicant stated that the key drivers underpinning the need for OWF are the need to reduce greenhouse gas (GHG) emissions, energy security and need for low carbon electricity capacity.
- 1.5.5. The applicant's case for the need to reduce GHG emissions is centred on the UK's commitments to reduce carbon emissions by 57% by 2032 compared to emission levels in 1990. This was agreed in the Framework Convention on Climate Change (2015) ('the Paris agreement'), the advice from the Committee on Climate Change (CCC) in 2019 was that 75GW of offshore wind energy may be required to reach net zero by 2050 and the British Energy Security Strategy 2022 (BESS) including a target of 50GW of operational offshore wind generation by 2030. The applicant also noted the emphasis in NPS EN-1 on the need for the rapid development of low carbon energy sources to support decarbonisation of the UK's electricity supply. The proposed development would have an export capacity of more than 100MW.
- 1.5.6. The applicant stated that meeting decarbonisation and energy security targets necessitates a significant amount of energy infrastructure, which is critical for the transition to a low carbon economy as recognised in NPS EN-1. It noted that recent sanctions on Russian gas have increased gas prices by more than 200% from 2021 to 2022; reliance on global markets for imported energy leaves the UK vulnerable to price spikes, political pressure and potentially supply disruption.
- 1.5.7. The applicant stated that the proposed development will deliver significant quantities of low carbon electricity from as early as the late 2020s in line with the CCC's recent identification of the need for urgent action to increase the pace of decarbonisation in the electricity sector.
- 1.5.8. The applicant stated in its Planning Statement [APP-231] that NPS EN-1 identifies offshore generation as a critical national priority (CNP).

Potential harm to national sites

- 1.5.9. The applicant summarises its conclusions on the initial predicted harm of the proposed development referring to the RIAA [REP8-004], with further information in section 3 of [AS-033]. The predicted scale of impacts initially presented was superseded during the examination and as discussed above in some cases the scale of impact remained in dispute at the close of the examination.

Consideration of alternative solutions

- 1.5.10. The applicant stated that in the Hornsea Three OWF DCO, the SoS provided advice on the scope of alternatives requiring consideration, which was limited to 'do nothing' or alternative wind farm projects. The applicant therefore considered the following alternative solutions:
- a 'do nothing' option
 - alternative locations for OWF projects
 - changing the scale and design of the wind farm
 - changes to the number and location of export cables

- an increased air gap (clearance between the rotor blades and sea surface), and
- alternative rotor designs

Do nothing

- 1.5.11. The applicant discounted the 'do nothing' option as it would not meet any of the project objectives for the proposed development and would ignore or hinder efforts to respond to the clear and urgent need for offshore wind deployment at scale before 2030 to help the UK meet its legally binding commitment to net zero by 2050.

Alternative locations

- 1.5.12. The applicant considered alternative locations outside of the UK EEZ and within it, including repowering of existing OWFs, ScotWind projects, and planned Round 3 and 4 OWFs. It discounted locations outside of the UK EEZ because these projects would not contribute to identified UK need and therefore would not meet the project objectives.
- 1.5.13. It stated that rapid technological advances in WTG size (from 120m in 2013 to 260m in 2021) meant that it was highly unlikely that pairing foundations for smaller capacity turbines with larger turbines would be feasible, so a newly built OWF was the only means of repowering.
- 1.5.14. It identified up to 30.6GW of potential capacity from ScotWind over the next decade, with up to 14.4GW by 2030. As all this generating capacity is likely to be required in addition to the proposed development to meet UK Government targets, this was not considered to be a feasible alternative solution.
- 1.5.15. Similarly, for Round 3 and 4 projects, the applicant stated that the generating capacity was likely to be needed in addition to the proposed development to meet the UK Government's targets. It considered that most of these projects would have the same or greater effects on European sites.

Scale and design

- 1.5.16. The applicant stated that consideration of environmental parameters was a central theme of site selection and design. The ES Chapter Offshore Project Description [APP-069] sets out more information about how the applicant determined the MDS and ES Chapter Site Selection and Alternatives [APP-066] confirms the reasons for selection of the final MDS.
- 1.5.17. The applicant stated that it reduced the northern array boundary prior to submission of the DCO application, which had a positive impact in constraining the area over which impacts to birds could occur. It considered that any further reduction would not be financially or technically feasible, or less damaging.
- 1.5.18. The applicant also discounted the alternative solution of fewer WTGs, as these would generate lower capacity and limit the ability of the proposed development to contribute to the UK Government's targets.

Number and location of export cables

- 1.5.19. The applicant stated that it had sought to route the OfECC outside of the MLS SAC but this was not possible due to navigational safety. An overlap was required at the northern part of the SAC to provide a buffer from the pilotage area. The overlapping area avoids the fisheries' byelaw area, which the applicant understood to be the most ecologically sensitive location. The applicant set out more information about refinement of the OfECC within these constraints in ES Chapter Site Selection and Alternatives [APP-066], including figure 4.8 showing the shipping and navigation constraints. The Benthic Compensation Strategy Roadmap (BCSR) [APP-047] provides more detail about the buffer proposed between the OfECC and pilotage area, stating that HHA indicated the export cable should be installed at least 1km south to avoid creating additional risks.
- 1.5.20. Prior to submission of the DCO application, and in response to NE advice, it reduced the number of export cables from 4 to 2, which reduced the duration and footprint of works by approximately 50%. It stated that further reduction in the cable numbers would result in the project objectives not being met and there was no feasible alternative to avoid the SAC and reduce the cable numbers.
- 1.5.21. NE (F41 [PD2-008]) advised that a more substantive consideration of alternatives was required to ensure the alternatives test could be met. NE (F48) also queried why a combined or coordinated approach was not taken forward and if routing could avoid the Annex I sandbank features of the MLS SAC.
- 1.5.22. The applicant [REP1-051] considered that [AS-003] set out all information to meet the alternatives test if the SoS determined that compensation was required, including an analysis of alternative cable routeing and design options. The applicant stated that any further design refinement would be likely to reduce the benefit of the proposed development and design changes are not a feasible alternative solution. It would continue to consider potential coordination but to progress the application it had made a reasonable worst-case assessment. If coordination was agreed in future, impacts would be less than those identified in the assessment.
- 1.5.23. In response to the ExA [PD-023], the applicant [REP5-091] confirmed it was unable to coordinate further with North Falls whilst satisfying shipping stakeholders. It stated that the separation distance between the offshore export cables would in general be at least 300m to enable cable repair and to lay an 'omega' loop. It explained that having separate cable corridors allows both projects the greatest flexibility to minimise disruption to the ports during construction.
- 1.5.24. The ExA (Q4.2.3, [PD-027]) also sought further clarification and supporting evidence from the applicant to demonstrate why further reduction in the cable numbers would result in the project objectives not being met and if it was possible to reduce the OfECC width through the MLS SAC. The applicant [REP7-083] confirmed that the maximum size of export cable constrains the maximum amount of power that can be exported. If the number of circuits is halved, the total generating

capacity will also be halved. It stated that the OfECC width cannot be reduced further as there would not be sufficient room to avoid constraints such as potential archaeological features, boulders or UXO.

1.5.25. The ExA (Q4.2.2, [PD-027]) asked NE to confirm what further information it considered was needed to achieve a substantive consideration of alternative solutions. NE [REP7-011] welcomed the applicant's further justification and advised that it was for the SoS to determine if it was sufficient to meet the test. It did not identify any further information it considered was necessary.

1.5.26. The applicant stated that it was engaged in the Government-led Offshore Transmission Network Review (OTNR) to investigate feasibility of a coordinated offshore grid connection working with North Falls and Sea Link projects. It considered that there is currently no certainty that this would be a viable option. This matter is discussed further at chapter 9 of this recommendation.

1.5.27. The applicant in [PD4-006] explained that the consortium's high level feasibility study concluded that coordination is technically feasible but that it would result in an increase in capital costs, constraints costs and programme delay of up to 5 years. Essex County Council [AS-011] submitted a copy of a letter from the DESNZ confirming that grant funding would not be continued. Based on the need for the proposed development, impact on the delivery date and cost of the assessed Offshore Coordination Support Scheme (OCSS) options, the applicant progressed with the assumption of a deliverable radial onshore connection.

Increased air gap

1.5.28. The applicant stated that the air gap of 28m was driven by balance of collision risk, engineering and landscape and visual impact consideration, which meant there was no feasible alternative to increase the air gap. It stated that significant concerns were raised by stakeholders including NE and Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) about seascape, landscape and visual impacts which led to commitments to curtail WTG heights.

Rotor design

1.5.29. The applicant concluded that smaller rotors for the same number of WTGs would reduce the generating capacity of the proposed development and limit its ability to contribute to the 2030 target. To achieve the same generating capacity with smaller rotors would require more WTGs, which would increase the magnitude of effects to ornithology receptors. It was not considered a feasible alternative.

Applicant's conclusion on alternative solutions

1.5.30. The applicant considered that it had undertaken a comprehensive analysis of potential alternative solutions (grounded in considerations of legal, technical and commercial feasibility) that was sufficient to enable the SoS to objectively conclude an absence of feasible alternative solutions.

ExA conclusions

1.5.31. 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 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. Considering the information submitted by the applicant, the ExA is satisfied that no alternative design parameters (including number and location of export cables, increased air gap and smaller rotor design) 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 adverse effects on the European site.

1.5.32. The ExA is satisfied 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.

1.6. IMPERATIVE REASONS OF OVERRIDING PUBLIC INTEREST (IROPI)

1.6.1. The need for the proposed development is discussed in chapter 3 of the Report. This section addresses the examination of the IROPI test under the requirements of The Habitats Regulations. The applicant's case for IROPI under the HRA process is presented in section 5 of the HRA Derogations Case [AS-003].

1.6.2. The applicant's reasoning that there is an imperative need for the proposed development included the following points (in summary):

- There is an urgent need to establish a secure, diverse, affordable and resilient energy supply and meet decarbonisation targets. This provides a clear and urgent need for the proposed development to help meet the UK Government target of 50GW of offshore wind installed capacity by 2030.
- Urgent action is required to reduce rising global temperatures and to limit the effects of climate change on human health and safety by reducing GHG emissions.
- NPS EN-1 and EN-3 require delivery of substantial amounts of renewable energy with offshore wind being one of the major components, which is critical national infrastructure.
- The adoption of net zero by 2050 requires a substantial reduction in carbon emissions, which will create substantial additional demand for low carbon electricity in the 2030s and 2040s.
- The proposed development can deliver large amounts of low carbon electricity from as early as the late 2020s and its connection to the National Energy Transmission System (NETS) means it would contribute to management of the national electricity system. It can make a large, meaningful, and timely contribution to decarbonisation and security of supply, while helping lower bills for consumers.

- 1.6.3. The ExA (GC.1.04 [PD-011]) sought clarification about the proposed development's contribution to the Government's objective for 50GW of OWF generation by 2030, noting that the commitment to 'more than 100MW of generating capacity' seemed inconsistent with the claim it was a substantial infrastructure asset. The applicant [REP2-039] stated that the final generating capacity has not been defined. It noted (GC.1.03 [REP2-039]) there was agreement for connection capacity of up to 1,080MW and the final figure would depend on WTG selection. This represents approximately 2% of the Government's target. The applicant referred to NPS EN-1, which states that the SoS "is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS."
- 1.6.4. The ExA (GC.1.06 [PD-011]) requested comments on the compatibility of a 7-year time limit for commencement in the dDCO [REP8A-042] relative to the Government objective for 50GW by 2030 and the applicant's claim that the proposed development could be deployed in this time frame. The applicant [REP2-039] is seeking to deliver the proposed development within a timeframe that meets the 2030 target but must allow for the reasonable worst-case when drafting the dDCO, including unforeseen delays. NPS EN-1 sets out the urgent need and strong support for CNP infrastructure including offshore wind, with the weight to be attached not being time limited to developments that can deliver by 2030. It referred to SADEP as an example of a DCO granted with the same period for commencement and to which the SoS ascribed substantial positive weight.
- 1.6.5. The applicant stated that there is also a public interest in the proposed development proceeding in terms of:
- Combatting climate change – low carbon electricity generation could result in mitigation that benefits seabird habitats and prey species that are vulnerable to climate change for example through warming sea temperature.
 - Employment – supporting an average of 390 direct full time equivalent (FTE) construction jobs for the onshore scheme and 205 FTE jobs for the offshore scheme for up to 2 years.
 - Gross value added (GVA) – contribution to GVA from construction activity, including approximately £2.2m locally and £4.6m nationally from supply of onshore components and £101m from manufacture of offshore components.
- 1.6.6. The applicant considered that the proposed development is of overriding interest compared with the harm to the European sites, because of the public interest from the benefits outlined in [AS-003]. It stated that the proposed development would also contribute to alleviating a key anthropogenic pressure on seabirds at the AOE and FFC SPAs, arising from climate change driven reductions in prey availability. This would also apply to the MLS SAC, where increased weather instability could result in suboptimal conditions for benthic habitats.
- 1.6.7. No comments relevant to the HRA have been received from any IP on the applicant's IROPI case in [AS-003].

ExA conclusions

1.6.8. The ExA notes that the absence of adverse effects to priority habitats and species allows the consideration of benefits of a social and economic nature. 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. The ExA notes that the extent of harm to the relevant site features from the proposed development is relatively small. For the AOE, FFC and Farne Islands SPAs and AOR Ramsar site, AEoI arise from in-combination effects. For the MLS SAC, AEoI arises from habitat loss or disturbance from cable protection up to a maximum of 5,400sq.m (if required), which equates to 0.0008% of the SAC area. The ExA is content that the benefits of the proposed development, particularly from its contribution to the reduction in UK carbon emissions and maintaining energy security, are sufficient to allow the SoS to conclude that the proposed development is of imperative overriding public interest. Noting the 7-year implementation period in the dDCO, the ExA's recommendation is that IROPI could still be established if the proposed development is not operational by the Government's target year of 2030 for 50GW of offshore wind installed capacity, noting that the NPS EN-1 does not time limit weight only to those developments that would be completed by 2030. 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 a proposed package of compensatory measures (CM) for the following sites and features:

- LBBG feature of the AOE SPA and Ramsar site
- kittiwake feature of the FFC SPA ('without prejudice')
- guillemot feature of the FFC SPA and Farne Islands SPA and razorbill feature of the FFC SPA ('without prejudice')
- sandbanks which are slightly covered by seawater all the time feature of the MLS SAC ('without prejudice')

1.7.2. The CM for LBBG form Work No. 18B of the dDCO [REP8A-042] and would be secured through Schedule 13 of the dDCO.

1.7.3. The applicant provided draft wording for inclusion in Schedule 13 of the dDCO to secure the 'without prejudice' CM in [REP5-090], which provides for compensation through project-led proposals or contributions to the Marine Recovery Fund (MRF) or other form of strategic compensation funding. The draft wording was incorporated into a 'without prejudice' version of the dDCO [REP8A-042]. Examination matters relating to how CM would be secured and the ExA's consideration of the draft wording is set out below as relevant to each feature.

1.7.4. The potential for strategic compensation through contribution to the MRF or other form of strategic compensation funding was discussed throughout the examination, as addressed by feature below. During the examination, a written ministerial statement (WMS) was published on 31 January 2025, which set out the Government's commitments to

implementing an offshore wind environmental package including launch of the MRF in late 2025 to provide an optional mechanism for developers to fund strategic CM. DESNZ published supporting guidance, explaining how developers could refer to strategic compensation measures in DCO applications in advance of the MRF becoming operational. Both the WMS and DESNZ guidance stated that projects likely to use the measure included those that received a seabed lease from The Crown Estate under Leasing Rounds 3 or 4, and the 2017 extensions round, which would include the proposed development. The ExA sought the views of the applicant and NE on the implications of the WMS and DESNZ guidance and the examination of these matters is discussed below as relevant to each feature.

LBBG – AOE SPA and Ramsar site

1.7.5. The applicant's proposed CM for LBBG in the LBBG Compensation – Evidence, Site Selection and Roadmap [REP8-010] comprises two options:

- installation of predator fencing and restoration of habitat within the fenced off area at Orford Ness within the AOE, or
- predator control and habitat management at the Outer Trial Bank (OTB) in The Wash.

1.7.6. The details of the measures and associated monitoring would be provided in a LIMP. The LIMP would be produced post-consent and the information it would contain is outlined in [REP5-021]. The Orford Ness site is included within the DCO order limits (Work No. 18B). The OTB site is owned by The Crown Estate, which cannot be the subject of compulsory powers, and is not in the order limits.

1.7.7. NE agreed with the proposed measures in principle (D24 [PD2-006]), however IPs raised a number of concerns that were examined by the ExA.

Orford Ness

1.7.8. NE (D25, D29 and Appendix J Onshore Ecology [PD2-006]) raised concerns that the impacts of the predator fence on the Orfordness – Shingle Street SAC and AOE Ramsar site are not sufficiently understood and therefore impacts might not be adequately mitigated. The issue of inadequate baseline information has been discussed in the AEoI section above (see section 1.4 on AOE Ramsar site and Orfordness - Shingle Street SAC) and is not repeated here.

1.7.9. The RSPB [RR-094] questioned the likely effectiveness of the proposed measure arguing that the reasons for population and productivity decline at Orford Ness are not clear and therefore predation may not be the limiting factor. It disputed the applicant's predicted breeding density at the site and potential breeding capacity of the fenced area, noting that the local nesting densities at nearby Havergate Island (in Orford) are significantly lower. The applicant considered that further work into the densities found at Havergate Island is required as it appears that a large proportion of the habitat is unsuitable for nesting LBBGs (for example under water) perhaps resulting in the low densities.

- 1.7.10. NE highlighted (D32 [PD2-006] [REP7-104]) the potential for the gulls to delay using the Orford Ness site and considered there would be a risk of mortality debt accruing (citing the fact that LBBG typically do not start to breed until their fifth year, and the lack of breeding gulls in the Norfolk and East Anglia project's compensation compound in the 2023 breeding season). NE advised (D28.5 [PD2-006]) that the fence at AOE be erected a minimum of four years in advance of the operational phase to extend the lead in time as much as possible, noting that this schedule was required and achieved by the Norfolk OWF projects. NE argues that where it is unavoidable that the benefits of a compensatory measure are not predicted to arise until after the impacts commence, guidance indicates that this should be factored into the design of the measures for example through multiple interventions or increased level of provision [REP7-104].
- 1.7.11. The applicant [REP5-074] acknowledged that it may potentially accrue a mortality debt by committing to the fence being erected 3 years prior to operation but argued that either measure has the potential to over-compensate and mortality debt would be easily recovered over the lifetime of the proposed development. The applicant [REP5-074] also argued that acquiring a small mortality debt would be appropriate given the CNP status of the proposed development. It stated that Norfolk and East Anglia projects' compensation site is still in its infancy and adaptive management measures are in place to help with future success of the site [PD4-006].
- 1.7.12. NE (D30 [PD2-006]) raised specific concerns about fence maintenance and remediation of potential breaches. The applicant noted that it provided an outline for the fence maintenance schedule in the LIMP [REP5-022], which satisfied NE [REP7-108].
- 1.7.13. As an alternative to the proposed Orford Ness site, the National Trust [RR-080] and NE (table 5 in [REP4-058]) suggested the applicant pursue a site at neighbouring Lantern Marshes, encouraging the applicant to collaborate with North Falls OWF who were at that point already in discussion with the National Trust over the site. However, the applicant argued that the Lantern Marshes site holds no additional advantages over the proposed Orford Ness site and would need to be secured by other means as it is outside the order limits and has not been assessed (unlike the Orford Ness site). The applicant confirmed it would not be pursuing the Lantern Marshes option further [EV3-003].
- 1.7.14. NE (D29 and D33 [PD2-006]) raised concerns that as negotiations with landowners at both sites were ongoing, there was uncertainty whether or not either site could be secured for the lifetime of the project.
- 1.7.15. Concerns were raised by National Trust and Cobra Mist Limited, including at [RR-080], [REP7-101], [REP8-049], [REP3-041], [REP5-103] and [REP5-104], in relation to the acquisition of land at Orford Ness for compensatory provision. The applicant responded to such concerns, including at [REP8-035], [REP8A-039], [REP1-051] and [REP5-074]. As discussed by the ExA at Appendix D and Chapter 10 of this recommendation, we are satisfied that powers can be sought by

the applicant to secure the availability of land for compensatory provision.

Outer Trial Bank

- 1.7.16. NE (D25.5 [PD2-006]) and the RSPB [RR-094] noted that OTB is a challenging site to access and sits in an area of high environmental sensitivity (The Wash SPA, Ramsar site and The Wash and North Norfolk Coast SAC). The RSPB [RR-094] considered that the implementation of the proposal for rat eradication measures has the potential to impact the SAC, SPA and Ramsar features of The Wash SPA and Ramsar site and The Wash and North Norfolk Coast SAC and would require a HRA in its own right.
- 1.7.17. The ExA requested in the RIES ([PD-027] , QT4.2.13) justification as to whether a HRA Report for OTB was required. The applicant argued that as no specific consent is required for the measures at OTB via the DCO, and that as the proposals do not comprise development within the planning regime, a HRA is not required [REP7-083]. The applicant proposes to carry out all relevant assessments and seek all relevant planning permissions post DCO application [REP7-083].
- 1.7.18. NE (D33 [PD2-006]) and the RSPB [RR-094] questioned the evidence supporting rat predation as the primary factor limiting breeding success at OTB. The applicant stated [REP1-051] that presence of rats and signs of predation were noted in an RSPB 2023 survey, in the applicant's DAS - Outer Trials Bank [REP3-026], and in further surveys carried out by NE during the 2024 breeding season (the survey report of the latter was submitted to the examination at [REP6-053]). Therefore, the applicant considers that whilst further survey work would be beneficial prior to implementing a measure at OTB, this measure would likely have a high degree of success [REP8-036]. No further comment on this was received from NE or the RSPB.
- 1.7.19. NE (D25.5 [PD2-006]) advised that OTB is a challenging site to access that an appropriate access methodology and schedule for management had not been presented and requested that an outline statement should be submitted. The applicant stated that negotiations concerning access and use of OTB were at an advanced stage [REP1-051]. Additionally, NE (D30 [PD2-006]) considered that workable plans for monitoring and biosecurity would need to be in place.
- 1.7.20. As with Orford Ness, NE (D29 and D33 [PD2-006]) raised concerns about the security of the delivery of the measures as negotiations with landowners were ongoing. The applicant confirmed that the OTB site is owned by The Crown Estate, which cannot be the subject of compulsory powers, and the land is therefore not secured in the order limits [REP1-051]. However, the applicant submitted a letter from The Crown Estate relating to the OTB site [REP6-054] which stated that The Crown Estate was not yet in a position to enter into any legal documentation with the applicant, but that confirmed its intention to continue to work with the applicant in good faith to assist them in finding appropriate areas in which compensations measures can be facilitated within the necessary timescales, subject to various matters

(such as details about the precise nature and location of the proposed activities, contract and commercial agreement, and so on).

Compensation requirement

- 1.7.21. NE disagreed with the applicant's proposed compensation requirement (number of additional breeding pairs required to provide the necessary compensation quantum per annum) (D26, D27 [PD2-006]). The applicant's position on calculating the compensation requirement for LBBG is to use the Hornsea 4 methodology, applying a mean mortality rate and a compensation ratio of 2:1 for the site at Orford Ness and 3:1 for the OTB. The applicant explained that the differences in ratios used is due to the connectivity of the sites to the impacted SPA (AOE SPA). Using the applicant's approach results in a compensation requirement of 42.8 breeding pairs of LBBG for the Orford Ness site (2:1) and 64.2 breeding pairs for the OTB site (3:1).
- 1.7.22. NE advocated that the compensation quantum should be based on the predicted mortalities derived using its recommended approach, i.e. 11.31 birds per annum and not 5.7 birds per annum as used by the applicant. This is because of the applicant's approach to adult apportioning and use of sabbaticals in the calculation (see section 1.4 on AOE SPA and Ramsar site above).
- 1.7.23. NE [REP4-058], [REP5-094] and [REP5-095] initially recommended the Hornsea 3 approach to calculating the compensation quantum but recognised that this relies on detailed demographic data not available for LBBG. NE therefore also recommended the applicant use the Hornsea 4 approach but adapt it to include an adjustment for natal dispersal and philopatry to account for birds migrating away from a breeding site that will not recruit back into their natal colony when they reach the breeding age. The applicant argued [REP4-060] [REP5-074] it is unnecessary to adjust the compensation quantum to account for natal dispersal in this scenario because the proposed compensation measure is delivering compensation at the impacted SPA (AOE). NE subsequently conceded that because the proposed measures at the Orford Ness site would take place within the SPA, and thereby accrue conservation benefits directly to it, NE considered the additional step of factoring in philopatry for AOE SPA would not be necessary in this particular instance, "were the applicant to progress both the 'VE2' and Outer Trial Bank sites" [REP7-104] [REP8-051] (which implies that NE does not consider that a single site would provide sufficient certainty).
- 1.7.24. NE also considered that the compensatory proposals should be able to demonstrate they could compensate for the Upper Confidence Interval (UCI) value mortality rate, to account for a precautionary worst-case, and be scaled using a 3:1 ratio, to increase confidence that sufficient benefits will still arise, should the measures underperform [REP8-051].
- 1.7.25. Although the applicant proposed 2 site options (Orford Ness and OTB), it considered the proposed measures to be mutually exclusive, not complementary [REP1-051]. The applicant argued that each option on its own had the potential to compensate more than the required compensation quantum [REP1-051] and 2 separate measures were not

therefore necessary. However, NE considered (D24, D28 [PD2-006]) that having 2 distinct measures would provide significant resilience should either fail to be successful and recommended both options be progressed. According to NE, the applicant's plan to bring forward one compensation site at Orford Ness does not consider significant uncertainty in the likely occupancy rate and risks failing to achieve its target without appropriate adaptive management or the addition of a suitable alternative site [REP7-104].

ExA conclusions

- 1.7.26. 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 LBBG package of proposed compensation measures is feasible, appropriate and would ultimately ensure the overall coherence of the UK NSN. The ExA considers that the compensatory measures proposed by the applicant are sufficient for the level of impact anticipated from the proposed development, and the implementation of the LIMP secured via Schedule 13 Part 1 has the potential to deliver a proportionate level of benefit.
- 1.7.27. In light of the evidence presented, the ExA recommends to the SoS that the following parameters are appropriate to use to calculate the compensation quantum for LBBG for the AOE SPA for the proposed development:
- impact value based on worst-case mortality rates (NE's approach)
 - ratio of 3:1 to reflect various uncertainties relating to the productivity of the site and the potential to accrue a mortality debt, and
 - central impact value to be proportionate with the level of impact associated with the proposed development.
- 1.7.28. This results in a compensation quantum of 127.3 pairs (table 3.2 [REP7-076]), which the ExA considers reasonable to round down to 127 pairs.
- 1.7.29. The applicant argues that the size of area at Orford Ness, with predator fencing installed and appropriate habitat management, has the potential to produce a breeding population equating to a maximum of 2400 pairs (paragraph 1.1.25 of the Roadmap [REP8-010]) and that the OTB has capacity for an additional 1,500 pairs to reach historical maximum populations. Therefore, should the SoS decide to follow NE's advised worst-case compensation quantum of 597.2 pairs, either site would have the capacity to deliver this.
- 1.7.30. The ExA considers it prudent that the development of compensation packages comprises multiple measures to provide resilience should an individual measure fail or underperform. However, the ExA has no reason to believe the recommended compensation quantum cannot be delivered at one site, and therefore recommends that the measures at the Orford Ness site are implemented, with the OTB retained as an option should the Orford Ness site fail to meet its objectives.

Guillemots and razorbills – FFC SPA and Farne Islands SPA

1.7.31. The applicant identified the following potential CM options in the Guillemot and Razorbill Compensation – Evidence, Site Selection and Roadmap ('the Auk Roadmap') [REP8-012]:

- project-led compensation comprising small-scale management measures at colonies in south-west England aimed at reducing recreational disturbance (such as wardens, signage, education, visitor access statements and engagement with local businesses and organisations), or
- strategic compensation delivered by Defra in the form of contribution to the MRF comprising predator control.

1.7.32. The details of the project-led measures and associated monitoring would be provided in a Guillemot and Razorbill Implementation and Monitoring Plan (GRIMP). The GRIMP would be produced post-consent should the SoS agree with this recommendation, and the information it would contain including the details of the measures, would follow those outlined in [REP8-014].

1.7.33. In its RR (D2 [PD2-006]), NE expressed broad support for the proposal to provide compensation for impacts on guillemot and razorbill through reduction of disturbance at small colonies in south-west England. Furthermore, NE [PD2-006] noted that although connectivity to the FFC SPA and the wider UK network of SPAs classified for guillemot is likely limited, populations of both species from the south-west colonies may mix with birds from other SPAs in the non-breeding season, resulting in some potential for exchange. NE considered this would be of greater concern for a project with greater impacts on FFC SPA auks than the proposed development but given the scale of contribution made by the proposed development to the in-combination impacts, NE concluded that the likelihood of low connectivity does not mean a proportionate contribution of auks to the network cannot be made in this specific instance.

1.7.34. Despite being broadly supportive of the proposals, NE and the RSPB raised several concerns that have been discussed during the examination [PD2-006].

1.7.35. NE (D1, D2 and D3 [PD2-006]) and the RSPB [RR-094] raised concerns about the baseline data characterising the compensation sites and their populations. The RSPB [RR-094] also argued that the Auk Roadmap and GRIMP did not propose specific measures. Additional surveys were undertaken during the examination in summer 2024 which established from a longlist of sites, three shortlisted sites where disturbance was highest. These surveys did not fully alleviate NE's concerns [REP5-099] however the applicant commits in the Auk Roadmap and GRIMP (if compensation is required for guillemot and razorbill) to future monitoring (including colony counts, productivity and disturbance events) to ensure that at least two years of baseline data are collected to further understand the sites. The applicant [REP8A-038] stated that this data would be collected from the 2025 breeding season onwards.

- 1.7.36. NE disagreed with the applicant's proposed compensation quantum (D4 and D5 [PD2-006]). This was discussed extensively during the examination (see RIES [PD-027] , table 4.2, ID 4.2.3).
- 1.7.37. NE advocated that the compensation quantum should be based on the predicted mortalities derived using its recommended approach, which were 2.28 guillemots and 0.63 razorbills per annum and not 0.82 guillemots and 0.22 razorbills per annum as used by the applicant. This is because of the differing approaches to disturbance and mortality rates used in the calculation of impact (see section 1.4 on FFC above).
- 1.7.38. NE [REP8-051] initially advocated the Hornsea 3 Part 2 method of calculating compensation quanta to be the most ecologically complete for compensatory measures where it is necessary to calculate the number of breeding pairs required to compensate for a specified mortality impact, however, testing the method for guillemot and razorbill produced "unrealistic and clearly disproportionate requirements for scaling compensatory measures" (NE's words). In light of this, NE advised that in the absence of a robust alternative option for these species, it is appropriate on this project for measures be scaled with the UCI impact value generated using NE's advised disturbance and mortality rates, the Hornsea 4 method to derive the quantum, and a 3:1 ratio to generate the number of pairs the compensation measures should be able to accommodate. With these parameters, NE [REP8-051] therefore considers the compensation measures should be evaluated against the potential need to deliver an additional 41.8 pairs of guillemot for FFC SPA and 25.74 pairs of razorbill for FFC SPA (Table 3.3 and 3.4 of [REP7-076]).
- 1.7.39. At the time of NE's comments [REP8-051], the applicant had not presented any calculations for Farne Islands SPA guillemot, but NE considered that the value for FFC could be used indicatively. The applicant updated the Auk Roadmap at Deadline 8 [REP8-012] to include figures for the Farne Islands SPA, including using NE's preferred methodology, comprising a compensation requirement of 9.30 breeding pairs of guillemot using the applicant's parameters, and 35.43 breeding pairs using NE's preferred parameters.
- 1.7.40. NE (D5 and D6 [PD2-006]) noted that the applicant plans to have the measures in place 3 breeding seasons prior to operation and raised concerns that in doing so it would be likely to accrue 'mortality debt' on the impacted guillemot and razorbill populations because both species do not reach adulthood until around 6 years old and therefore operations would commence before young produced by the compensation will reach maturity and enter the breeding population. NE [REP7-104] advised that to limit mortality debt the applicant should implement the compensation measure at least 4 years prior to operations, or if a delay is unavoidable, the debt should be factored into the design of the measures such as through multiple interventions or an increased level of provision. The applicant [REP8-036] argued that the 3 shortlisted sites have the potential for supporting more than NE's worst case compensation targets.
- 1.7.41. NE (D7, D10 and D11 [PD2-006]) raised concerns that proposed sites had not been secured with relevant landowners and stakeholder

participation had not been formalised. The applicant [REP1-051] argued that the majority of proposed measures would not require landowner consent or the securing of land and that it was continuing discussions with stakeholders in the south-west and other offshore wind farm projects to determine the best solution to achieve a strategic measure. The applicant [REP8A-040] submitted a letter from the Cornwall Wildlife Trust at Deadline 8A that confirmed the relevant strategic coordination and funding provisions are sufficient, the Cornwall Wildlife Trust can provide the necessary services that would be required to deliver the potential measures and are therefore willing to enter into an appropriate commercial agreement should compensation be deemed necessary by the SoSES NZ.

1.7.42. NE (D8 [PD2-006] [REP4-061] [REP5-099] [REP7-104] [REP7-110]) also had various recommendations for the applicant's proposals to measure success of the compensation and associated proposed monitoring methods. NE recommended (D9 [PD2-006] [REP4-058] [REP7-104]) that success be measured by seeking to see positive changes in bird numbers and/ or productivity as well as changes in human behaviour, and a comprehensive monitoring programme that includes human activity would be needed to identify these changes when they may occur. It advised the applicant to consider the use of adaptive or innovative techniques such as drones or cameras for recording human activity. The applicant updated the GRIMP at Deadline 8 [REP8-014] to include the potential to use innovative monitoring techniques as part of adaptive management measures. The applicant [REP5-074] also states that annual colony counts and productivity studies will be carried out where possible at the selected colonies and several colonies will be monitored as control sites, however, that is not stated explicitly within the GRIMP itself.

ExA conclusions

1.7.43. 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 package of proposed compensation measures for auks is feasible, appropriate and would ultimately ensure the overall coherence of the UK NSN. The ExA considers that the compensatory measures proposed by the applicant are sufficient for the level of impact anticipated from the proposed development, both on the FFC SPA and Farne Islands SPA.

1.7.44. In light of the evidence presented, the ExA recommends to the SoS that the following parameters are appropriate to use to calculate the compensation quantum for auks for the FFC SPA and Farne Islands SPA for the proposed development:

- impact value based on worst-case mortality rates (NE's approach)
- ratio of 3:1 to reflect various uncertainties relating to the productivity of the site and the potential to accrue a mortality debt, and
- central impact value to be proportionate with the level of impact associated with the proposed development.

- 1.7.45. For FFC, this results in a compensation quantum of 31.0 pairs of guillemot and 16.6 pairs of razorbill (Tables 3.3 and 3.4 [REP7-076]). For the Farne Islands SPA this results in a compensation quantum of 35.43 pairs of guillemot.
- 1.7.46. The applicant estimates that from the three shortlisted sites, an equivalent conservative maximum of 184 additional adult pairs of guillemots and 113 pairs of razorbills could be delivered into the regional population based on national productivity rates (see paragraph 8.1.23 of the Roadmap [REP8-012]). Therefore, should the SoS decide to follow NE's advised worst-case compensation quanta, the sites would have the capacity to deliver this.
- 1.7.47. For FFC, compensation would be secured under the GRIMP via Part 3 of Schedule 13 to the dDCO. That said, reference to the Farne Islands SPA has not been incorporated by the applicant in either the without prejudice wording for Part 3 of Schedule 13 of the dDCO [REP8A-042] or the GRIMP [REP8-014]. The ExA therefore recommends that the SoSESNZ obtains from the applicant amended versions of Part 3 of Schedule 13 of the rDCO, together with the GRIMP, to include making provision for compensatory measures for guillemot as a qualifying feature of the Farne Islands SPA.

Kittiwake – FFC SPA

- 1.7.48. The applicant identified the following potential CM options in the Kittiwake Compensation – Evidence, Site Selection and Roadmap [REP5-017]:
- compensation comprising use of an existing artificial nesting structure (ANS) constructed by RWE (DBS) in Gateshead on the River Tyne (with DBS acting as a partner or 'strategic compensation provider'), or
 - strategic compensation delivered by Defra in the form of contribution to the MRF
- 1.7.49. The details of the ANS measure and associated monitoring would be provided in a Kittiwake Implementation and Monitoring Plan (KIMP). The KIMP would be produced post-consent and the information it would contain is outlined in [REP5-023]. Appended to the Kittiwake Roadmap is an In Principle Letter of Agreement from DBS (East and West) (appendix B of [REP5-017]) confirming that it would be willing to allocate nesting platforms to the applicant in the event that the SoS decides that CM are required.
- 1.7.50. NE [PD2-006] agreed with the Gateshead ANS measure in principle, however both NE and the RSPB raised concerns for discussion during the examination.
- 1.7.51. Both parties queried the delivery mechanism and sharing arrangements with DBS OWF (see NE (D12, D13 and D17 [PD2-006]), the RSPB [RR-094], and table 4.2 (ID 4.2.8) of the RIES [PD-027] for details). Both parties questioned how the applicant's contribution would be secured and how the number of any kittiwake pairs occupying the ANS would be divided and shared between the participating projects.

Following updates to the Roadmap at Deadline 2 [REP2-009] providing additional details on the practical arrangements, NE was satisfied with the arrangements proposed [REP4-061]. However, NE noted that governance proposals for the post-consent phase were still in preparation and would be left to develop with stakeholders post-consent and argued that this presents a risk as an agreement with stakeholders had not yet been secured [REP7-104]. The RSPB continued to request further detail on the apportionment of the ANS between developers and it remained an 'ongoing point of discussion' in its SoCG with the applicant [REP5-067].

- 1.7.52. Although NE agreed with the applicant's calculated impact value, it disagreed with the supporting calculations for the proposed compensation level (NE (D15 [PD2-006])). The applicant presented compensation quanta based on its preferred impact values (using the mean mortality rate, Hornsea 4 method and a 3:1 ratio) resulting in seven (6.6) pairs of kittiwakes [REP5-017]. It also presented NE's preferred impact values (using the upper confidence interval (UCI) mortality rate, Hornsea 3 stage 2 methods and a 3:1 ratio) resulting in 46 (45.7) pairs [REP5-017]. The applicant argued that uncertainties are already factored in when calculating impacts through collision risk modelling and therefore adding further levels of precaution would result in a compensation quantum that is unrealistic [REP7-076]. It considered that seven pairs are sufficient, and considered that NE's requirement of 46 pairs to compensate for less than one bird is "clearly disproportionate to the impact" [REP7-076]. Nevertheless, the applicant noted that the compensation measure has the capacity to cover the quantum required using the UCI and 3:1 ratio [REP8A-039]. NE sets out its justification for favouring the Hornsea 3 approach and the UCL in [REP5-095].
- 1.7.53. Both NE and the RSPB questioned the confidence that could be had in the project specific measure, in terms of whether the tower would be occupied sufficiently and in a timely manner (see NE (D21 and D22 [PD2-006])), the RSPB [RR-094] and Table 4.2 (ID 4.2.10) of the RIES [PD-027]). In NE's view, it would be appropriate for the applicant to continue with both compensation options (Gateshead ANS and a contribution to the MRF), to safeguard delivery of the compensation. The applicant confirmed in [REP1-049] and [REP1-051] that this dual optionality reflects its preferred approach.
- 1.7.54. Regarding monitoring arrangements, the RSPB [RR-094] considered that the proposals set out in the KIMP [section 5.7 in APP-053] should be developed in greater detail and draw on experience gained in respect of other extant kittiwake compensation ANS, making recommendations regarding details of the productivity monitoring. The applicant [REP1-049] updated section 5.7 of the KIMP ([REP2-014] and [REP5-023]) to specify that a monitoring programme would be discussed and developed with NE and other stakeholders, agreed between the parties and would be undertaken by DBS on behalf of all parties or as otherwise agreed.

ExA conclusions

1.7.55. The ExA considers that there is sufficient information for the SoS to establish that appropriate CM 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 NSN. The ExA considers that the project-specific compensatory measures proposed by the applicant are sufficient for the modest level of impact anticipated from the proposed development, and the implementation of the KIMP secured via Schedule 13 Part 2 has the potential to deliver a proportionate level of benefit.

1.7.56. In the event the SoS is minded to agree with the ExA recommendation, Schedule 13 Part 2 has been inserted into the rDCO to secure CM for the kittiwake features of the FFC SPA. Part 1 of Schedule 17 requires a final KIMP to be approved by the SoS, which would need to be based on compensation values specified in Schedule 13 Part 2(13)(2)(e).

1.7.57. In light of the evidence presented, the ExA recommends to the SoS that the following parameters are appropriate to use to calculate the compensation quanta for kittiwake for the FFC SPA for the Proposed Development, specified in Schedule 13 Part 2 (13)(2)(e):

- ratio of 3:1 to reflect various uncertainties such the timing and speed of colonisation of the ANS
- central impact value to be proportionate with the level of impact associated with the proposed development, and
- Hornsea 3 stage 2 approach as per NE's advice.

1.7.58. This results in a compensation quantum of 16 (15.9) pairs (Table 3.2 [REP7-076]). The applicant confirms the existing ANS at Gateshead would be able to accommodate 16 nesting sites in paragraph 3.4.2 of the Roadmap [REP5-017]. The ExA has inserted this quantum into in Schedule 13 Part 2(13)(2)(e) of the rDCO.

Sandbanks – MLS SAC

1.7.59. The applicant initially identified potential strategic and project-led CM in the BCSR [APP-047]:

- Strategic compensation delivered by Defra in conjunction with NE and JNCC in the form of a SAC extension or new designation.
- Project-led compensation comprising removal of disused telecommunications' cables in SACs with protected sandbank features.
- Project-led compensation comprising early removal of pressure from licensed aggregate areas.
- Project-led compensation comprising seagrass habitat creation or restoration.

1.7.60. Details of the project-led CM and associated monitoring would be provided in a benthic implementation and monitoring plan (BIMP). The BIMP would be produced post-consent if required; the information it would contain is outlined in [REP7-029].

1.7.61. The applicant's potential project-led CM for early removal of pressure from licensed aggregate areas was subject to discussion during examination, as reported in the RIES [PD-027]. At Deadline 7, the applicant [REP7-083] stated it was removing this option, as based on NE's updated condition assessment citing aggregate extraction as a threat for the MLS SAC it was unlikely to provide additionality. The BCSR [REP7-027] was updated accordingly but the 'without prejudice' version of the dDCO [REP8A-042] retained this potential project-led CM in the definition of 'compensation measure' in Schedule 13. Given the applicant confirmed its removal, the rDCO includes an amendment to remove it from Schedule 13. This potential project-led CM is not discussed further in the Report.

Compensation level and timing

1.7.62. As NE did not agree with the applicant on the MDS or WCS of lasting habitat loss or change to the Annex I sandbank feature of the MLS SAC, or the scale and significance of impact, the level of compensation was also not agreed (F3, F4, F13 and F33 [PD2-008]). NE maintained its position through the examination [REP4-061] [REP5-096] [REP8A-053].

1.7.63. The applicant stated in its BCSR [REP8-008] that compensation should only be required once it is known whether cable protection has been installed. It recognised that Defra's Draft Best Practice Guidance for Developing Compensatory Measures in relation to MPAs (2021) requires compensation to be in place prior to the effect but makes allowance for where this is not possible, quoting the guidance as follows: "Where this is not possible, it is important that necessary licences are in place, finances are secured and realistic implementation plans have been agreed with the appropriate bodies to demonstrate that the compensatory measure is secured." It considered that the proposed development is such a case, as the need for cable protection can only be established following cable installation.

1.7.64. NE (F47 [PD2-008]) did not agree with the applicant that compensation would only be needed post-installation of the export cable, if adverse effects were identified. NE noted that similar arguments were raised by the applicants for Norfolk Vanguard and Boreas OWFs and the SoS decision letters required compensation to be agreed prior to impacts occurring and could not be deferred post-installation.

1.7.65. The applicant [REP1-051] considered it inappropriate to implement compensation where impacts are not likely to occur. It had a high level of confidence that cable protection would not be required and that the level of potential impact from the proposed development is orders of magnitude lower than the Norfolk projects.

1.7.66. As discussed in section 1.4 of this appendix, NE considered there is insufficient detail to have certainty that cables could be buried and remain buried without cable protection, and advised that this had implications for compensation (F10 and F45 [PD2-008]). Whilst the applicant stated that soils information was sufficient to confirm that cable can be buried it was not possible to rule out the need for

protection due to unexpected conditions. Further geotechnical survey would also be conducted to inform the route and burial method.

1.7.67. NE [REP4-061] [REP5-096] [REP8A-053] recorded no change in its advice.

1.7.68. The ExA is satisfied for the reasons described in section 1.4 of this appendix that the effect requiring compensation is habitat loss from placement of cable protection. As described above, the ExA is satisfied that the MDS associated with this is 5,400sq.m, being the maximum volume of cable protection that could be placed during construction and subsequently repaired or replaced, and considers that this is the harm that requires compensation. The ExA notes that whilst NE recorded this matter as not resolved for its benthic compensation advice, it did confirm that the MDS for cable protection was a resolved matter for benthic ecology. The ExA notes the applicant's position that it would be inappropriate to require compensation if an impact is not likely to occur. However, noting the advice of NE as ANCB, including reference to earlier SoS decisions, and the draft Defra guidance that where it is not possible for the CM to be effective before impact, then licences, finances and implementation plans to demonstrate it is secured should be in place, the ExA considers it is necessary to secure compensation prior to commencement of offshore cable installation works. It considers that this is required as the applicant is seeking flexibility within the DCO to place cable protection, and as there remains uncertainty around the potential strategic and project-led CM identified by the applicant as discussed below.

Strategic compensation

1.7.69. The applicant [REP8-008] identifies a SAC extension to include an additional area of qualifying sandbank habitat as having potential to deliver compensation and stated that it had discussed with NE a few extension options with "ecological merit due to the quality of the sandbank and supporting features." It identified extensions to IDRBNR SAC (figure 6.1 in [REP8-008]) or Haisborough, Hammond and Winterton (HHW) SAC (figure 6.3 of [REP8-008]) as having ecological merit but stated that these must be delivered by Defra in conjunction with NE and JNCC. It provided information about the value, function and scale of the proposed strategic CM, including the likely delivery process and timescales. It indicatively estimated that a proposed SAC status could be achieved by the second quarter of 2027 with management and monitoring thereafter, compared to the proposed commencement of export cable installation in 2030. It stated that NE advised that an extension must demonstrate ecosystem functionality and consider uncertainty around delivery. On that basis, the applicant did not apply compensation ratios for the replacement of potentially lost habitat but identified extension areas of 408sq.km for IDRBNR and 253sq.km for HHW, which it described as being only deliverable strategically given the worst-case cable protection of 5,400sq.m.

1.7.70. NE [PD2-008] advised that strategic compensation has the greatest likelihood of maintaining the coherence of the NSN. It stated that sufficient capacity could be built into the design of the strategic CM to

compensate for the impacts of the proposed development as a sole measure. The applicant [REP1-051] [REP2-039] agreed with NE.

1.7.71. As the strategic CM would be led by Defra, NE (F1, F3 and F4 [PD2-008]) advised that information provided by the applicant in the BCSR [REP8-008] about timing, deliverability, location and success criteria should not be relied upon. It stated that discussion outside of individual project examinations is required to determine project contributions and compensatory ratios. NE [(F6, F7 and F8 [PD2-008]) advised that the long-term implementation and success criteria to prove additionality will be determined by Defra and nothing has been secured yet.

1.7.72. The ExA (ME.1.10 [PD-011]) asked NE to clarify when in the project lifecycle the strategic compensation would need to be implemented. NE [REP2-059] did not specifically respond but in [REP4-061] stated that once Defra guidance is given, the applicant should make every effort to update the examination.

1.7.73. The WMS confirmed that Defra would commit to designating new marine protected areas (MPA) or extending existing MPAs to deliver sufficient compensation for OWFs with no ecologically effective options to compensate for unavoidable impacts to seabed habitats in SAC and MCZ, and stated that that total area of new or extended designation was anticipated to be small in comparison to MPA tranches previously designated. DESNZ published supporting guidance.

1.7.74. The ExA (Q4.4.2 [PD-027]) sought the views of the applicant and NE on the implications of the WMS and DESNZ guidance for the strategic CM option.

1.7.75. The applicant [REP7-083] considered that the WMS should provide significant comfort to the ExA and SoS that if compensation is required then use of strategic compensation can be relied upon as an effective and achievable CM. Strategic compensation remained the applicant's preferred option, should compensation ultimately be required (where cable protection is used). It updated the BCSR [REP7-027] to reflect publication of the WMS and DESNZ guidance.

1.7.76. NE [REP7-110] understood that Defra and DESNZ included provision for the proposed development within the strategic compensation MPA designation and extension process. It maintained that a strategic CM had the greatest likelihood of maintaining the coherence of the NSN and did not believe there was merit in further progressing project specific CM. It stated that it would aim to agree the level of impact requiring compensation to apply to the MRF with the applicant but this was likely to be in the post consent phase. Whilst NE [PD2-008] initially noted potential for a time lag between the impact occurring and strategic compensation achieving the desired outcomes, which might require a strategic CM to include an overall net positive outcome, at close of the examination NE [REP8A-053] advised that the DESNZ guidance takes this matter into consideration and it would be resolved as part of agreeing the strategic CM.

1.7.77. Noting the position of the applicant and the advice of NE as the ANCB, the ExA considers that a strategic CM has the greatest

likelihood of maintaining the coherence of the NSN, and that the WMS provides assurance that Defra has committed to providing new or extended MPA designations that provide sufficient capacity to compensate for the identified habitat loss effects of offshore wind development from Round 3 and 4 leasing, and 2017 extensions, which would include the proposed development.

1.7.78. The ExA's reasoning on project-led CM is provided later in this appendix but it has recommended that the SoS cannot rely on project-led measures. The ExA is satisfied that there will be sufficient capacity to compensate the identified habitat loss of 5,400sq.m described above (under compensation level). The ExA is satisfied that financial contribution to the MRF or other strategic compensation fund could result in delivery of a strategic CM that is additional to normal practice. Whilst concerns were raised by NE about the applicant's information regarding timing, deliverability, location and success criteria given that the strategic CM would be led by Defra, and the ExA also had concerns about reliance on a strategic CM given that the MRF or other vehicle for strategic compensation is not yet established, the ExA is satisfied that publication of the WMS and DESNZ guidance in January 2025 provided evidence of the Government's commitment to establish such a process for OWF projects including the proposed development.

1.7.79. The ExA notes that Defra-led monitoring of the strategic CM to demonstrate its appropriateness and efficacy is also proposed. Noting NE's advice that compensation ratios would be a matter for discussion outside individual projects, the ExA is not able to recommend a compensation ratio to the SoS as there is currently no guidance about how this is to be established. The ExA is satisfied that the DCO includes a mechanism through which this matter can be agreed post-consent (as discussed below under securing mechanism).

1.7.80. The ExA is content that agreement of the compensation ratio would incorporate consideration of any time lag between the impact occurring and compensation being implemented. The ExA considers that a legal mechanism to secure the strategic CM should be incorporated into the DCO; this is discussed below (under securing mechanism). 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 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.

Project-led compensation

1.7.81. NE's advice on potential project-led CM options still proposed by the applicant at close of examination is discussed below. NE's overall position that strategic compensation is needed due to extreme difficulties in delivering project-led CM was maintained throughout the examination [PD2-008] [REP2-059] [REP5-097]. It did not believe there was merit in progressing or placing reliance on project-led CM [REP4-061] [REP5-096]. In response to a question from the ExA (ME.1.10 [PD-011], the applicant agreed that strategic compensation should be given the highest weighting of its proposed compensation options, and

later confirmed [REP7-083] that it remained the applicant's preferred option. Nonetheless, 2 project-led options remained in its HRA Derogation Case [AS-003] and the ExA has therefore considered these in the Report.

Removal of redundant telecommunications' cables

- 1.7.82. The applicant focused on removal of disused telecommunications' (telecoms) cables as it stated that there were no known surface laid decommissioned oil and gas pipelines in SACs in the southern North Sea. Table 6.3 of the BCSR [REP8-008] summarised disused telecoms' cables in SACs with protected sandbank features. None were identified in the MLS SAC but some were recorded in HHW SAC (3,999.6sq.m of cable intersecting with sandbank, owned by British Telecom (BT)) and North Norfolk Sandbanks and Saturn Reef SAC (NNSSR) (9,147sq.m of cable intersecting with sandbank owned by BT and BAE Systems). Overall, this provided 13,146.6sq.m of possible surface area relative to the worst case of 5,400sq.m of cable protection, or compensation ratio of more than 2:1. The applicant noted that a compensation ratio of 1:1 was used on Hornsea Three. The applicant indicated that it was not known if these telecoms' cables were surface laid.
- 1.7.83. The applicant provided information about the value, function and scale of the proposed CM, including an overview of the likely delivery process and timescales. Only initial engagement had taken place with cable owners but it was considered less complicated to agree mechanisms for liability and transfer than for example for oil and gas infrastructure. The applicant indicatively estimated that telecoms' cable removal could be achieved by 2028 with management and monitoring from 2029.
- 1.7.84. NE [PD2-008] supported this option and considered it could be delivered before the impact occurs but raised concerns about feasibility, timing, location and success criteria. It requested more evidence that the telecoms' cables were causing a significant impact on the Annex I sandbank qualifying feature and hindering the conservation objectives, as well as how commitments with cable owners would be secured. It advised that it would be hard to determine success criteria and prove additionality in the absence of further evidence. NE advised that it could be progressed as a sole CM if its concerns were addressed but otherwise it would only be supportive of the CM as part of a package.
- 1.7.85. Limited further evidence was provided by the applicant, and NE [REP4-061] [REP5-096] recorded no change for this matter in its Risk and Issues Log. It stated [REP5-097] that it was unlikely the applicant would be able to provide sufficient evidence or security during the examination that removal of telecoms' cables alone would sufficiently offset the impacts for the Annex I sandbank feature.
- 1.7.86. Despite this, the applicant [REP5-091] wished to retain this potential CM. It considered that, given the very limited potential of the works leading to AEoI, the telecoms' cables would not need to be having a significant impact on the qualifying feature to have a similar adverse

effect and removal would be of benefit. It stated that BT raised no objection to the concept, and the applicant updated the BCSR (appendix A [REP7-027]) to include a letter from BT confirming the presence of redundant infrastructure in the order limits and that there was no reason in principle that it could not be removed. BT stated that this would be subject to any planning consents or marine licences to be obtained by the applicant. No evidence of discussion with BAE Systems was provided for the NNSSR SAC.

1.7.87. The applicant [REP5-091] noted NE's preference for telecoms' cables to be surface laid or exposed but considered that in mobile and dynamic environments such as sandbanks, assets are likely to be exposed and reburied and removal would prevent future re-exposure. It stated that whilst some of the telecoms' cables are outside the MLS SAC, removal would maintain the ecological coherence of the sandbank network in the region. The applicant [REP7-083] responded to a request from the ExA (QT4.1.1 [PD-027]) to support its assertion that telecoms' cables are likely to be exposed at different times by referring to NE's updated condition assessment for the MLS SAC, which identified a risk from external cable protection due to the highly mobile nature of the site.

1.7.88. NE [REP8-052] recorded no change to [PD2-008] and this matter was not resolved at the close of Examination [REP8A-053]. It [REP8A-053] acknowledged the BT letter but stated that no details of locations were provided.

1.7.89. The ExA has carefully considered all the evidence submitted to the examination and considers that removal of redundant telecoms' cables would not be suitable as a sole CM. The ExA notes that whilst NE advised that the principle of the CM was supported and could be delivered prior to the impact occurring, in the absence of more evidence about the specific proposal it did not consider additionality could be proved.

1.7.90. The ExA concurs with NE's position, noting that whilst the applicant identified a possible surface area of 13,146.6sq.m of redundant telecoms' cables for removal, it was not known if these cables are surface laid or if they are hindering the conservation objectives of the SACs in which they are located.

1.7.91. The ExA agrees with the advice of NE that to be an effective CM, it would need to address an issue to the extent that the coherence of the NSN will be preserved. In the absence of survey evidence for the redundant telecoms' cables under consideration, the ExA does not consider that the SoS can have confidence that this is the case. In addition, whilst there is some evidence of discussion with BT as a cable owner, there is little firm detail about the location of redundant telecoms' cable it is describing in its letter of in principle support, and if this is the cable in HHW SAC and NNSSR SAC identified by the applicant for the CM. It also contains several caveats about further consenting processes that would need to be undertaken by the applicant. It is unclear what progress has been made on securing a legally binding agreement for the applicant to undertake the removal of the telecoms' cable. The applicant has not supplied any information

about discussion with BAE Systems, who it identifies as an owner of cable in NNSSR SAC.

- 1.7.92. Based on the evidence submitted into the examination and in the knowledge that the CM is not satisfactory to NE, the ExA cannot conclude that removal of redundant telecoms' cables on its own would be suitable as a CM. The ExA notes that NE advised it may be suitable as part of a package of CM but based on the evidence it is unclear what level of contribution it could make. Noting that the applicant and NE are agreed that the other project-led CM (seagrass habitat creation or restoration) would deliver at most 10% of the required compensation, and there are no other project-led CM identified by the applicant, the ExA does not consider that any reliance can be placed on this project-led CM as part of a package without further evidence from the applicant.
- 1.7.93. If the SoS took an alternative view, the SoS would need to be satisfied that the applicant's proposals are sufficiently informed, developed and robust to be capable of protecting the coherence of the NSN as required by Regulations 64 and 68 of the Habitats Regulations.

Seagrass habitat creation or restoration

- 1.7.94. The applicant [REP8-008] stated that if like-for-like compensation cannot be provided, non-like-for-like such as restoration or creation of habitat with similar or identical ecological function to the sandbank habitat could be considered. It stated that seagrass beds are a sub-type of Annex I sandbank habitat, and whilst subtidal bed is not suitable for the MLS SAC, alternative subtidal sites to the west along the Lincolnshire coast or intertidal sites within the wider region of the southern North Sea could be investigated. The applicant identified several sites with existing seagrass restoration projects. It indicatively estimated that the seagrass seed or shoot deployment could be achieved in the second or third quarter of 2027, with monitoring from 2028 to 2033.
- 1.7.95. In response to a question from the ExA (ME.1.10 [PD-011]) on the weighting that could be afforded to project-led CM, the applicant [REP2-039] confirmed that this should be given the lowest weighting as it is not like-for-like and it would supplement other options with approximately 10% compensation consistent with Defra guidance (Consultation on policies to inform updated guidance for MPAs (Defra, 2024)). This was consistent with advice from NE [PD2-008] [REP4-061] [REP5-096] that it could only be considered as part of a package providing less than 10% of the required compensation or potential adaptive management for part delivered compensation. The requirement would need to be for subtidal seagrass.
- 1.7.96. NE [PD2-008] referred to the Offshore Wind Leasing Round 4 Dogger Bank Strategic Compensation Plan (2024), which states that seagrass restoration can be suitable as compensation for sandbank but it is a lower preference compared to measures supporting the same ecological function of the habitat. Significant concerns were raised by the steering group about deliverability of seagrass restoration, even on a small scale, with no long-term successes in the UK. NE was unclear if

the CM could be delivered prior to the impacts occurring, and stated that the location, long term implementation and success criteria were not presented in detail or agreed with the SNCB. It queried what seagrass restoration projects would be supported and how the applicant would demonstrate that the CM was additional to what the selected projects had already entrained. It advised that the CM needed to be further progressed or removed as an option.

1.7.97. The ExA [PD-014] sought an update from NE about further advice on technical feasibility it had committed to providing at DL1. NE (ME.2.04 [REP3-031]) stated that no further evidence or information has become available in support of the measure and its advice remains unchanged.

1.7.98. The ExA (QT4.1.3 [PD-027]) also sought any evidence the applicant held about success of seagrass habitat creation or restoration in the UK. The applicant [REP7-083] acknowledged that initiatives have had varying levels of success but referred to large-scale initiatives such as those undertaken via the LIFE Recreation ReMEDIES Project and Project Seagrass. It stated that these have improved understanding of how to achieve seagrass restoration and supported development of best practice guidance. Four years of restoration trials in the Plymouth Sound SAC and Solent Maritime SAC using several methods showed that the most promising results were through hydro marine seeding (HMS), which has led to early promising signs of a flourishing, young seagrass bed. Seed bag deployments undertaken via the SEACAMS project in Wales showed 66% success rates after 1 year indicating the potential viability of this method. Other seagrass restoration projects taking place around the UK include the Seeding Change Together Project in Falmouth, Cornwall and Seagrass Ocean Rescue in North Wales.

1.7.99. NE maintained this advice at the close of examination and this matter was recorded as not resolved [REP8A-053].

1.7.100. The ExA agrees with NE that if this project-led CM were to be progressed it would have to require subtidal habitat not intertidal to provide a similar or identical ecological function to the sandbank habitat that would be impacted, including support to typical species of subtidal sandbanks. Whilst the applicant stated that there might be suitable sites along the Lincolnshire coast it has not identified any specific sites or provided any evidence that these could be secured for the purpose of compensation. It has provided no evidence of discussion or agreement with potential delivery partners. The ExA notes that both the applicant and NE agreed that at most this CM could provide up to 10% of compensation required, or it could be used for adaptive management. The applicant also referred to several existing projects but the ExA understands this to be in the context of demonstrating potential effectiveness of the measure rather than proposing that the proposed development would contribute to these projects, noting that no evidence has been provided of discussion with the promoters of these projects.

1.7.101. The ExA considers that there is insufficient evidence to demonstrate how the additionality test would be met if the Applicant were to contribute towards an existing project. Whilst the applicant

provided some examples where there were promising results from 2 delivery methods, the ExA notes that the emphasis on these being early signs of success and that these projects related to intertidal habitat. It considers that evidence from Dogger Bank showing a lack of success as described by NE is more compelling for the subtidal habitat, which is what would be required to compensate the effects of the proposed development. Based on the evidence, the ExA considers that the seagrass habitat CM would not be suitable as a sole CM. It considers that there is a lack of clarity and detail in the proposal to recommend it as partial CM or for adaptive management, and that further evidence from the Applicant would be needed for the SoS to place reliance on it as part of a project-led CM package.

1.7.102. If the SoS took an alternative view, the SoS would need to be satisfied that the applicant's proposals are sufficiently informed, developed and robust to be capable of protecting the coherence of the NSN as required by Regulations 64 and 68 of the Habitats Regulations.

1.7.103. The ExA cannot be certain that the identified project-led CM for Annex I sandbank would be feasible to deliver, or that these would provide sufficient compensatory value to address the effects of the proposed development and concludes 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 the applicant to:

- Undertake considerable additional work on the proposal to remove redundant telecoms' cables, including survey and analysis to confirm that there are surface-laid cables, and to an extent that would provide sufficient surface area for compensation, progress towards legal agreements with the cable owner(s) and additional consenting required, and development of monitoring proposals.
- Undertake significant additional work to demonstrate the feasibility of seagrass habitat creation or restoration proposals, including identification of suitable sites for subtidal habitat and progress with delivery partners to demonstrate how the CM would be implemented and managed.

Securing mechanism, implementation and monitoring

1.7.104. NE (Annex A1 [PD2-003]) provided suggested wording for a benthic compensation schedule. The applicant subsequently submitted 'without prejudice' wording for insertion into Schedule 13 to secure benthic compensation in [REP5-090], which provided for compensation through contributions to the MRF (or other strategic compensation funding) or project-led CM. The ExA (Q4.4.1 [PD-027]) sought NE's views on the wording; it referred to [REP6-066] where it reiterated its suggested wording should be used and raised concerns that the applicant's wording did not secure a requirement for compensation prior to works. It [REP7-110] had no further comment. The applicant commented on NE's proposed wording in [REP7-086]. It did not agree that a steering group is required for a strategic CM, as the applicant would simply be paying an agreed sum into the MRF. It considered that the appropriate trigger was use of cable protection.

- 1.7.105. NE (F50 [PD2-008]) was unable to comment on the Outline BIMP (OBIMP) [APP-048] as it was a skeleton document. It (F17, 27 and F37 [PD2-008]) stated that [APP-048] would need more detail about monitoring and adaptive management to provide comfort to the SoS. The applicant [REP1-051] stated that more detail could be provided if project-led options were shown to be viable CM. In response to the ExA's request [PD-023], the applicant [REP5-091] stated that any further information [for project-led CM] would be provided in a final BIMP post-consent, if required. It provided an updated OBIMP [REP7-029] to reflect the WMS and DESNZ guidance, and removal of the aggregate industry pressure project-led CM.
- 1.7.106. The ExA (QT4.1.5 [PD-027]) sought clarification from the applicant as to how the success criteria would be established and how there could be confidence that project-led measures would be capable of being monitored. The applicant [REP7-083] stated that the project-led CM provide viable alternatives to a strategic CM and it would provide success criteria, monitoring plans and adaptive management information as part of the post-consent approvals process. It updated the BCSR [REP8-008] to include indicative monitoring proposals for the remaining project-led CM options. NE [REP8A-052] was unable to review and agree these due to timescales but noted in respect of the proposals for removal of telecoms' cables that exploration monitoring of potentially buried cables was unlikely to meet the criteria. Monitoring of seagrass restoration was not agreed and NE highlighted that the success criteria would need to consider structure and function not just extent and be for the lifetime of the proposed development. NE's final Risk and Issues Log [REP8A-053] showed this matter as not resolved.
- 1.7.107. NE [REP8-052] noted that the WMS confirmed if strategic compensation through the MRF is used, then a BIMP would be produced in consultation with Defra. The DESNZ guidance states that the DCO must include a requirement for the applicant to provide a high level implementation and monitoring plan prior to commencing works (to be obtained from Defra when available), and a full plan as soon as it is available from Defra on completion of the designation or extension programme.

ExA conclusions

- 1.7.108. For the reasons set out earlier in the appendix, the ExA considers that a strategic CM is the only potential CM identified by the applicant upon which reliance can be placed. If a strategic CM is progressed, this would need to be implemented by Defra. The ExA is content that a mechanism for agreeing the contribution and securing the payment required from the applicant can be incorporated into the DCO. Having considered the wording provided by the applicant in Schedule 13 of the 'without prejudice' dDCO and NE as part of its RR, the ExA is content that the applicant's Schedule 13 Part 4 wording would provide an appropriate mechanism, subject to amendment to provide clarity on the need for SoS approval of the payment value following consultation with relevant stakeholders, therefore ensuring that further consultation on the compensation level, and timing of payment is not precluded. The ExA has therefore amended the wording of Schedule 13 in the rDCO. The ExA is content that submission and

approval of a final BIMP for project-led CM (if the SoS determines that these could be relied upon) would be secured through the wording suggested by the applicant and NE, and that this would provide an opportunity for the further detail on monitoring and adaptive management to be discussed with NE.

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 proposed development 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 Matrices [REP8-004]. LSE were identified for a number of these sites from the proposed development (including the LBBG compensation site works) 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 were subject to discussion and scrutiny. At close of Examination, two issues raised by NE about impacts from operational port activities and collision risk to marsh harrier and nightjar remained outstanding.
- 1.8.4. Nonetheless the ExA is satisfied based on the information provided that the correct European sites and qualifying features have been identified for the assessment, and that all potential impacts which could give rise to significant effects have been identified.
- 1.8.5. 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, AEoI 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 1 of this chapter, plus the following that were disputed by NE for the reasons described in section 1.4 of this chapter:
 - Orfordness to Shingle Street SAC - perennial vegetation of stony banks, annual vegetation of draft lines, coastal lagoons
 - OTE SPA – RTD
 - SNS SAC – harbour porpoise
 - Hamford Water SPA and Stour and Orwell Estuary SPA - avocet
 - Hamford Water, Stour and Orwell Estuary, Blackwater Estuary SPA and Ramsar sites - black-tailed godwit
 - Wash and North Norfolk Coast SAC - harbour seal.
- 1.8.6. However, the ExA's finding are that AEoI 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)
 - MLS SAC - sandbanks which are slightly covered by seawater all the time (alone and in-combination from habitat loss or disturbance).
- 1.8.7. Whilst the ExA cannot exclude an AEoI from these European sites, based on the evidence discussed in section 1.4 of this Chapter it is satisfied that there would be no AEoI from the proposed development alone and in-combination by virtue of effects to the qualifying plant and invertebrate features of the AOE Ramsar site, gannet of FFC SPA and razorbill (assemblage species) of Farne Islands SPA.
- 1.8.8. The applicant submitted a formal derogation case [AS-003] that included an assessment of alternative solutions, a case for IROPI, and proposed compensation measures, for AOE SPA and Ramsar site and, on a without-prejudice basis, FFC SPA, Farne Islands and MLS SAC. The guillemot feature of the Farne Islands SPA was not discussed in [AS-003] but applicable compensation measures were identified in the Guillemot and Razorbill Roadmap [REP8-012].
- 1.8.9. 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.
- 1.8.10. The findings of the examination are that the compensation package as proposed is feasible and appropriate and is adequately secured in the rDCO. The ExA recommends that Schedule 13 Part 2 (kittiwake), Part 3 (guillemot and razorbill) and Part 4 (Margate and Long Sands SAC benthic compensation) are included and has added these to the rDCO. It is, however, recommended that the SoSESNZ should obtain from the applicant amended versions of Part 3 of Schedule 13 of the rDCO, together with the GRIMP, to include making provision for compensatory measures for guillemot as a qualifying feature of the Farne Islands SPA.
- 1.8.11. The ExA considers that there is sufficient information before the SoSESNZ 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 LAND RIGHTS OBJECTIONS MADE BY AFFECTED PERSONS

Appendix D records affected persons (APs) and other persons with relevant objections to aspects of the applicant's land rights (compulsory acquisition (CA) or temporary possession (TP)) request whose objections were made in writing only and/or in writing at orally at a compulsory acquisition hearing (CAH1, CAH2 or CAH3), and with exception of:

- the land rights objections concerning the proposed onshore substation zone; which are reported upon in chapter 9 of our recommendation; and
- the objections made by statutory undertakers, other than undertakers and utility providers, which are reported upon in chapter 10 of our recommendation.

This appendix should be read in conjunction with the applicant's final versions of the Book of Reference (BoR) [\[REP7-013\]](#) and Land Rights Tracker (LRT) [\[REP7-062\]](#). The LRT for each objecting AP lists: the status of the objection; the plots for each land interest; identifies those subject to CA of land with TP, CA of rights with TP or TP of land only (as shown on the Onshore Land Plans [\[REP7-004\]](#), respectively shaded in pink, blue and yellow); the proposed works affecting those plots as shown on the Onshore Works Plans [\[REP6-005\]](#); and the status of negotiations at the end of the examination.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
Adam Charles Brown and Joanna Marie Brown	153472, 153477	HoTs agreed and option agreement in negotiation	CA of rights for plots 03-003, 03-005, 03-011, 03-013, 03-014 and 03-015 for the OnECC and operations and maintenance access (O&M). TP of plots 03-002, 03-006, 03-008, 03-010 and 03-012 for the temporary construction compound (TCC). The APs case is made in RR-010, REP2-071, AS-067 and REP3-040. The objection to the land rights powers sought remains extant, albeit the APs and the applicant have agreed HoTs and an option agreement is being negotiated.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Andrew William Bacon	156077	HoTs agreed and option agreement in negotiation	CA of rights for plots 08-009 and 08-011 for the OnECC and O&M. The APs case is made in RR-010, REP2-074 and AS-067 and relates to impacts on farming business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Anne Dorette Hutchby and Sidney Desmond Hutchby	156081, 156333	HoTs agreed and option agreement in negotiation	CA of rights for plot 08-014 for the OnECC. These APs did not to submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified these APs as having an

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant, albeit the APs' and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of the plot in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Arthur Philip Wallis and Juliet Wallis	156085, 209986	HoTs agreed and option agreement in negotiation	CA of rights for plots 09-010, 09-011, 09-017*, 09-020 and 09-023* for the OnECC, O&M and TCC. TP of plots 09-015*, 09-016, 09-018* and 09-019 for the TCC. The APs case is made in RR-010, REP2-075 and AS-067 and relates to impacts on farming business operations and residential property. The objection to the land rights powers sought remains extant, albeit the APs and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Cherie Ann Bomando and Ricky Gerard Bomando	156105, 156311	HoTs agreed and option agreement in negotiation	CA of rights for plots 09-013* and 09-014 for the OnECC. These APs did not submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified these APs as having an objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant, albeit the APs' and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Cobra Mist Limited	178622	HoTs negotiations ongoing	CA of rights plots 19-002 and 20-003 for access. The applicant is continuing to engage with the land interest and HoT negotiations are ongoing. The applicant is seeking a voluntary agreement. The AP's case is made in RR-014, REP2-076, REP3-041, REP5-103 and REP5-104.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The AP objected in [REP5-104] to the CA of operational land owned by Cobra Mist Limited stating it was “...<i>the HoTs for a lease having ... unacceptable covenants and restrictions, together with financial terms which were ... worse than those applicable to the existing wind farm nesting site of equal size.</i>” In respect of the rights over existing access tracks, that are necessary for Cobra Mist Limited operations, the AP requested that “... <i>use of any CPO powers by the Applicant be limited only to those which are required i.e. necessary and sufficient to enable the construction, monitoring and maintenance of a LBBG nesting site...</i>” The applicant modified the extent of land impacting on Cobra Mist Limited operational land [Sheet 19 and 20 of Land Plans – Onshore REP7-004] for the LBBG nesting site and provided greater clarity on the areas proposed to be subject to access rights [Sheets 19 and 20 of Works Plans – Onshore REP6-005]. The applicant has reiterated [Ref CML-02 of REP6-043] that it has no intention of impairing or constraining the existing, or future, activities and operation carried out by Cobra Mist Limited. Stating that “<i>the rights sought are only those necessary for the establishment and maintenance of the mitigation area as set out in the Statement of Reasons</i>” [paragraphs 9.2.19 and 9.2.22 REP7-015].

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			Under s106(1)(c) PA 2008 the SoSESNZ may disregard representations relating to the compensation for the CA of rights over land. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
David William Salmon	160479	HoTs agreed and option agreement in negotiation	CA of rights for plots 16-019, 16-020, 16-021 and 16-023 for the OnECC and O&M. TP of plots 16-017 and 16-022 for the OnECC, TCC and haul road access (HR). This AP did not submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified this AP as having an objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought, except in relation to plot 16-022 which is addressed separately in

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			chapter 9, in respect of the remaining plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Elizabeth Birgitta Harris	160191	HoTs negotiations ongoing	Plot 17-031 – Addressed in chapter 9
Elizabeth Birgitta Harris and Peter Leslie Harris	160191, 160194	HoTs negotiations ongoing	Plot 18-001 – Addressed in chapter 9
Frank Leach	258210	HoTs agreed and option agreement in negotiation	CA of rights for plots 08-020, 08-021* and 08-022 for the OnECC. This AP did not submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified this AP as having an objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Great Holland Hall Limited	154461	HoTs agreed and option agreement in negotiation	CA of rights for plots 01-012, 02-004, 02-006, 02-007, 02-008, 02-009, 02-010, 03-001 for the landfall, OnECC and O&M. This AP did not submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified this AP as having an objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Henry Fairley and Son Limited	159863	HoTs negotiations ongoing	CA of freehold for plots 14-036A,15-005 and15-006 for road improvements (RI). There has been an amendment made to the plots listed to align with revised land plans. In relation to the road improvements, the applicant is hopeful that agreement will be reached shortly.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The AP's case is made in RR-045. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
		HoTs agreed and option agreement in negotiation	CA of rights for plots 14-029, 14-030, 14-031, 14-036, 14-037, 14-038, 14-039, 14-040* and 14-041* for the OnECC and RI. TP of plots 14-021, 14-024 and 14-035 for the TCC and RI. The AP's case is made in RR-045 and relates to impacts on farming business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
JB Fairley and Son Limited	154470	HoTs agreed and option agreement in negotiation	CA of rights for plots 06-011, 06-012, 06-013, 06-015, 06-016, 06-017, 08-023, 08-026, 09-001 and 09-006 for the OnECC and O&M. TP of plots 08-025, 09-003 and 09-005 for the TCC and HR. The AP's case is made in RR-010, RR-051, REP2-084 and AS-067 and relates to impacts on farming business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
James Andrew Clachan	160035	HoTs negotiations ongoing	CA of freehold for plots 14-005, 14-007, 14-009, 14-011, 14-032, 15-001, 15-004, 15-008 and 15-010 for RI. The applicant has considered the feedback received from the land interests appointed agent and is looking to arrange a meeting to discuss this shortly. The applicant is hopeful that a voluntary agreement will be reached here.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The AP's case is made in RR-010 and AS-066 and relates to impacts on farming business operations and residential property. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
		HoTs agreed and option agreement in negotiation	CA of rights for plots 14-003, 14-004 and 14-008 for the OnECC and O&M. TP of plot 14-006 for the TCC. The AP's case is made in RR-010 and AS-066 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
James Andrew Clachan, Linda Maureen Clachan and Richard John Clachan	160035, 160037, 160038	HoTs negotiations ongoing	CA of freehold for plots 15-011 and 15-013 for RI. The applicant has considered the feedback received from the land interests appointed agent and is looking to arrange a meeting to discuss this shortly. The applicant is hopeful that a voluntary agreement will be reached here. The APs case is made in RR-010 and AS-067 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
James Fairley and Sons (Farms) Limited	156030	HoTs agreed and option agreement in negotiation	CA of rights for plots 09-024, 10-001, 10-002, 10-003, 10-008, 10-009, 10-010, 10-011, 10-012, 10-013, 11-001, 11-002, 11-003, 11-004*, 11-005, 11-006, 11-008, 11-009, 11-010, 11-011 and 11-012 for the OnECC, O&M and HR. TP of plots 10-004, 10-005, 10-006, 10-007, 11-013 and 11-014 for the HR. The AP's case is made in RR-010, RR-047 REP2-083, AS-067 and REP3-040 and relates to impacts on business operations and residential property.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
John Charles Jiggins	160265	HoTs agreed and option agreement in negotiation	CA of rights for plots 11-019, 11-020, 12-004 and 12-005 for the OnECC, O&M and HR. TP of plots 11-016, 11-017, 12-002, 12-003, 12-006 and 12-011 for the OnECC, TCC and HR. The AP's case is made in RR-010 and RR-057 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
John Charles Jiggins and John Harvey Jiggins	160265, 160266	HoTs negotiations not commenced	CA of rights for plots 13-002, 13-003 and 13-004 for O&M. The Applicant understands there are pending changes to the landownership of this title on Land Registry and is awaiting confirmation. The APs case is made in RR-010 and RR-057 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
John Harvey Jiggins	160266	HoTs agreed and option agreement in negotiation	CA of rights for plots 12-013, 12-014, 13-001 and 13-005 for the OnECC and O&M. The AP's case is made in RR-010 and RR-057 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
John Harvey Jiggins and Jiggins Trust and Robert Church and Penny Toleman and Joanna Burke and James Burke and Joanna Green	160266, 184379, 268899, 268900, 268901, 268902, 268903	HoTs agreed and option agreement in negotiation	CA of rights for plots 13-006* and 13-007* for the OnECC and O&M. TP of plots 12-007* and 12-010* for the TCC. The APs case is made in RR-010 and RR-057 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the APs' and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
John Hutley and Lorna Marion Hutley	153838, 153839	HoTs agreed and option agreement in negotiation	CA of rights for plots 05-001*, 05-002, 05-003* and 05-009* for the OnECC and O&M. TP of plots 05-007* and 05-010* for the HR. The APs case is made in RR-010, RR-056 and AS-067 and relates to impacts on business operations and residential property.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The objection to the land rights powers sought remains extant, albeit the APs' and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
John Jiggins Limited	159870	HoTs agreed and option agreement in negotiation	CA of rights for plots 13-008 and 13-011 for the OnECC and TCC. TP of plots 13-009, 13-010 and 13-012 for the TCC. The AP's case is made in RR-010 and RR-057 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
June Hilda Varley	154307	HoTs agreed and option agreement in negotiation	CA of rights for plot 04-001 for the OnECC. The AP's case is made in RR-010, RR-058 and AS-067 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of the plot in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Holly Marie Florence Johnson and John Paul Jeffery Traveller and Rachael Donna Thackery and Russell Albert Johnson	275386, 275390, 275391, 275392	HoTs issued	CA of freehold for plot 15-009 for RI. The applicant will continue to engage and endeavour to seek a voluntary agreement. These APs did not submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified these APs as having an objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The ExA is satisfied that the land rights powers being sought in respect of the plot in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Mary Anne Cooper	160058	HoTs agreed and option agreement in negotiation	CA of freehold for plots 14-016 and 14-017* for RI. CA of rights for plots 14-045, 14-046, 16-001, 16-004, 16-008*, 16-009*, 16-010*, 16-011, 16-012, 16-013 and 16-015 for the OnECC and O&M. TP of plots 14-015, 14-018, 14-019*, 14-022 and 14-023* for the TCC. The AP's case is made in RR-010, REP2-087, AS-067 and REP3-040 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
Nicholas David Lawrence and Samuel William Lawrence	153908, 153910	HoTs agreed and option agreement in negotiation	CA of rights for plots 04-007, 04-014, 04-018*, 04-019 and 04-020 for the OnECC and O&M. TP of plots 04-006, 04-010 and 04-012 for the HR. The APs case is made in RR-010, REP2-099, AS-067 and REP3-040 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the APs' and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Nicholas David Lawrence and Samuel William Lawrence and Helen Peirson and Janet Philp and Wendy Harwood	153908, 153910, 158328, 158329, 158330	HoTs agreed and option agreement in negotiation	CA of rights for plots 03-016, 03-017, 03-018, 04-003*, 04-004, 04-016 and 04-017 for the OnECC and O&M. TP of plots 04-005, 04-008, 04-009, 04-011* and 04-013 for the HR. The APs case is made in RR-010, REP2-089 and AS-067 and relates to impacts on business operations and residential property.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			The objection to the land rights powers sought remains extant, albeit the APs' and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the APs have an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Richard Harrison-Osborne and Sara Carol Harrison-Osborne	160196, 160197	N/A	TP of plot 12-001 for the OnECC. The applicant is not currently pursuing an agreement with this land interest. Following a meeting with the land interest on 16 November 2023 it has been agreed that a temporary licence agreement for the rights will be agreed ahead of any scheduled works as this is for visibility splay works only. Should a temporary licence not be agreed between the parties, the ExA is satisfied that the TP powers being sought in respect of the plot in which the AP has an interest would be for a legitimate purpose.
Richard John Lord	156308	HoTs agreed and option agreement in negotiation	CA of rights for plot 09-008 for the OnECC. This AP did not submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified this AP as having an

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of the plot in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Robert Fairley Limited	159905	HoTs agreed and option agreement in negotiation	CA of rights for plots 13-022 and 14-001 for the OnECC and O&M. TP of plot 13-017 for the TCC. The AP's case is made in RR-010, RR-092, REP2-091 and AS-067 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Strutt and Parker (Farms) Limited and Liana Enterprises Limited	154521	HoTs negotiations ongoing	CA of rights for plots 07-001, 07-004, 07-007, 07-008, 07-011, 08-002, 08-006, 08-008, 08-012, 08-013, 08-015, 08-016, 08-017 and 08-019 for the OnECC and O&M. TP of plots 07-002, 07-003, 07-005, 07-006, 07-009, 07-010, 07-012, 08-003, 08-005, 08-007 and 08-024 for the OnECC and HR. The applicant is awaiting further detail and comments from the land interest, having last chased for an update on 20 February 2025. The applicant will continue to engage with the land interest. The AP's case is made in PD3-003, PD3-004, REP2-092, REP2-093 and REP6-082. The objection to the land rights powers sought remains extant. The AP contributed comments relating to the route of haul roads during the examination and this is reported in section 5.2 Farming and section 5.5 Onshore Ecology and Biodiversity. The AP has also identified [REP5-108] a parcel of land under consideration by TDC as a promoted site for allocation in its emerging Local Plan. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss. The ExA is satisfied that the land rights being sought do not prejudice, hinder or frustrate TDC in their consideration of the promoted site in forming its emerging Local Plan.
T Fairley and Sons Limited	159915	HoTs negotiations ongoing	CA of freehold for plots 17-023* and 17-024 for the OnSS. The applicant met with the land interest on 26 February 2025 to discuss the screening at the substation. The applicant is hopeful that this will help facilitate a voluntary agreement. The AP's case is made in RR-010, RR-109, REP2-096, AS-067, REP3-040 and REP6-077 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant and has been dealt with in chapter 9. The ExA has made further comment on this in chapter 9.
		HoTs agreed and option agreement in negotiation	CA of rights for plots 13-023, 17-001, 17-002, 17-004, 17-006, 17-007*, 17-009, 17-015, 17-018, 17-019, 17-026, 17-027 and 17-028 for the OnECC, O&M, TCC, HR, National Grid and OnSS.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			TP of plots 17-003, 17-005, 17-012 and 17-013* for the TCC and HR. The AP's case is made in RR-010, RR-092, REP2-091 and AS-067 and relates to impacts on business operations and residential property. The objection to the land rights powers sought remains extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA has made further comment on this in Chapter 9.
Tendring District Council	154527	HoTs negotiations ongoing	CA of rights for plots 01-009 and 02-001 for the landfall and OnECC. TP of plots 01-001*, 01-002 and 01-003 for access. The applicant last corresponded with the land interest via email on 24 February 2025. The applicant will continue to engage with the land interest and endeavour to attain a voluntary agreement. The AP's case is made in RR-112 and REP2-043 and relates to public access land and tourism. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
The Executor of The Estate of the Late Charles James Tabor and Rebecca Mason and Michael Hughes	284272, 295371, 295372	HoTs negotiations ongoing	Plot 17-025 – Addressed in chapter 9.
The Frinton-On-Sea Golf Trust Limited	154530	HoTs agreed and option agreement in negotiation	CA of rights for plots 01-010 and 02-003 for the landfall and O&M. This AP did not submit relevant representations or make any other written or oral submissions during the examination. Nevertheless, the applicant identified this AP as having an objection to the CA of rights being sought, while compiling the LRT and updating it during the examination. In the absence of information to the contrary the ExA is treating this objection to the land rights powers sought as remaining extant, albeit the AP and the applicant have agreed HoTs and an option agreement is being negotiated. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Timothy Simon Ecott	160106	HoTs negotiations ongoing	CA of rights for plot 18-002 for National Grid. Addressed in chapter 9.
Valerie Joan Roberts	154145	HoTs negotiations ongoing	CA of rights for plots 05-012, 05-013, 05-015, 05-017, 05-018, 05-019, 05-020, 05-024, 05-025, 05-026, 06-003, 06-004, 06-006 and 06-010 for the OnECC and O&M. TP of plots 05-008, 05-011, 05-021, 05-022*, 05-023, 06-002, 06-005 and 06-007 for the OnECC, TCC and HR. The applicant met with Thorpe Park Solar Farm on 17 February 2025 to discuss HoTs and the interaction between the projects. The applicant is hopeful that an agreement will be reached shortly. The AP's case is made in RR-120 and relates to impacts on future business plans. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
Joanna Mangham	277177	N/A	CA of rights for plots 10-008, 10-009, 10-011 and 10-012 for the OnECC, O&M and HR. No voluntary agreement is being sought. Interest included due to raising a relevant representation. The AP's case is made in RR-053 relating to disturbance and noise. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Stephen Nigel Mangham	277172	N/A	CA of rights for plots 10-008, 10-009, 10-011 and 10-012 for the OnECC, O&M and HR. No voluntary agreement is being sought. Interest included due to raising a relevant representation. The AP's case is made in RR-105 relating to use of machinery, loss of agricultural land and option for offshore connection. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Maria Ann Martin	151893	N/A	TP (non-exclusive) of plots 01-001* and 01-002 for access. No voluntary agreement is being sought. Interest included due to raising a relevant representation. The AP's case is made in RR-053 relating to the integrity of the road surfacing. The objection to the land rights powers sought remains extant. The ExA is satisfied that the TP being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Stephen Philip Martin	151920	N/A	TP (non-exclusive) of plots 01-001* and 01-002 for access. No voluntary agreement is being sought. Interest included due to raising a relevant representation. The AP's case is made in RR-074 relating to the integrity of the road surfacing. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
T and R Fairley	266814	N/A	CA of freehold for plots 14-016, 14-017*, 14-018 and 14- 019* for RI. CA of rights for plots 14-044*, 14-045, 14-046, 16- 001, 16-002, 16-003, 16-004, 16-008*, 16-009*, 16-010*, 16- 011, 16-012, 16-013, 16-014* and 16-015 for the OnECC and O&M. TP of plots 14-015, 14-022 and 14-023* for the TCC. No voluntary agreement is being sought. Interest included due to raising a relevant representation. The AP's case is made in RR-108 and REP2-095 relating to freehold, use of farm access, loss of arable land and lack of engagement. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Tendring District Council	154527	N/A	CA of rights for plots 01-012, 02-001A, 02-004, 02-006, 02-008, 02-010, 10-013 and 11-003 for the landfall, OnECC and O&M.

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			TP (non-exclusive) of plot 01-005 for access. No voluntary agreement is being sought in relation to the Interests' category 2 rights. Interest included due to raising a relevant representation. The AP's case is made in RR-112, REP2-043 and REP2-048 relating to concerns on education, training, employment and tourism for the area. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Orford and Gedgrave Parish Council	248203	HoTs negotiations not commenced	CA of rights for plots 19-001 and 19-003 for access. The applicant has identified that access over a jetty south of Orford Quay and part of the River Ore may be required and is investigating with the land interest the rights which may be necessary. Commercial negotiations will follow. The AP's case is made in RR-083. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of all plots in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate

Name of land interest	AP Ref. No.	Position at the examination's close with respect to the status of heads of terms (HoTs) and voluntary agreements	Examining Authority's consideration and conclusions
			and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.
Orwell Housing Association Limited	197246	N/A	CA of rights for plot 08-010* for O&M. No voluntary agreement is being sought. Interest included due to raising a relevant representation. The AP's case is made in RR-086 request for further information. The objection to the land rights powers sought remains extant. The ExA is satisfied that the land rights powers being sought in respect of the plot in which the AP has an interest would be for a legitimate purpose, that they are necessary and proportionate and that there is a compelling case in the public interest for the powers to be granted, which would outweigh private loss.

202[] No.

INFRASTRUCTURE PLANNING

The Five Estuaries Offshore Wind Farm Order 202[]

<i>Made</i>	- - - -	<i>[]</i>
<i>Laid before Parliament</i>		<i>[]</i>
<i>Coming into force</i>		<i>***</i>

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 - PART 2 — Rights of way to be temporarily closed or restricted
 - PART 3 — Traffic regulation orders not applicable to the undertaker
 - PART 4 — Speed limits
- SCHEDULE 5 — Access to works
- SCHEDULE 6 — Land of which temporary possession may be taken
- SCHEDULE 7 — Land in which only new rights etc. may be acquired
- SCHEDULE 8 — Modification of compensation and compulsory purchase enactments for creation of new rights and imposition of restrictive covenants
- SCHEDULE 9 — Protective provisions
 - PART 1 — Protection for electricity, gas, water and sewerage undertakers
 - PART 2 — For the protection for operators of electronic communications code networks
 - PART 3 — For the protection of the Environment Agency
 - PART 4 — For the protection of drainage authorities
 - PART 5 — For the protection of Network Rail and Infrastructure Limited
 - PART 6 — For the protection of National Highways
 - PART 7 — For the protection of London Gateway Port
 - PART 8 — For the protection of North Falls Offshore Wind Farm
 - PART 9 — For the protection of the Port of London Authority (onshore)
 - PART 10 — For the protection of the Port of London Authority (offshore)
 - PART 11 — For the protection of Essex County Council as local highway authority
 - PART 12 — For the protection of Anglian Water
 - PART 13 — For the protection of Affinity Water
 - PART 14 — For the protection of National Grid Electricity Transmission
 - PART 15 — For the protection of Cadent Gas Limited
- SCHEDULE 10 — Deemed marine licence – Generation Assets
 - PART 1 — General
 - PART 2 — Conditions
- SCHEDULE 11 — Deemed marine licence – Transmission Assets
 - PART 1 — General
 - PART 2 — Conditions
- SCHEDULE 12
 - PART 1 — Tree Preservation Orders
 - PART 2 — Removal of hedgerows
 - PART 3 — Removal of important hedgerows
- SCHEDULE 13 — Compensation
- SCHEDULE 14 — Arbitration rules
- SCHEDULE 15 — Documents to be certified
- SCHEDULE 16 — Offshore co-ordinates

An application has been made to the Secretary of State under section 37 of the Planning Act 2008(a) (the “2008 Act”) for an Order granting development consent.

The application was examined by a panel of 5 members (appointed by the Secretary of State) in accordance with Part 6 of the 2008 Act and carried out in accordance with the Infrastructure Planning (Examination Procedure) Rules 2010(b).

The panel, having considered [the representations made and not withdrawn and] the application together with the accompanying documents, in accordance with section 74(2) of the 2008 Act, has submitted a report and recommendation to the Secretary of State.

The Secretary of State has considered the [representations made and not withdrawn], and the report and recommendation of the panel, has taken into account the environmental information in accordance with regulation 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(c), and, as a national policy statement as effect in relation to the proposed development, has had regard to the documents and matters referred to in section 104(2) of the 2008 Act.

[The Secretary of State is satisfied that the open space forming special category land specified in the land plans and special category land plan (as defined in article 2 of this Order), when burdened with any new rights authorised to be compulsorily acquired under this Order, 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, and that, accordingly, section 132(3) 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, 132, 140 and 149A and schedule 5] to the 2008 Act, makes the following Order:

PART 1

Preliminary

Citation and commencement

1. This Order may be cited as the Five Estuaries Offshore Wind Farm Order 202[•] and comes into force on [•] 202[•].

Interpretation

2.—(1) In this order—

“1961 Act” means the Land Compensation Act 1961(d);

(a) 2008 c. 29. Section 37 was amended by sections 128(2) and 137(5) and Schedule 13, Part 1, paragraphs 1 to 5 of the Localism Act 2011 (c. 20).

(b) S.I. 2010/103. This instrument was amended by S.I. 2012/635

(c) S.I. 2017/572.

(d) 1961 c. 33, the relevant parts of the 1961 Act were amended by the Planning and Compulsory Purchase Act 2004 (c. 5), the Housing and Planning Act 2016 (c. 22), the Levelling-up and Regeneration Act 2023 (c. 55) and the Transfer of Tribunal Functions (Lands Tribunal and Miscellaneous Amendments) Order (S.I. 2009/1307)

“1965 Act” means the Compulsory Purchase Act 1965(a);

“1980 Act” means the Highways Act 1980(b);

“1981 Act” means the Compulsory Purchase (Vesting Declarations) Act 1981(c);

“1984 Act” means the Road Traffic Regulation Act 1984(d);

“1989 Act” means the Electricity Act 1989(e);

“1990 Act” means the Town and Country Planning Act 1990(f);

“1991 Act” means the New Roads and Street Works Act 1991(g);

“2003 Act” means the Communications Act 2003(h);

“2004 Act” means the Energy Act 2004(i);

“2008 Act” means the Planning Act 2008;

“2009 Act” means the Marine and Coastal Access Act 2009(j);

“2016 regulations” means the Environmental Permitting (England and Wales) Regulations 2016 (k);

“ancillary works” means the ancillary works described in Part 2 of Schedule 1 (ancillary works) and any other works authorised by this Order that 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 such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“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;

“bank holiday” means a bank holiday in England and Wales under section 1 of the Banking and Financial Dealings Act 1971(l);

“book of reference” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“build option 1” 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. 5A, 6A, 7A, 8A, 9A, 10A, 11A, 12A, 14A and 15E), 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 2” means the scenario in which the undertaker only constructs those works required for the Five Estuaries Offshore Wind Farm grid connection and does not construct Work Nos 5A, 6A, 7A, 8A, 9A, 10A, 11A, 12A, 14A and 15E;

“building” includes any structure or erection or any part of a building, structure or erection;

“buoy” means any floating device used for navigational purposes or measurement purposes, including wave buoys, LiDAR and guard buoys;

“business day” means a day other than a Saturday or Sunday or a bank holiday in England and Wales;

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- (a) 1965 c. 56.
 - (b) 1980 c. 66.
 - (c) 1981 c. 66.
 - (d) 1984 c. 27.
 - (e) 1989 c. 29.
 - (f) 1990 c. 8.
 - (g) 1991 c. 22.
 - (h) 2003 c. 21.
 - (i) 2004 c. 20. Section 105 was amended by section 69 of the Energy Act 2008 (c. 32).
 - (j) 2009 c. 23.
 - (k) S.I. 2016/1154.
 - (l) 1971 c. 80.

“cable” means up to 400 kilovolts cables for the transmission of electricity and includes direct lay cables, cables laid in cable ducts or protective covers, and further includes fibre optic and other communications cables either within the cable or laid alongside;

“cable circuits” means a number of electrical conductors necessary to transmit electricity between two points, comprising up to three electrical conductors, which may be attached together or take the form of single 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;

“cable protection” means physical measures for the protection of cables from physical damage including but not limited to concrete mattresses, split pipe system, and/or rock placement, and protective aprons or coverings (including material used for cable crossings);

“carriageway” has the same meaning as in the 1980 Act;

“code of construction practice” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“commence” means —

- (a) in relation to the offshore works, the first carrying out of any licensed marine activities authorised by the deemed marine licences, save for pre-construction survey and monitoring approved under the deemed marine licences; or
- (b) in respect of the onshore works, the first carrying out of a material operation, as defined in section 155 of the 2008 Act comprised in or for the purposes of the authorised development other than onshore site preparation works, and;

“commencement”, “commenced” and cognate expressions are to be construed accordingly;

“compensatory works” means Work Nos. 18A and 18B to provide compensatory measures for Lesser Black Back Gulls;

“deemed marine licence” means the marine licences set out in Schedules 10 (deemed marine licence – generation assets) and 11 (deemed marine licence – transmission assets);

“Deep Water Route Cable Installation Area (Future Dredging depths) plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“discharging authority” for the purposes of Schedule 2 of this Order means Essex County Council;

“electronic transmission” means a communication transmitted—

- (a) by means of an electronic communications network; or
- (b) by other means but while in electronic form;

“environmental statement” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“foundation” means any of a monopile, multi-leg pin-piled jacket, mono suction caisson, multi-leg suction caisson jacket;

“HAT” means highest astronomical tide;

“tree preservation order and hedgerow plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“highway” and “highway authority” have the same meaning as in the 1980 Act;

“inter-array cables” means the cables linking the wind turbine generators to each other and to the other offshore works;

“jacket foundation” means a steel jacket/lattice-type structure constructed of steel, fixed to the seabed with steel pin piles or steel suction buckets and associated equipment including scour protection, J-tubes, corrosion protection systems and access platforms and equipment;

“jointing” means a process by which two or more cables are connected to each other by means of cable joints;

“land plans (onshore)” means the documents certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“LiDAR” means a light detection and ranging system used to measure weather and sea conditions;

“location plan - offshore)” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“location plan - onshore)” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace, any component part of any offshore work including any cable, and the onshore works described in Parts 1 and 2 of Schedule 1 (authorised development) not including removal, reconstruction or replacement of foundations and buildings associated with the onshore substation, to the extent assessed in the environmental statement, and any derivative of maintain must be construed accordingly;

“Margate and Long Sands special area of conservation - benthic mitigation plan” means the document forming an appendix to the outline cable specification and installation plan;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, being 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;

“mean low water springs” or “MLWS” means the lowest level which spring tides reach on average height of all low waters above Chart Datum over a period of time;

“monopile foundation” means a steel or concrete pile foundation, driven and/or drilled into the seabed and associated equipment including scour protection, J-tubes, corrosion protection systems and access platforms and equipment;

“National Highways” means National Highways Limited (company number 09346363) whose registered office is Bridge House, 1 Walnut Tree Close, Guildford, Surrey GU1 4LZ or any such successor or replacement body that may from time to time be primarily responsible for the functions, duties and responsibilities currently exercised by that statutory body;

“North Falls” means the nationally significant infrastructure project known as North Falls Offshore Wind Farm, being an offshore electricity generating station approximately 24.5 kilometres from its nearest point at the Port of Lowestoft, and being the authorised development consented by the North Falls Offshore Wind Farm Order 202[];

“offshore in-principle monitoring plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“offshore Order limits and grid coordinates plan” means the document certified as such by the Secretary of State for the purposes of the Order under article 44 (certification of plans etc.);

“offshore project design principles” means the document certified as such by the Secretary of State for the purposes of the Order under article 44 (certification of plans etc.);

“offshore substation” means a platform 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 3 inclusive and any related further associated development in connection with those Works;

“onshore site preparation works” means onshore works comprising surveying or investigatory works including archaeological investigations, environmental surveys, investigations for the purpose of assessing ground conditions; remediation of contamination, preparatory works to existing infrastructure and diversion and laying of utilities and services; creation of any temporary means of access; site clearance including vegetation clearance; erection of screening and fencing, site security works, creation of temporary hard standing, or the temporary display of site notices or advertisements “onshore works” means Work Nos. 4 to 18 inclusive and any related further associated development in connection with those Works;

“onshore substation design principles document” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“onshore works” means Work Nos 4 to 17 inclusive and any related further associated development in connection with those Works;

“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;

“Order limits” means the limits shown on the works plan (offshore) and works plan (onshore) within which the authorised development may be carried out;

“outline cable specification and installation plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline construction traffic management plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order

“outline fisheries liaison and co-existence plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans, etc) for the purposes of this Order;

“outline groundwater monitoring plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc)for the purposes of this Order;

“outline landscape and ecological management plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc)for the purposes of this Order;

“outline marine mammal mitigation protocol” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline marine written schemes of investigation” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline offshore operations and maintenance plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc)for the purposes of this Order;

“outline onshore written schemes of investigation” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline project environmental management plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc)for the purposes of this Order;

“outline public access management plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline skills and employment strategy” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline sediment disposal management plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline southern north sea special area of conservation site integrity plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline workforce travel plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline working in proximity to wildlife plan” means the document forming an appendix to the outline project environmental management plan;

“pin piles” means steel or concrete cylindrical piles driven and/or drilled into the seabed to secure steel jacket foundations;

“platforms” means the offshore structures housing or incorporating electrical equipment such as switchgear and transformers and high voltage reactive controls, electrical systems such as metering and control systems, J-tubes, landing facilities for vessels and helicopters, re-fuelling facilities, vessel charging facilities, communication and control systems, auxiliary and uninterruptible power supplies, energy storage systems, standby electricity generation equipment, cranes, storage for waste and consumables including fuel, marking and lighting and other associated equipment and facilities;

“relevant planning authority” means in any given provision of this Order (including the requirements), the local planning authority—

(a) for the area of land to which the provision relates is situated; and

(b) with the relevant legislative competence under the 1990 Act for the matter to which that provision relates;

“requirements” means, or a reference to a numbered requirement is a reference to, those matters set out in Schedule 2 (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 a 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 plans” means the plan certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“stage” for the purposes of the requirements means the phase of Works, being the Works to be carried out at the same time as set out in the order in which all of the Works are planned to be undertaken;

“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 part of a street;

“street authority”, in relation to a street, has the same meaning as in Part 3 of the 1991 Act (d);

“street works and access plan” means the plan certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“substation” means in relation to the onshore works, an HVAC substation compound sited within Work No.15 containing electrical equipment (including power transformers, gantries, switchgear, reactive compensation equipment, electrical protection equipment devices (disconnectors, circuit breakers), cooling, harmonic filters, cables and back-up generators), control buildings, lightning protection masts, communications masts, access including internal roads, fencing and other associated equipment, structures or buildings;

“suction caisson foundation” means a tubular steel structure with steel buckets that partially or fully penetrates the seabed and associated equipment, including scour protection, J-tubes, corrosion protection systems and access platforms and equipment;

“temporary closure of public rights of way plan” means the plan certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“transition joint bay” means underground concrete bays in Work No. 5 where the offshore export cables are jointed to the onshore cable circuits;

(a) S.I. 2017/1012

(b) S.I. 2017/1013

(c) Section 48 was amended by section 124 (1) and (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 2015.

“trenchless installation technique compound” means a construction site associated with the cable or cable circuit works where horizontal directional drilling or other trenchless construction technique is proposed including hard standings, lay down and storage areas for construction materials and equipment, areas for spoil, areas for vehicular parking, bunded storage areas, areas comprising water and bentonite tanks, pumps and pipes, areas for welfare facilities including offices and canteen and washroom facilities, wheel washing facilities, workshop facilities and temporary fencing or other means of enclosure and areas for other facilities required for construction purposes;

“trenchless installation techniques” means the installation of electrical circuits and/or cables by means of boring techniques for installing cable ducts including horizontal directional drilling, pipe jacking/horizontal auger boring and micro-boring;

“tribunal” means the Lands Chamber of the Upper Tribunal;

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“undertaker” means, subject to article 7 (benefit of the Order) Five Estuaries Offshore Wind Farm Limited, incorporated under company number 12292474 and having its registered office at Windmill Hill Business Park, Whitehill Way, Swindon, Wiltshire, United Kingdom, SN5 6PB;

“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), access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment including communications equipment, fixed to a foundation or transition piece; and

“works plan - offshore” means the plan or plans certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“works plan - onshore” means the plan or plans certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order.

(2) References in this Order to rights over land include references to rights to do or to place and maintain, anything in, on or under land or in the airspace above its surface and references in this Order to the imposition of restrictive covenants are references to the creation of rights over land which interfere with the interests or rights of another and are for the benefit of land which is acquired under this Order or is 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 (offshore design parameters) and 5 (onshore substation works, design and landscaping) in Part Schedule 2 (requirements);
- (b) the conditions in Part 2 (conditions) of Schedule 10 (deemed marine licence – generation assets); and
- (c) the conditions in Part 2 (conditions) of Schedule 11 (deemed marine licence – transmission assets).

(4) For the purposes of this Order, all areas described in square metres in the book of reference are approximate.

(5) References in this Order to points identified by letters or numbers are to be construed as references to points so lettered or numbered on the relevant plans.

(6) References in this Order to numbered works are references to the works as numbered in Part 1 of Schedule 1 (authorised development).

(7) The expression “includes” is to be construed without limitation unless the contrary intention appears.

(8) 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 the 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.

(2) Subject to the requirements and conditions of the deemed marine licences, the offshore works must be constructed within the Order limits seaward of MHWS and the onshore works must be constructed within the Order limits landward of MLWS.

Operation of generating station

4.—(1) The undertaker is authorised to use and operate the authorised development for which development consent is granted by this Order.

(2) Paragraph (1) does not relieve the undertaker of any requirement to obtain any permit or licence under any legislation that may be required from time to time to authorise the operation of the authorised development.

Deemed marine licences under the 2009 Act

5. The deemed marine licences set out in Schedules 10 (deemed marine licence — generation assets) and 11 (deemed marine licence — transmission assets) respectively, are deemed to be granted to the undertaker under Part 4 (marine licences) of the 2009 Act for the licensed marine activities set out in Part 1, and subject to the conditions set out in Part 2, of each of those Schedules.

Power to maintain the authorised development

6.—(1) Subject to paragraph (2), 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 (marine licensing) of the 2009 Act for the offshore not covered by the deemed marine licences.

Benefit of the Order

7.—(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) Where an agreement has been made in accordance with paragraph (2)(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) Where an agreement has been made in accordance with paragraph (2)(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), (9), (12) and the first reference in paragraph (13) include references to the transferee or 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 transferred any benefit, or for the duration of any period during which the undertaker has granted any benefit, under paragraphs (2) or (3) —

- (a) the benefit transferred or granted (“the transferred benefit”) includes any rights that are conferred, and 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 such 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 paragraph (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) the transfer is of Work No. 13A to National Highways to allow National Highways to carry out works to the strategic road network;
- (c) the transfer is of Work No. 13 to the local highway authority to allow the local highway authority to carry out works to the local road network; or
- (d) the time limits for claims for compensation in respect of the acquisition of land or effects upon land under this Order have elapsed 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 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) Prior to any transfer or grant under this article taking effect, whether or not the consent of the Secretary of State is required, the undertaker must give notice in writing to the Secretary of State, and if such transfer or grant relates to the exercise of powers in their area, to the MMO and the relevant planning authority.

(10) The notices required under paragraphs (5) and (9) must—

(a) state—

- (i) the name and contact details of the person to whom the benefit of the provisions will be transferred or granted;
- (ii) subject to paragraph (11), the date on which the transfer will take effect;
- (iii) the provisions to be transferred or granted; and
- (iv) the restrictions, liabilities and obligations that, in accordance with paragraph (7)(c), will apply to the person exercising the powers transferred or granted.

(b) be accompanied by where relevant, a plan showing the works or areas to which the transfer or grant relates.

(11) Sections 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 10 (deemed marine licence — Generation Assets) or Schedule 11 (deemed marine licence — Transmission Assets) of the Order to correct the name of the undertaker to the name of a transferee or lessee under this article 7 (benefit of the Order)

Application and modification of legislative provisions

8. The following enactments do not apply in relation to the construction of any work or the carrying out of any operation for the purpose of or in connection with, the construction of the authorised development or any maintenance of any part of the authorised development—

- (a) the provisions of any byelaws made under, or having effect as if made under, paragraphs 5, 6 or 6A of Schedule 25 (byelaw making powers of the authority) to the Water Resources Act 1991(a);
- (b) the provisions of any byelaws made under section 66 (powers to make byelaws) of the Land Drainage Act 1991(b);
- (c) sections 23 (prohibition on obstructions etc. in watercourses) and 30 (authorisation of drainage works in connection with a ditch) of the Land Drainage Act 1991(c);
- (d) regulation 12 (requirement for environmental permit) of the 2016 regulations in respect of a flood risk activity only;
- (e) the provisions of the Neighbourhood Planning Act 2017(d) in so far as they relate to the temporary possession of land under articles 31 (temporary use of land for carrying out the authorised development) and 32 (temporary use of land for maintaining the authorised development) of this Order;
- (f) Sections 6 (grass verges etc) and 30 (unauthorised structures on seashore) of the Essex Act 1987(e)

(a) 1991 c. 57. Paragraph 5 was amended by section 100(1) and (2) of the Natural Environment and Rural Communities Act 2006 (c. 16), section 84 of, and paragraph 3 of Schedule 11 to, the Marine and Coastal Access Act 2009 (c. 23), paragraph 49 of Schedule 25 to the Flood and Water Management Act 2010 (c. 29) and S.I. 2013/755. Paragraph 6 was amended by paragraph 26 of Schedule 15 to the Environment Act 1995 (c. 25), section 224 of, and paragraph 24 of Schedule 16, and Part 5(B) of Schedule 22, to, the Marine and Coastal Access Act 2009 and S.I. 2013/755. Paragraph 6A was inserted by section 103(3) of the Environment Act 1995.

(b) 1991 c. 59. Section 66 was amended by paragraph 38 of Schedule 2 to the Flood and Water Management Act 2010 (c. 29) and section 86(3) of the Water Act 2014 (c. 21).

(c) 1991 c. 59. Section 23 was amended by section 120(1) of and the paragraph 192 of Schedule 22 to, the Environment Act 1995 and section 31 of, and paragraphs 25 and 32 of Schedule 2 to, the Flood and Water Management Act 2010 (c. 29).

(d) 2017 c. 20.

(e) 1987 c.xx

- (g) Holland Haven Country Park Local Nature reserve byelaws made by Tendring District Council on 5th July 1995 under sections 20, 21(4) and 106 of the National Parks and Access to the Countryside Act 1949(a) in accordance with section 236 of the Local Government Act 1972(b);
- (h) Regulation 6 of the Hedgerows Regulations 1997(c) is modified so as to read for the purposes of this Order only as if there were inserted after paragraph (1)(j) the following—
“(k) or for carrying out development which has been authorised by an order granting development consent pursuant to the Planning Act 2008.”;
- (i) sections 28E (duties in relation to sites of special scientific interest) and 28H (Statutory undertakers, etc.: duty in relation to carrying out operations) of the Wildlife and Countryside Act 1981(d).

Defence to proceedings in respect of statutory nuisance

9.—(1) Where proceedings are brought under section 82(1) (summary proceedings by persons aggrieved by statutory nuisances) of the Environmental Protection Act 1990(e) 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 may be imposed, under section 82(2) of that Act if—

(2) the defendant shows that the nuisance—

- (a) 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 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 a consent given under section 61 (prior consent for work on construction sites), of the Control of Pollution Act 1974(f); or
- (b) is a consequence of the construction, maintenance or decommissioning of the authorised development and cannot reasonably be avoided; or
- (c) 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 the operational stage); or
- (d) is a consequence of the use of the authorised development and cannot reasonably be avoided.

(3) For the purposes of paragraph (1) above, compliance with the controls and measures relating to noise, vibration dust or artificial light described in the code of construction practice will be sufficient, but not necessary, to show that an alleged nuisance could not reasonably be avoided.

(4) Section 61(9) (consent for work on construction site) of the Control of Pollution Act 1974(g) 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) 1949 c.97. Section 20 was amended by schedule 11 of 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 the schedule 11 of the Natural Environment and Rural Communities Act 2006 (c.16) and schedule 20 of the Local Government Act 1972 (c. 70). There are other amendments which are not relevant to this Order.

(b) 1972 c.20. Section 236 was amended by section 84 of the Local Government Act 1985 (c.51), schedule 6 of 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.

(c) S.I. 1997/1160

(d) 1981 c.69.

(e) 1990 c. 43. Amended by section 103 of the Clean Neighbourhoods and Environment Act 2005 (c. 16.). There are other amendments not relevant to this Order.

(f) 1974 c.40. Section 61 was amended by Schedule 7 to the Building Act 1984 (c.55), paragraph 15 of Schedule 15 to the Environmental Protection Act 1990 (c.43) and Schedule 24 to the Environment Act 1995.

(g) 1974 c. 40. Section 61 was amended by Schedule 7 to the Building Act 1984 (c. 55), paragraph 15 of Schedule 3 to the Environmental Protection Act 1990 and Paragraph 1 of Schedule 24 to the Environment Act 1995.

PART 3

Streets

Street works

10.—(1) The undertaker may, for the purposes of the authorised development, enter on so much of any of the streets specified in Schedule 3 (streets 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 under it;
- (b) tunnel or bore under the street;
- (c) remove or use all earth and materials in or under the street;
- (d) place apparatus under the street;
- (e) maintain apparatus 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

11.—(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 issued or approved under those provisions apply (with all necessary modifications) in relation to—

- (a) the carrying out of works under article 10 (street works); and
- (b) the temporary closure, temporary alteration or temporary diversion of a street by the undertaker under article 14 (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 that 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 street authority);
- (e) section 69 (works likely to affect other apparatus in the street);
- (f) section 76 (liability for cost of temporary traffic regulation);
- (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, stopping up, alteration or diversion (as the case may be) required in a case of emergency.

(4) The following provisions of the 1991 Act do not apply in relation to any works executed under the powers conferred by this Order—

- (a) section 56(d) (power to give directions as to timing of street works);
- (b) section 56A(e) (power to give directions as to placing of apparatus);

^(a) Sections 55, 57, 60, 68 and 69 were amended by the Traffic Management Act 2004 (c. 18.).
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- (c) section 58(f) (restriction on works following substantial road works);
- (d) section 58A(g) (restriction on works following substantial street works);
- (e) section 61(protected streets); and
- (f) schedule 3A(h) (restriction on works following substantial street works).

Construction and maintenance of new or altered highway

12.—(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

13.—(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 (rights of way to be temporarily closed or restricted) of Schedule 4 (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 rights of way specified in Part 2 (rights of way to be temporarily closed or restricted) of Schedule 4 (traffic regulation) may not be temporarily closed under this article unless a diversion for the closed section of that right of way, is first provided by the undertaker to the standard defined in the public access management plan to be approved in accordance with the requirements set out in Schedule 2 (requirements), 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

14.—(1) The undertaker, during and for the purposes of carrying out 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; and
- (b) 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 (4), that street authority is deemed to have granted consent.

Access to works

15. The undertaker may, for the purposes of the authorised development, form and lay out means of access, or improve an existing means of access for the purposes of the authorised development within the Order limits from the streets listed in Schedule 5 (access to works) and shown on the street works and access plan.

Traffic regulation

16.—(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 4 (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 provision 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 this paragraph no person is to drive any motor vehicle at a speed exceeding the limit specified in column (3) of Part 4 (speed limits) of Schedule 4 (traffic regulation) along the lengths of road identified in the corresponding row of column (2) of that Part for the period stated in the notice, which period may not exceed 18 months from the date notified.

(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) The undertaker may issue more than one notice under paragraph (3). Where more than one notice is issued, the provision of section 88(1) (temporary speed limits) of the 1984 Act limiting the period of a temporary speed limit order to a period not exceeding 18 months applies to each notice individually, and notices may run consecutively.

(6) Without limitation on the scope of paragraph (1), and 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 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 (9) any prohibition, restriction or other provision made under this article may have effect both before and after the expiry of that period.

(8) 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 (9).

(a) S.I. 2016/362.
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- (9) The undertaker must not exercise the powers conferred by this article unless it has—
- (a) given 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,
 - (iii) to the chief officer of police and to the traffic authority in whose area the road is situated; 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).
- (10) 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 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).
- (11) 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.
- (12) Before exercising the powers conferred by this article 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.
- (13) Expressions used in this article and in the 1984 Act have the same meaning in this article as in that Act.
- (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) 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.
- (16) 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.

Power to alter layout etc. of streets

17.—(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—

(2) alter the level or increase the width of the street including any kerb, footway, cycle track or verge; and

- (3) make and maintain passing place(s).
- (4) The undertaker must restore any street that has been temporarily altered under this article to the reasonable satisfaction of the street authority.
- (5) The powers conferred by paragraph (1) must not be exercised without the consent of the street authority.
- (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.

PART 4

Supplemental powers

Discharge of water

18.—(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 by the undertaker pursuant to paragraph (1) is determined as if it were a dispute under section 106 (right to communicate with public sewers) of the Water Industry Act 1991(a).

(3) The undertaker must not discharge any water into any watercourse, 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) 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 bed or banks of, or construct any Works in, under, over or within eight metres of, any watercourse forming part of a main river, 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 the entry into controlled waters of any matter whose entry or discharge into controlled waters is prohibited by regulation 12 (requirement for environmental permit) of the Environmental Permitting (England and Wales) Regulations 2016(b).

(8) In this article—

- (a) “public sewer or drain” means a sewer or drain which 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.

(a) 1991 c. 56. Section 106 was amended by sections 43(2) and 35(8)(a) and paragraph 1 of Schedule 2 to the Competition and Service (Utilities) Act 1992 (c.43) and sections 99 and 36(2) of the Water Act 2003 (c. 37.). There are other amendments to this section which are not relevant to this Order.

(b) S.I. 2016/1154.

(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 (5), or approval under paragraph (4)(a) that person is deemed to have granted consent or given approval, as the case may be.

Authority to survey and investigate the land

19.—(1) The undertaker may for the purposes of this Order enter on any land above MLWS shown within the Order limits or 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 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; 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 before or after 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.

(4) No trial holes, bore holes or trenches are to be made under this article—

- (a) in land located 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 temporary use of land pursuant to 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.

Protective work to buildings

20.—(1) Subject to the following provisions of this article, the undertaker may at its own expense carry out such protective works to any building which may be affected by the authorised development as the undertaker considers necessary or expedient.

(2) Protective works may be carried out—

- (a) at any time before or during the carrying out in the vicinity of the building of any part of the authorised development; 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 first becomes operational.

(3) For the purpose 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 purpose 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), (c) or (d), specifying the protective works proposed to be carried out.

(6) Where a notice is served under paragraph (5)(a), (c) or (d), the owner or occupier of the building or land concerned may, by serving a counter-notice within the period of ten 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 48 (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 first becomes operational 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 (compensation in case where no right to claim in nuisance) of the 2008 Act.

(10) Any compensation payable under paragraph (7) or (8) must be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(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 as it applies in respect of 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.

Removal of human remains

21.—(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 sub-paragraph (2) before the removal of any human remains where the undertaker is satisfied—

- (a) that 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; or
- (b) is, or is a child of, a brother, sister, uncle or aunt of the deceased; or
- (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

22.—(1) The undertaker may acquire compulsorily so much of the Order land as is required to carry out or to facilitate, or is incidental to, the authorised development.

(2) This article is subject to paragraph (2) of article 24 (compulsory acquisition of rights) and paragraph (8) of article 31 (temporary use of land for carrying out the authorised development).

Time limit for exercise of authority to acquire land compulsorily

23.—(1) After the end of the period of 7 years beginning on the day on which this Order is made—

(a) 1857 c.81
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- (a) no notice to treat is to be served under Part 1 (compulsory Purchase under Acquisition of Land Act of 1946) of the 1965 Act; and
- (b) no declaration is to be executed under section 4 (execution of declaration) of the 1981 Act^(a) as applied by article 27 (application of the 1981 Act).

(2) The authority conferred by article 31 (temporary use of land for carrying out the authorised development) ceases at the end of the period referred to in paragraph (1), except that nothing in this paragraph 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.

Compulsory acquisition of rights

24.—(1) The undertaker may acquire such rights over the Order land, or impose restrictive covenants affecting the land as may be required for any purpose for which that land may be acquired under article 22 (compulsory acquisition of land), by creating them as well as acquiring rights already in existence.

(2) Subject to article 26 (private rights) and article 33 (statutory undertakers) in the case of the Order land specified in column (1) of Schedule 7 (land in which only new rights etc. may be acquired) the undertaker's powers of compulsory acquisition are limited to the acquisition of new rights in the land or the imposition of restrictive covenants as may be required for the purpose specified in relation to that land in column (2) of that Schedule.

(3) Subject to Schedule 2A (counter-notice requiring purchase of land not in notice to treat) to the 1965 Act (as substituted by paragraph 10 of Schedule 8 (modification of compensation and compulsory purchase enactments for creation of new rights and imposition of restrictive covenants)), where the undertaker acquires a right over land or the benefit of a restrictive covenant, the undertaker is not required to acquire a greater interest in that land.

(4) Schedule 8 (modification of compensation and compulsory purchase enactments for creation of new rights and imposition of new restrictions) 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 the creation of a new right or the imposition of a restrictive covenant.

(5) In any case where the acquisition of new rights or the imposition of restrictive covenants under paragraph (1) 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 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.

Compulsory acquisition of land: minerals

25. Parts 2 and 3 of Schedule 2 (minerals) to the Acquisition of Land Act 1981^(b) are incorporated in this Order, subject to the following modifications—

- (a) paragraph 8(3) is not incorporated;
- (b) for “acquiring authority” substitute “undertaker”; and
- (c) for “undertaking” substitute “authorised development”.

Private rights

26.—(1) Subject to the provisions of this article, all private rights or restrictive covenants over land subject to compulsory acquisition under article 22 (compulsory acquisition of land) cease to

(a) Section 4 was amended by sections 184 and 185 of, and paragraph 2 of Schedule 18 to, the Housing and Planning Act 2016 (c. 22).

(b) 1981 c.67

have effect in so far as their continuance would be inconsistent with the exercise of the powers under article 22 —

- (a) as from the date of an interest in the land acquisition of the land by the undertaker, whether compulsorily or by agreement; or
- (b) on the date of entry on the land by the undertaker under section 11(1) (power of entry) of the 1965 Act (a)

whichever is the earlier.

(2) Subject to the provisions of this article, all private rights or restrictive covenants over land subject to the compulsory acquisition of rights or the imposition of restrictive covenants under article 24 (compulsory acquisition of rights) cease to have effect in so far as their continuance would be inconsistent with the exercise of the right or compliance with the restrictive covenant—

- (a) as from the date of the acquisition of the right or the imposition of the restrictive covenant by the undertaker (whether the right is acquired compulsorily, by agreement or through the grant of 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 in pursuance of the right,

whichever is the earlier.

(3) Subject to the provisions of this article, all private rights or restrictive covenants 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) Any person who suffers loss by the extinguishment or suspension of any private right or restrictive covenant under this article is entitled to compensation in accordance with the terms of section 152 (compensation in case where no right to claim in nuisance) of the 2008 Act to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(5) This article does not apply in relation to any right to which section 138 (extinguishment of rights, and removal of apparatus, of statutory undertakers etc.) of the 2008 Act or article 33 (statutory undertakers) applies.

(6) 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 restrictive covenants 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 taking temporary possession of the land;

that any or all of those paragraphs do not apply to any right specified in the notice; or

- (b) any agreement made at any time between the undertaker and the person in or to whom the right in question is vested or belongs.

(7) If an agreement referred to in paragraph (6)(b)—

- (a) is made with a person in or to whom the right is vested or belongs; 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.

(a) Section 11(1) was amended by paragraph 14(3) of Schedule 4 to the Acquisition of Land Act 1981 (c. 67.) paragraph 12(1) of Schedule 5 to, the Church of England (Miscellaneous Provisions) Measure 2006 (No. 1) and section 186(2) of the Housing and Planning Act 2016 (c. 22.).

(8) 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

- 27.—(1) The 1981 Act applies as if this Order were a compulsory purchase order.
- (2) The 1981 Act, as applied, has effect with the following modifications.
- (3) In section 1 (application of Act) for sub-section (2) substitute—
- “This section applies to any Minister, any local or other public authority or any other body or person authorised to acquire land by means of a compulsory purchase order.”
- (4) Omit section 5 (earliest date for execution of declaration).
- (5) Omit section 5A (time limit for general vesting declaration).
- (6) In section 5B(1) (extension of time limit during challenge)—
- (a) 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 Planning Act 2008 (legal challenges relating to applications for orders granting development consent)”; and
- (b) for “the three year period mentioned in section 5A” substitute “the seven year period mentioned in article 23 (time limit for exercise of authority to acquire land compulsorily) of the Five Estuaries Offshore Wind Farm Order 202[•]”.
- (7) In section 6 (notices after execution of declaration) for sub-section (1)(b) substitute—
- “on every other person who has given information to the acquiring authority with respect to any of that land further to the invitation published and served under section 134 of the Planning Act 2008,”.
- (8) In section 7 (constructive notice to treat) in sub-section (1)(a) omit “(as modified by section 4 of the Acquisition of Land Act 1981)”.
- (9) In Schedule A1 (counter-notice requiring purchase of land not in general vesting declaration), for paragraph 1(2) substitute—
- “But see article 28 (acquisition of subsoil only) of the Five Estuaries Offshore Wind Farm Order 202[•] which excludes the acquisition of subsoil from this Schedule”.
- (10) References to the 1965 Act in the 1981 Act are to be constructed as references to the 1965 Act as applied by section 125 (application of compulsory acquisition provisions) of the 2008 Act and as modified by article 29 (modification of Part 1 of the 1965 Act) to the compulsory acquisition of the land under this Order.

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 22 (compulsory acquisition of land) and paragraph (1) of article 24 (compulsory acquisition of rights) 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) Paragraph (2) does not prevent Schedule 2A (counter-notice requiring purchase of land not in notice to treat) to the 1965 Act (as modified by article 29 (modification of Part 1 of the 1965 Act) or paragraph 10 of Schedule 8 as the case may be) from applying where the undertaker acquires any part of, or rights in a cellar, vault, arch or other construction forming part of a house, building or factory.
- (4) The following do not apply in connection with the exercise of the power under paragraph (1) in relation to subsoil only—
- (a) Schedule 2A to the 1965 Act (as modified by article 29 (modification of Part 1 of the 1965 Act));

- (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 1990 Act.

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 (application of compulsory acquisition provisions) of the 2008 Act, is modified as set out in paragraphs (2) to (5).

(2) In section 4A(1) (extension of time limit during challenge)(a) for “section 23 of the Acquisition of Land Act 1981 (application to High Court in respect of compulsory purchase order), the three year period mentioned in section 4” substitute “section 118 (legal challenges relating to applications for orders granting development consent) of the 2008 Act, the seven year period mentioned in article 23 (time limit for exercise of authority to acquire land compulsorily) of the Five Estuaries Offshore Wind Farm Order 202[●]”.

(3) In section 11A (powers of entry: further notice of entry)—

- (a) in sub-section (1)(a), after “land” insert “under that provision”; and
- (b) in sub-section (2), after “land” insert “under that provision”.

(4) In section 23(2) (interests omitted from purchase), for “section 4 of this Act” substitute “article 23 (time limit for exercise of authority to acquire land compulsorily) of the Five Estuaries Offshore Wind Farm Order 202[●]”.

(5) In Schedule 2A (counter-notice requiring purchase of land not in notice to treat)—

- (a) for paragraphs 1(2) and 14(2) substitute—
“But see article 28(3) (acquisition of subsoil only) of the Five Estuaries Offshore Wind Farm Order 202[●] which excludes the acquisition of subsoil only from this Schedule”; and
- (b) at the end insert—

“Part 4

INTERPRETATION

30. In this Schedule, references to entering on and taking possession of land do not include doing so under article 19 (authority to survey and investigate the land), article 20 (protective work to buildings), 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 Five Estuaries 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 of 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, but subject to article 23 (time limit for exercise of authority to acquire land compulsorily)—

- (a) enter on and take temporary possession of—
 - (i) the land specified in column (1) of Schedule 6 (land of which temporary possession may be taken) for the purpose specified in relation to that land in column (2) of that Schedule relating to the part of the authorised development specified 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 that land;
- (c) construct temporary works (including the provision of means of access), 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 permanent works specified in relation to that land in column (3) of Schedule 6 (land of which temporary possession may be taken), or any other mitigation works in connection with the authorised development; and
- (f) construct such works on that land as are mentioned in Schedule 1 (authorised development) including carrying out any mitigation works required under the requirements set out in Schedule 2 (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 and explain the purpose for which entry is taken in respect of land specified under paragraph (1)(a)(ii).

(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 6 (land of which temporary possession may be taken); or
- (b) in the case of any land referred to in paragraph (1)(a)(ii), after the end of the period of one year beginning with the date of completion of the work for which temporary possession of the land was taken unless the undertaker has, by 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 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, 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; but the undertaker is not required to—

- (a) replace a building removed under this article;
- (b) restore the land on which any permanent works (including ground strengthening works, drainage works, highway works including visibility splay creation or improvement, boundary treatments and mitigation works) have been constructed under paragraph (1)(e); or
- (c) remove any measures installed over or around statutory undertakers' apparatus to protect that apparatus from the authorised development.

(5) 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 the land of the powers conferred by this article.

(6) Any dispute as to a person's entitlement to compensation under paragraph (5), or as to the amount of the compensation, is to 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 (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 carrying out of the authorised development, other than loss or damage for which compensation is payable under paragraph (5).

(8) The undertaker must not compulsorily acquire, acquire new rights over or impose restrictive covenants over the land referred to in paragraph (1)(a)(i) of this Order.

(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(a) (refusal to give possession to acquiring authority) of the 1965 Act applies to the temporary use 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.

(11) Nothing in this article prevents the taking of temporary possession more than once in relation to any land specified in paragraph (1).

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 and take temporary possession of any land within the Order land if such possession is reasonably required for the purpose of maintaining the authorised development; and
- (b) 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 garden belonging to a 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.

(a) Section 13 was amended by sections 139 of, and paragraph 28 of Schedule 13, and paragraph 1 of Schedule 23 to the Tribunals Courts and Enforcement Act 2007 (c. 15.).

(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 the 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 (refusal to give possession to acquiring authority) of the 1965 Act applies to the temporary use of land pursuant to 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.

(11) In this article "the maintenance period", in relation to any part of the authorised development means the period during which the authorised development is in operation after construction and commissioning is complete.

Statutory undertakers

33. Subject to the provisions of Schedule 9 (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 the rights of, and remove, relocate the rights of 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 a supply is given.

(2) Paragraph (1) does not apply in the case of the 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 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^(a); and

(a) 2003 c. 21.
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“public utility undertaker” has the same meaning as in the 1980 Act.

Funding

35.—(1) The undertaker must not exercise the powers conferred by the provisions referred to in paragraph (2) in relation to any Order land unless it has first put in place in relation to that land 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 22 (compulsory acquisition of land);
- (b) article 24 (compulsory acquisition of rights);
- (c) article 26 (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);
- (h) article 33 (statutory undertakers); and
- (i) article 34 (recovery of costs of new connections).

(3) A guarantee or alternative form of security given in respect of any liability of the undertaker to pay compensation pursuant to the provisions referred to in paragraph (2) 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.

PART 6

Miscellaneous and general

Application of landlord and tenant law

36.—(1) This article applies to any agreement entered into by the undertaker so far as it relates to the terms on which any Order land is subject to a lease granted by or under that agreement.

(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) No enactment or rule of law to which paragraph (2) applies is to apply in relation to the rights and obligations of the parties to any lease granted by or 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 lease of any obligation of any other party under the lease.

Felling or lopping of trees and removal of hedgerows

37.—(1) Subject to article 38 (trees subject to tree preservation orders), the undertaker may fell or lop any tree or shrub, or cut back its roots, within or encroaching upon land within the Order limits if it 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) In carrying out any activity authorised by paragraph (1), 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.

(3) Any dispute as to a person's entitlement to compensation under paragraph (2), or as to the amount of compensation, is to be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(4) The undertaker may, for the purposes of carrying out the authorised development but subject to paragraph (2), remove any hedgerow within the Order limits that is required to be removed.

(5) In this article “hedgerow” and “important hedgerow” has the same meaning as in the Hedgerows Regulations 1997(a).

Trees subject to tree preservation orders

38.—(1) Subject to paragraph (2), the undertaker must not fell, lop, prune, or cut back the roots of any tree which is the subject of a tree preservation order except as provided in Schedule 12 Part 1 (tree preservation orders).

(2) The undertaker may fell or lop any tree within or encroaching upon the Order limits that is subject to a tree preservation order which is not listed in Schedule 12 Part 1 (tree preservation orders) for which a tree preservation order which was made after 12 March 2024, or cut back its roots, if it reasonably believes it to be necessary in order to do so in order to prevent the tree—

- (a) from obstructing or interfering with onshore site preparation works 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.

(3) In carrying out any activity authorised by paragraph (2)—

- (a) the undertaker must not cause 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.

(4) The authority given by paragraph (2) constitutes a deemed consent under the relevant tree preservation order.

(5) 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.

Abatement of works abandoned or decayed

39. Where any of the offshore works 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

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requiring the undertaker at its own expense either to repair, make safe and restore one or any of those works, or remove Work No. 1 or any relevant part of it, without prejudice to any notice served under section 105(2) (requirement to prepare decommissioning programmes) of the 2004 Act^(a). The notice may also require the restoration of the site of the relevant part(s) of Work No. 1.

Saving provisions for Trinity House

40. Nothing in this Order prejudices or derogates from any of the rights, duties or privileges of Trinity House.

Crown rights

41.—(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 licensee to use, take, 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

42. Schedule 9 (protective provisions) has effect.

Application of the 1990 Act

43.—(1) Development consent granted by this Order is to be treated as specific planning permission for the purposes of section 264(3)(a) (cases in which land is to be treated as not being operational land) of the 1990 Act.

(2) Any planning permission which has been initiated prior to the commencement of the authorised development pursuant to this Order may continue to be lawfully implemented thereafter notwithstanding any physical incompatibility with the authorised development or inconsistency with any provision of this Order.

(3) As from the date on which the authorised development is commenced, any conditions of a planning permission granted pursuant Part 3 (Control over Development) of the 1990 Act (whether express or otherwise) which relate to land within the Order limits or land adjacent to the Order limits cease to have effect to the extent they are inconsistent with the authorised development or with anything done or approved under the requirements in Schedule 2 (requirements).

(4) As from the date of this Order where planning permission (whether express or otherwise) is granted (whether prior to the date of this Order or after) pursuant to Part 3 of the 1990 Act in respect of land within the Order limits for development not forming part of the authorised development, the carrying out of development pursuant to such planning permission is not to operate to prevent the undertaker from carrying out further works for the development of the authorised development pursuant to the terms of this Order.

^(a) Section 105(2) was substituted by section 69(2) of the Energy Act 2008 (c.32).

(5) Nothing in this Order restricts the undertaker from seeking or implementing, or the relevant planning authority from granting, planning permission for development within the Order limits.

(6) Any development, or any part of a development within the Order limits which is constructed or used under the authority of a planning permission pursuant to Part 3 of the 1990 Act (whether express or otherwise) following the coming into force of this Order is to be disregarded at all times for the purposes of ascertaining whether or not an offence has been committed under the provisions of sections 160 (offences) or 161 (breach of terms of order granting development consent) of the 2008 Act.

Certification of plans, etc.

44.—(1) The undertaker must, as soon as practicable after the making of this Order, submit to the Secretary of State copies of all of the documents listed in Schedule 15 (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.

Service of notices

45.—(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 (5) 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 (references to service by post) of the Interpretation Act 1978^(a) 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 a 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 any 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 name or 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 a 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

(a) 1978 c. 30.
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- (d) the notice or document is 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 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 electronic communication given by a person may be revoked by that person in accordance with paragraph (8).
- (8) Where a person is no longer willing 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 or 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.

No double recovery

46. Compensation is not payable in respect of the same matter both under this Order and under any other enactment, any contract or any rule of law, or under two or more different provisions of this Order.

Requirements, appeals, etc.

- 47.—**(1) Schedule 2 Part 2 (approval of matters specified in requirements) has effect.
- (2) Save to the extent that the requirements are already subject to Schedule 2 Part 2 (approval of matters specified in 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—
“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”;
 - (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 Five Estuaries 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.

Arbitration

48.—(1) Subject to article 40 (saving provisions for Trinity House) any difference under any provision of this Order, unless otherwise provided for, is to be referred to and settled in arbitration in accordance with the rules at Schedule 14 (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 MMO is required under any provision of this Order is not subject to arbitration.

Compensation

49. Schedule 13 (compensation) has effect.

Signed by authority of the Secretary of State for Energy Security and net zero

Date

Name
Department

SCHEDULE 1 Authorised development

Articles 3 and 4

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 37 kilometres from the coast of Suffolk 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 79 wind turbine generators each fixed to the seabed by a foundation, and further comprising (b) and (c) below;
- (b) a network of subsea inter-array cables, including cable crossings and cable protection; and
- (c) floating buoys.

and associated development within the meaning of section 115(2) (development for which development consent may be granted) of the 2008 Act comprising—

Work No. 2— Electrical export works comprising:

- (a) up to two offshore substation platforms each fixed to the seabed by a foundation;
- (b) up to two subsea cable circuits between the offshore platforms forming Work No.2(a) including cable crossings and cable protection; and
- (c) up to two subsea cable circuits between Work No. 2(a) and Work No. 3, cable protection and cable crossings.

*Work No. 2A—*Sheet piling works and creation of pits for trenchless installation techniques, including installation of up to two cable ducts, installation and use of temporary construction

working areas, cable installation vessel anchoring and works to allow vessels to remain in place at low tide.

Work No. 3—Installation of up to two subsea cable circuits between Work No. 2 and Work No. 4, including up to two cable ducts, cable protection and cable crossings and further including;

- (a) sheet piling works including creation of pits for trenchless installation techniques, trenchless installation technique works including the creation of entrance and exit pits; and
- (b) installation and use of temporary construction working areas, cable installation vessel anchoring, works to allow vessels to remain in place at low tide and laydown area.

Work Nos. 1, 2, 2A and 3 are to be constructed seaward of MHWS within the area delineated by the co-ordinates shown on the offshore order limits and co-ordinates plan and listed in Table 1 of Schedule 16 (offshore co-ordinates), and within the area for each Work No. as shown on the works plan—

In the District of Tendring, Essex:

Work No. 4 — Installation of up to two buried cable circuits within cable ducts between Work No. 3 and Work No. 5, approximately 500m, including trenchless installation technique works.

Work No. 4A —Construction of a temporary construction compound and laydown area (Beach Works temporary construction compound), improvement and use of existing access routes including creation of construction access to Work Nos. 3, 4, and 5, works to junctions and visibility splays, temporary construction working areas and laydown area.

Work No. 5 — Installation of up to two buried cable circuits within cable ducts approximately 215m, and—

- (a) construction of a haul road;
- (b) a temporary construction working area;
- (c) up to two transition joint bays;
- (d) trenchless installation techniques including the creation of pits;
- (e) a temporary construction compound.

Work No. 5A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections from within Work No.5 to Work No. 6A.

Work No. 6 — Installation of up to two buried cable circuits within cable ducts between Work No. 5 and Work No. 7 from the north east of the landfall compound to Clacton Road, approximately 1230 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and cable trenching works; construction of a haul road, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 6A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 5A and Work No. 7A.

Work No. 6B — The creation of a temporary construction compound east of Clacton Road, creation of construction access, construction of a haul road, temporary construction working areas and laydown, and creation and improvement of accesses to the public highway including works to junctions and visibility splays.

Work No. 7 — Installation of up to two buried cable circuits within cable ducts between Work No. 6 and Work No. 8 from west of Clacton Road to the railway, approximately 2400 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and cable trenching works; construction of a haul road, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 7A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 6A and Work No. 8A.

Work No. 7B — The creation of a temporary construction compound west of Clacton Road, creation of construction access, construction of a haul road, temporary construction working areas and laydown, and creation and improvement of accesses to the public highway including works to junctions and visibility splays.

Work No. 7C — Off-route haul road connecting to Work Nos. 7 and 7A, to the west of the cable route, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 7D — Off-route haul road connecting to Work Nos. 7 and 7A, to the east of the cable route, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 7E — Off-route haul road connecting to Work Nos. 7 and 7A, to the east of the cable route and to the south-west of the railway, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 8 — Installation of up to two buried cable circuits within cable ducts between Work No. 7 and Work No. 9 from the railway to Thorpe Road, approximately 1000 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and cable trenching works; construction of a haul road, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 8A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 7A and Work No. 9A.

Work No. 8B — The creation of a temporary construction compound south of Thorpe Road, creation of construction access, construction of a haul road, temporary construction working areas and laydown, and creation and improvement of accesses to the public highway including works to junctions and visibility splays.

Work No. 8C — Off-route haul road connecting to Work Nos. 8 and 8A, to the east of the cable route, north of the railway, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 9 — Installation of up to two buried cable circuits within cable ducts between Work No. 8 and Work No. 10 from Thorpe Road to Swan Road, approximately 4890 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and cable trenching works; construction of a haul road, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 9A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 8A and Work No. 10A.

Work No. 9B — The creation of a temporary construction compound north of B1035, Tendring Road, creation of construction access, construction of a haul road, temporary construction working areas and laydown, and creation and improvement of accesses to the public highway including works to junctions and visibility splays

Work No. 9C — Off-route haul road connecting to Work Nos. 9 and 9A, to the north-east of the cable route, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 9D — Off-route haul road connecting to Work Nos. 9 and 9A, to the south-west of the cable route, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 9E — Off-route haul road connecting to Work Nos. 9 and 9A, to the south-west of the route and crossing Landemere Road, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 9F — Off-route haul road connecting to Work Nos. 9 and 9A, to the north-east of the route to the north of Golden Lane, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No.10 — Installation of up to two buried cable circuits within cable ducts between Work No. 9 and Work No. 11 from Swan Road to Tendring Brook, approximately 1480 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and cable trenching works; construction of a haul road, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays; and creation of permanent ecological and environmental mitigation works including habitat creation.

Work No. 10A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 9A and Work No. 11A.

Work No. 10B — The creation of a temporary construction compound to the north of Thorpe Road, creation of construction access, construction of a haul road, temporary construction working areas and laydown.

Work No. 10C — Off-route haul road connecting to Work Nos. 10, 10A, 11 and 11A crossing Tendring Brook, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No.11 — Installation of up to two buried cable circuits within cable ducts between Work No. 10 and Work No. 12 from Tendring Brook to A120, approximately 3630 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and cable trenching works; construction of a haul road, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 11A — Installation of cable ducting for two additional circuits later installation of additional electrical connections between Work No. 10A and Work No. 12A.

Work No. 11B —The creation of a temporary construction compound to the east of B1035, immediately south of the A120, creation of construction access, construction of a haul road, temporary construction working areas and laydown, and creation and improvement of accesses to the public highway including works to junctions and visibility splays.

Work No.11C — Off-route haul road connecting to Work Nos. 11 and 11A, to the west of the cable corridor, crossing Stones Green Road, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage.

Work No. 11D — Off-route haul road connecting to Work Nos. 11 and 11A, to the east of the cable corridor, crossing Stones Green Road, temporary construction working areas, laydown and soils storage and temporary drainage works including alteration of existing drainage, connections to existing drainage..

Work No. 12 — Installation of up to two buried cable circuits within cable ducts between Work No. 11 and Work No. 13 from A120 to Bentley Road, approximately 2840 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and

cable trenching works; construction of a haul road, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 12A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 11A and Work No. 14A.

Work No. 12B — The creation of a temporary construction compound east of B1035, Clacton Road. Creation of construction access, construction of a haul road, temporary construction working areas and laydown, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 12C — The creation of a temporary construction compound to the west of B1035 Clacton Road, creation of construction access, construction of a haul road, temporary construction working areas and laydown, creation and improvement of accesses to the public highway including works to junctions and visibility splays, and creation and use of an off route haul road east of Clacton road.

Work No. 13 — Works to permanently widen and improve Bentley Road, including temporary removal and replacement of street furniture, temporary provision of segregated pedestrian / cycling area, planting and reinforcement of hedgerows, permanent highway drainage works including creation of new highway drainage and works of improvement to drainage, creation and improvement of connections to existing drains and watercourses; creation and use of a temporary construction compound and working areas.

Work No.13A — Works to permanently widen and improve the junction at Bentley Road and the A120, including removal of street furniture, provision of merger lane taper, drainage works including creation of new highway drainage and works of improvement to drainage, creation and improvement of connections to existing drains and watercourses; creation and use of a temporary construction compound and working areas.

Work No. 14 — Installation of up to two buried cable circuits with cable ducts between Work No. 12 from Bentley Road to Work No. 15, approximately 2710 metres; cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits, and cable trenching works; construction of haul roads, temporary construction accesses and working areas and laydown area, creation and improvement of accesses including works to junctions and visibility splays.

Work No. 14A — Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 12A and Work No. 15.

Work No. 14B —The creation of a temporary construction compound to north of the cable corridor, (east of Bentley road), including creation of construction access, construction of a haul road, temporary construction working areas and laydown, and creation and improvement of accesses to the public highway including works to junctions and visibility splays.

Work No. 14C —The creation of a temporary construction compound to north of the cable corridor, (west of Bentley Road), creation of construction access, construction of a haul road, temporary construction working areas and laydown, and creation and improvement of accesses to the public highway including works to junctions and visibility splays.

Work No. 14D —The creation of a temporary construction compound south of the cable corridor west of Bentley Road, and haul road (partly outside the cable corridor) including —

- (a) creation of temporary construction working areas and laydown areas, creation of construction access, construction of a haul road between Bentley road and Work No. 15; and
- (b) creation and improvement of accesses to the public highway including works to junctions, creation of a new temporary bellmouth junction and visibility splays.

Work No. 15 —Substation zone works comprising:

Work No. 15A—

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- (a) land re-profiling and groundworks,;
- (b) security fencing;
- (c) utilities connections;
- (d) temporary and permanent drainage works including alteration of existing drainage, connections to existing drainage and creation of new sustainable drainage including attenuation pond(s);
- (e) temporary and permanent access roads, bellmouth and visibility splays;
- (f) temporary construction areas, lay down areas and haul roads;
- (g) installation of up to two buried cable circuits within cable ducts (if required);
- (h) installation of up to two buried 400 kilovolts cable circuits within cable ducts (if required);
- (i) cable crossings, cable protection, cable ducts, joint bays, trenchless installation technique pit works including the creation of entrance and exit pits and cable trenching works; and
- (j) landscaping works including planting of screening;
- (k) creation of permanent ecological and environmental mitigation works including habitat creation.

Work No 15B — Construction of electrical substation infrastructure including:

- (a) creation of a platform;
- (b) a compound for electrical works necessary for the onward transmission of electricity (the “substation compound”) containing (but not limited to) switchgear and electrical equipment including 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
- (c) permanent security fencing and security gate.

Work No 15C —Landscaping works including,

- (a) re-profiling of ground levels;
- (b) planting of screening; and
- (c) creation of permanent ecological and environmental mitigation works, including habitat creation.

Work No 15D - Groundworks, drainage and planting including;

- (a) utilities connections;
- (b) temporary and permanent drainage works including alteration of existing drainage, connections to existing drainage and creation of new sustainable drainage including attenuation pond(s);
- (c) temporary construction areas, lay down areas and haul roads.

Work No 15E - Installation of cable ducting for two additional circuits for later installation of additional electrical connections between Work No. 14A to a point within Work No. 15 to the east of Work No. 15B.

Work No. 16 — Electrical works to connect to the National Grid substation including;

- (a) works needed 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) installation of up to two buried 400 kilovolts cable circuits with cable ducts (if required) between Work No. 15 and the national grid substation; including cable ducts, trenchless installation technique pit works including the creation of entrance and exit pits and cable trenching works;

- (c) construction of a haul road, temporary construction compound and laydown area; and
- (d) creation of access roads to provide operational and maintenance access.

Work No. 17 — Access routes to provide operational access from the public highways to Work Nos. 3 to 16

In the District of East Suffolk, Suffolk:

Compensatory works for Lesser Black Backed Gull comprising—

Work No 18A — Improvement of existing access, and construction of temporary construction access.

Work No 18B — The installation of predator exclusion fencing and associated monitoring and management equipment for the purposes of Lesser Black Backed Gull compensation, improvement of access, construction of temporary construction access, working areas and laydown areas.

Associated development in connection with Work Nos. 1 to 3:

Any associated development and in connection with Work Nos. 1 to 3 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—

- (a) scour protection around the foundations of the offshore structures;
- (b) cable protection measures such as rock placement and the placement of rock and/or concrete mattresses, with or without frond devices;
- (c) dredging;
- (d) the removal of material from the seabed required for the construction of Work Nos. 1 to 3 and the disposal of inert material of natural origin and/or dredged material within the Order limits produced during construction drilling, and seabed preparation for the installation of the foundations of the offshore structures or during seabed preparation for cable laying;
- (e) creation and use of temporary vessel laydown areas, use of cable anchors;
- (f) removal of static fishing equipment;
- (g) lighting; and
- (h) erection of temporary piled structures during construction

Associated development in connection with Work Nos. 4 to 18B:

Any associated development in connection with Work Nos. 4 to 18B 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—

- (a) 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;
- (b) bunds, embankments, swales, landscaping, fencing and boundary treatments and alteration of groyne;
- (c) provision of temporary and permanent ecological and environmental mitigation, enhancement and compensation works;
- (d) spoil storage and associated control measures;
- (e) jointing bays, link boxes, cable ducts, cable protection, joint protection, manholes, marker posts, underground cable markers, tiles and tape, signage and lighting and other works associated with laying cables and/or pulling cables through cable ducts;

- (f) 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;
- (g) works to alter the position of apparatus, including mains, sewers, drains and cables;
- (h) works to alter the course of, or otherwise interfere with, non-navigable rivers, streams or watercourses;
- (i) landscaping works and habitat creation including installation of bird and bat boxes, creation of hibernacula and reinforcement of existing planting to provide habitat;
- (j) works for the benefit or protection of land affected by the authorised development;
- (k) working sites in connection with the construction of the authorised development, construction lay down areas and compounds and storage compounds;
- (l) works of restoration;
- (m) fencing or other means of enclosure.

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 boreholes and trial pits;
- (b) temporary landing places, moorings or other means of accommodating vessels in the construction and/ or maintenance 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.

SCHEDULE 2

Article 3

Requirements

PART 1

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 Table 1 of Schedule 16 (offshore co-ordinates) and shown as Work No. 1 on sheet 2 of the offshore works plan.

(2) The offshore works must be constructed in accordance with the parameters set out in Table 1.

(3) Any part of Work No.2(c), any associated development or ancillary works located within the Sunk and Trinity Deep Water Routes, as shown shaded yellow on the Deep Water Route Cable Installation Area (Future Dredging depths) plan must be installed and maintained at a level which

would not impede the dredging of those parts of the Sunk and Trinity Deep Water Routes as follows:

- (a) shown shaded in yellow and outlined in a bold black line (and labelled Sunk Area A (22m CD)) to a level of 22 metres below Chart Datum;
- (b) shown shaded in yellow and outlined in a blue dotted line (and labelled Trinity (22m CD)) to a level of 22 metres below Chart Datum; and
- (c) shown shaded in yellow and cross hatched in orange (and labelled Sunk Area B (19m CD)) to a level of 19 metres below Chart Datum.

Table 1

<i>Parameter</i>	<i>Value</i>
Maximum number of wind turbine generators	79
Maximum total rotor swept area (metres squared)	4,194,340
Maximum height of wind turbine generators when measured from LAT to the tip of the vertical blade (metres)	370
Maximum rotor diameter of each wind turbine generator (metres)	340
Minimum distance from MHWS to the lowest point of the rotating blade for each wind turbine generator (metres)	28
Minimum distance between wind turbine generators (in all directions measured from the centre point of each wind turbine generator) (metres)	830
Maximum pile diameter of single pile structures (metres)	15
Maximum pile diameter of three pile structures (metres)	4
Maximum pile diameter of four pile structures (metres)	3.5
Maximum total seabed footprint for wind turbine generators (excluding scour protection) (metres squared)	92,274
Maximum total seabed footprint for wind turbine generators (including scour protection) (metres squared)	834,896
Maximum total scour volume for wind turbine generator foundations (metres cubed)	1,248,850
Maximum total length of inter-array cables (kilometres)	200
Maximum inter-array cable protection area (metres squared)	321,600
Maximum inter-array cable protection volume (metres cubed)	187,600
Maximum number of offshore substations	2
Maximum dimensions of offshore substations: Height when measured from LAT (excluding towers, helipads, mast and cranes) (metres) Length (metres) Topside area (metres squared)	105 125 100
Maximum total seabed footprint for offshore substation platforms (excluding scour protection) (metres squared)	3,700
Maximum total seabed footprint for offshore substation platform foundations (including scour protection) (metres squared)	72,985
Maximum total scour protection volume for offshore substation platforms foundations (metres cubed)	125,450
Maximum total length of export cables (kilometres)	196
Maximum export cable protection area (metres squared)	178,304
Maximum export cable protection volume (metres cubed)	129,691

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 electrical platform to be constructed;
- (e) the latitude and longitude of each wind turbine generator, meteorological mast and offshore electrical platform to be constructed; and

the Defence Infrastructure Organisation Safeguarding must be notified of any changes to the information supplied under this sub-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 must 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 must not be commenced until 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 details provided under sub-paragraph (2) of this requirement.

Onshore substation works, design and landscaping

5.—(1) Construction of Work No. 15B (the onshore electrical substation infrastructure) must not be commenced until details of—

- (a) the layout;
- (b) scale;
- (c) existing and proposed finished ground levels;
- (d) external hard surfacing materials;
- (e) the dimensions, 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;

have been submitted to and approved by the discharging authority.

(2) The details submitted under sub-paragraph (1) of this requirement must be in accordance with sub-paragraph (4) and substantially in accordance with the onshore substation design principles document, with the exception of the design review process set out in section 2.3 “design review process” thereof and any design guide. The design review process must accord with sub-paragraph (3) of this requirement.

(3) The details submitted under sub-paragraph (1) of this requirement must not be submitted to the discharging authority for approval prior to an independent design review panel reviewing the details and making any written recommendations to the undertaker about those details. Any recommendations received by the undertaker from the independent design review panel must accompany the details submitted to the discharging authority for approval under sub-paragraph (1) of this requirement.

(4) In relation to Work No. 15B —

- (a) the highest part of any building, any external electrical equipment or enclosure, excluding lightning rods, must not exceed 15 metres above finished ground level (50.775 metres Ordnance Datum);
- (b) the total area of the fenced compound (excluding its accesses) must not exceed 58,800 metres squared; and
- (c) the lightning rods within the fenced compound area must not exceed a height of 18 metres above finished ground level (53.775 metres Ordnance Datum);

(5) Work No. 15B must be carried out in accordance with the details approved under sub-paragraph (1).

(6) Work No. 15B must not be commenced until a written landscaping scheme and associated works programme in accordance with the outline landscape and ecological management plan for Work No. 15 has been submitted to and approved by the discharging authority.

(7) The written landscaping scheme to be submitted under sub-paragraph (5) 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.15.

(8) The landscaping of Work No.15 must be carried out in accordance with the details approved details under sub-paragraph (5).

(9) The landscaping of Work No.15 must be maintained throughout the operation of Work No.15B.

Code of construction practice

6.—(1) The onshore works must not be commenced until a final version of a code of construction practice, has been submitted to and approved by the discharging authority.

(2) The code of construction practice submitted under sub-paragraph (1) must be substantially in accordance with application document number 9.21 Revision E certified under this Order.

(3) The onshore works must be carried out in accordance with the approved final version of the code of construction practice.

Traffic and access plans

7.—(1) No stage of the onshore works may be commenced until for that stage the following plans have been submitted to and approved by the discharging authority;

- (a) construction traffic management plan;
- (b) workforce travel plan; and
- (c) public access management plan.

(2) The plans submitted under sub-paragraph (1) must be substantially in accordance with the outline plans certified under this Order.

(3) The onshore works must be carried out in accordance with the approved plans as applicable in each stage.

Permanent highway accesses

8.—(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 highway authority.

(2) Any new permanent means of access to a highway or any permanent alteration to an existing means of access must be constructed in accordance with the details approved under sub-paragraph (1).

Onshore archaeology

9.—(1) Geoarchaeological and archaeological evaluation and mitigation must be carried out in accordance with the archaeological mitigation strategy.

(2) No stage of the onshore works may be commenced until, for that stage, a geo-archaeological and archaeological written scheme(s) of investigation in accordance with the outline onshore written scheme of investigation as appropriate for the relevant stage has been submitted to and approved by the discharging authority.

(3) The onshore works must be carried out in accordance with the approved geo-archaeological and archaeological 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 a geo-archaeological and written scheme(s) of investigation in accordance with the outline onshore written scheme of investigation as appropriate has been submitted to and approved by the discharging authority. The geo-archaeological and archaeological written scheme(s) of investigation required under this sub-paragraph must be implemented as approved.

(5) The geo-archaeological and 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.

Landscape and Ecological management plan

10.—(1) No stage of the onshore works may commence until for that stage a written landscape and ecological management plan in accordance with the outline landscape and ecological management plan as appropriate for the relevant stage, has been submitted to and approved by the discharging authority.

(2) The landscape and ecological management plan(s) submitted under sub-paragraph (1) must include an implementation timetable.

(3) The onshore works must be carried out in accordance with the landscape and ecological management plans approved under sub-section (1), as applicable in each stage.

(4) Onshore site preparation works must only take place in accordance with the relevant details set out in the outline landscape and ecological management plan as certified.

Soil Management Plan

11.—(1) No stage of the onshore works may be commenced until, for that stage, a soil management plan substantially in accordance with the measures included in application document number 9.21 Revision E certified under this Order, as appropriate for the relevant stage, has been submitted to and approved by the discharging authority.

(2) The onshore works must be carried out in accordance with the approved soil management plan(s) as applicable in each stage.

Protected species onshore

12.—(1) No stage of the onshore works other than surveying and investigation necessary to comply with this requirement may be undertaken until, for that stage, pre-construction survey work has been carried out to establish whether a European protected species or nationally protected species under the Wildlife and Countryside Act 1981(a) is present on any of the land affected, or likely to be affected, by any part of that stage of the onshore works.

(2) The compensatory works other than surveying and investigation necessary to comply with this requirement may not be undertaken until, for those works, pre-construction survey work has been carried out to establish whether a European protected species or nationally protected species under the Wildlife and Countryside Act 1981 is present on any of the land affected, or likely to be affected, by any part of the compensatory works.

(3) Where a European protected species or nationally protected species under the Wildlife and Countryside Act 1981 is shown to be present, the stage of the onshore works or compensatory works likely to affect the species must not be commenced until a scheme of protection and mitigation measures for that stage has been submitted to and approved by the discharging authority in the case of the onshore works, or the relevant planning authority in the case of compensatory works.

(4) Each stage of the onshore works or the compensatory works which requires a scheme of protection and mitigation measures in accordance with sub-paragraph (3) of this requirement must be carried out in accordance with the approved scheme as applicable in each stage.

(5) 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.

Ground water monitoring

13.—(1) No stage of the onshore works for which a groundwater monitoring plan is required in accordance with the outline groundwater monitoring plan, must be commenced until, for that stage a groundwater monitoring plan has been submitted to and approved by the discharging authority

(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

14. Subject to requirement 19(4), any land which is used temporarily for the construction of the onshore works and not ultimately incorporated into permanent works or approved landscaping, must be reinstated within twelve months of the completion of the relevant stage of the onshore works or such other time period as may be agreed in writing with the discharging authority.

Control of noise during operational stage

15.—(1) The noise rating level for the standard operation of Work No. 15B (the onshore electrical substation) must not exceed;

- (a) 32decibel LAr,Tr at any time at a free field location immediately adjacent to the following noise sensitive locations—
 - (i) Waterhouse Farm (Grid reference 607256 228374);
 - (ii) Lilleys Farm (Grid reference 607731 227827); and
- (b) 31 decibel LAr,Tr at any time at a free field location immediately adjacent to Normans Farm (Grid reference 608446 228492).

(2) Prior to commencement of operation of Work 15B, a noise investigation protocol must be submitted to and approved by the discharging authority.

(a) 1981 c69
WORK\56135812\w.2

(3) The determination of LAr,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 strategy

16.—(1) The onshore works and offshore works other than Works Nos. 13, 13A, 18A and 18B must not be commenced until a skills and employment strategy, substantially in accordance with the outline skills and employment strategy has been submitted to and approved by the discharging authority.

(2) The skills and employment strategy must be implemented in accordance with the approved details.

Onshore build options

17.—(1) Subject to sub-paragraph (2), the undertaker may commence in relation to only: (a) build option 1; or (b) build option 2.

(2) Other than works 13 and 13A, the onshore works must not commence until notification has been submitted to the discharging authority as to whether the undertaker intends to commence build option 1 or build option 2.

(3) In the event that the undertaker notifies under sub-paragraph (1) that build option 2 is to be implemented, the width (being measured at 90 degrees to the orientation of the cables within each work) of each of Works Nos 4, 5, 6, 7, 8, 9, 10, 11 and 12 must not exceed 45 metres and Work No. 14, when including Work No.14D, must not exceed 60 metres; except:

- (a) where trenchless techniques are to be used to install the cables, where the width must not exceed 90 metres;
- (b) as necessary to create a transitional (tapered) area between the width for the trenched installation and the width for the trenchless installation compounds, to such extent as is necessary to properly space out the cables approaching the trenchless installation compound, up to the maximum width of the trenchless installation compound concerned in each relevant location; or
- (c) where necessary to provide connections to accesses, haul routes and temporary construction compounds as authorised by Schedule 1 where the width may extend to that necessary to effect the connection required.

Compensatory Works

18.—(1) The compensatory works must not be commenced under this Order until details of—

- (a) vehicular and pedestrian access for construction; and
- (b) a construction method statement,

have been submitted to and approved by the relevant planning authority.

(2) The compensatory works must be carried out in accordance with the approved details.

Reuse of temporary works with the onshore works for North Falls

19.—(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 North Falls are proposed to be reused by the undertaker in connection with the authorised development, such reuse must not be commenced until a scheme which accords with sub-paragraph (2) has been submitted to and approved by the discharging authority.

(2) The 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 and restoration or reinstatement.

(3) Any scheme approved under paragraph (2) must be implemented as approved.

(4) Where in the event that any temporary works which have been constructed as part of the onshore works pursuant to this Order are to be subsequently used for the purposes of the construction of North Falls, the undertaker will not be required to maintain, restore or reinstate any such temporary works.

Biodiversity net gain

20.—(1) Work No. 15 must not be commenced until a net gain strategy has been submitted to and approved by the discharging authority.

(2) The net gain strategy must be implemented as approved.

Offshore decommissioning

21. 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.

Onshore decommissioning

22.—(1) A written scheme of decommissioning for the onshore works must be submitted to and approved by the discharging authority not less than six months prior to any decommissioning works commencing.

(2) The written scheme of decommissioning submitted for approval under sub-paragraph (1) for the onshore works must include a code of construction practice.

(3) The scheme approved under sub-paragraph (1) must be implemented as approved in the carrying out of any decommissioning works or relevant part of it.

Migratory bat monitoring

23. The offshore works must not be commenced until a scheme for monitoring the migration of bats between the United Kingdom and the European mainland has been submitted to and approved by the Secretary of State in consultation with Natural England. Thereafter the monitoring of migratory bats must be undertaken in accordance with the approved monitoring scheme.

Requirement for written approval

24. Where under any of the above requirements the approval or agreement of the Secretary of State, the discharging authority or the relevant planning authority is necessary, that approval or agreement must be given in writing.

Amendments to approved details

25. With respect to any requirement which requires the authorised development to be carried out in accordance with the details approved under this Schedule, the approved details are taken to

include any amendments that may subsequently be approved or agreed by the Secretary of State, the discharging authority, or the relevant planning authority.

PART 2

Approval of matters specified in requirements

Interpretation

1. In this Part of this Schedule “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

2.—(1) Where an application has been made to the discharging authority or the relevant planning authority for any agreement or approval required pursuant to a requirement included in this Order, the discharging authority or relevant planning 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 the relevant planning authority;
- (b) such longer period as may be agreed by the undertaker and the discharging authority or the relevant planning authority.

(2) In determining any application made to the discharging authority or relevant planning authority for any consent, agreement or approval required by a requirement contained in Part 1 of Schedule 2 of this Order, the discharging authority or relevant planning 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 where consent, agreement or approval is refused or granted subject to conditions the discharging authority or relevant planning authority must provide its reasons for that decision with the notice of the decision.

(3) With the exception of Requirements 5, 12 and 18, in the event that the discharging authority or relevant planning authority does not determine an application within the period set out in sub-paragraph (1), the discharging authority or relevant planning authority is to be taken to have granted all parts of the application (without any condition or qualification) at the end of that period.

(4) With respect to Requirements 5, 12 and 18, where an application has been made to the discharging authority or relevant planning authority for any agreement or approval required pursuant to those requirements and the discharging authority or the relevant planning authority has not given notice to the undertaker of their decision within the period set out in sub-paragraph (1), within a period of 8 weeks or by the conclusion of such period as may be extended by agreement under sub-paragraph (1)(b), then the application shall be deemed to have been refused consent.

Further information

3.—(1) Where an application has been made under paragraph 2 the discharging authority or the relevant planning 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 or the relevant planning 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 or the relevant planning authority must issue the consultation to the requirement consultee within five days of receipt of the application. Where the consultee requires further information they must notify the discharging authority or relevant planning authority in writing specifying the further information required within 14 days of receipt of the consultation. The discharging authority or the relevant planning 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 or the relevant planning 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

4.—(1) Any consultee who receives a consultation under paragraph 3(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 3(3) then they must respond to the consultation within ten working days from the receipt of the further information requested.

Fees

5.—(1) Where an application is made to the discharging authority or the relevant planning authority for agreement or approval in respect of a requirement the fee for the discharge of conditions as specified in Regulation 16(1)(b) of the (a) (as may be amended from time to time) is to be paid by the undertaker to the discharging authority or the relevant planning authority in accordance with these regulations unless a bespoke arrangement has been agreed between the undertaker and discharging authority or the relevant planning authority, and legally secured.

Appeal

6.—(1) The undertaker may appeal in the event that—

- (a) The discharging authority or the relevant planning authority refuses an application, including any deemed refusal of consent under paragraph 2(4), for any consent, agreement or approval required by a requirement included in this Order or grants it subject to conditions; or
- (b) The discharging authority or the relevant planning authority fails to determine any application within the time period specified in paragraph 2.

(2) Any appeal by the undertaker must be made within 42 days of the date of the notice of the decision or determination, or (where no determination has been made) the expiry of the time period set out in paragraph 2(1), giving rise to the appeal referred to in sub-paragraph (1);

(3) 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 or the relevant planning 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 (3);

- (c) the discharging authority or the relevant planning 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 (3)(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 20 working days of the deadline for the receipt of counter-submissions pursuant to sub-paragraph (3)(d).

(4) The appointment of the person pursuant to sub-paragraph (3)(b) may be undertaken by a person appointed by the Secretary of State for this purpose instead of by the Secretary of State.

(5) 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 (3).

(6) Any further information required under sub-paragraph (5) must be provided by the appeal party from whom the further information was requested to the appointed person and the other appeal parties 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 (3)(c) to (3)(e).

(7) 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 or the relevant planning authority (whether the appeal relates to that part of it or not); and
- (c) may deal with the application as if it had been made to the appointed person in the first instance.

(8) 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.

(9) 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.

(10) 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.

(11) 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 1 of Schedule 2 (requirements) as if it had been given by the discharging authority or the relevant planning authority.

(12) Save where a direction is given pursuant to sub-paragraph (13) requiring the costs of the appointed person to be paid by the discharging authority or the relevant planning authority, the reasonable costs of the appointed person must be met by the undertaker.

(13) On application by the discharging authority or the relevant planning 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 3

Article 10

Streets subject to street works

In the District of Tendring:

<i>(1) Street</i>	<i>(2) Extent as shown on the street works and access plan</i>
Holland Haven Country Park car park access road	Between points labelled AA and AB on sheet 1
Access behind the seawall	Between points labelled AC and AD on sheets 1 and 2
Short Lane	Between points labelled AE and AF on sheets 2 and 3
Short Lane	Between points labelled AG and AH on sheets 2 and 3
Access track between Manor Farm and Short Lane	Between points labelled AI and AJ on sheets 3 and 4
B1032, Clacton Road	Between points labelled AK and AL on sheet 3 and 4
Little Clacton Road	Between points labelled AM and AN on sheet 4
B1033, Thorpe Road	Between points labelled AO and AP on sheet 6
B1034, Sneating Hall Lane	Between points labelled AQ and AR on sheets 6 and 7
Damant's Farm Lane	Between points labelled AS and AT on sheet 7
B1414, Landemere Road	Between points labelled AU and AV on sheet 8
Golden Lane	Between points labelled AW and AX on sheet 8
Access track from Golden Lane	Between points labelled AY and AZ on sheet 8
B1035, Tendring Road	Between points labelled BA and BB on sheet 9
B1035, Tendring Road	Between points labelled BC and BD on sheet 9
Swan Road	Between points labelled BE and BF on sheet 9
B1035, Thorpe Road	Between points labelled BG and BH on sheet 9
Access track from Lodge lane	Between points labelled BI and BJ on sheet 10
Lodge Lane	Between points labelled BK and BL on sheet 10
Wolves Hall Lane	Between points labelled BM and BN on sheet 11
Stones Green Road	Between points labelled BO and BP on sheets 11 and 12
B1035	Between points labelled BQ and BR on sheets 12
Access track to Wix Farms from B1035	Between points labelled BS and BT on sheet 12
Access track to Wix Farms from Colchester Road	Between points labelled BU and BV on sheet 12
B1035	Between points labelled BW and BX on sheet 12
Access track to Wix Farms from A120	Between points labelled BY and BZ on sheet 12 and 13
A120	Between points labelled CA and CB on sheets 12 and 13
Access track to A120 from Bradfield Lodge	Between points labelled CC and CD on sheet 13
B1035, Clacton Road	Between points labelled CE and CF on sheet 13
A120, Pelhams Corner	Between points labelled CG and CH on sheet 15
Bentley Road	Between points labelled CI and CJ on sheets 14 and 15
Payne's Lane	Between points labelled CK and CL on sheets 14, 15 and 16
Spratts Lane	Between points labelled CM and CN on sheet 16
Barlon Road	Between points labelled CO and CP on sheet 16 and 17
Access track from Barlon Road to Carrington Road	Between points labelled CQ and CR on sheet 16 and 17

Access track to Cattisgreen Farm	Between points labelled CS and CT on sheet 17 and 18
Ardleigh Road	Between points labelled CU and CV on sheet 17 and 18
Grange Road	Between points labelled CW and CX on sheet 17 and 18

SCHEDULE 4 Article 12, 13, 14, 16, 17

Traffic Regulation

PART 1

Streets to be temporarily restricted

In the District of Tendring:

<i>(1) Street or right of way to be temporarily closed or restricted</i>	<i>(2) Extent of temporary restriction</i>
Holland Haven Country Park car park access road	Between points labelled AA and AB on sheet 1
Access behind the seawall	Between points labelled AC and AD on sheets 1 and 2
Short Lane	Between points labelled AE and AF on sheets 2 and 3
Short Lane	Between points labelled AG and AH on sheets 2 and 3
Access track between Manor Farm and Short Lane	Between points labelled AI and AJ on sheets 3 and 4
B1032, Clacton Road	Between points labelled AK and AL on sheet 3 and 4
Little Clacton Road	Between points labelled AM and AN on sheet 4
B1033, Thorpe Road	Between points labelled AO and AP on sheet 6
B1034, Sneating Hall Lane	Between points labelled AQ and AR on sheets 6 and 7
Damant's Farm Lane	Between points labelled AS and AT on sheet 7
B1414, Landemere Road	Between points labelled AU and AV on sheet 8
Golden Lane	Between points labelled AW and AX on sheet 8
Access track from Golden Lane	Between points labelled AY and AZ on sheet 8
B1035, Tendring Road	Between points labelled BA and BB on sheet 9
B1035, Tendring Road	Between points labelled BC and BD on sheet 9
Swan Road	Between points labelled BE and BF on sheet 9
B1035, Thorpe Road	Between points labelled BG and BH on sheet 9
Access track from Lodge lane	Between points labelled BI and BJ on sheet 10
Lodge Lane	Between points labelled BK and BL on sheet 10
Wolves Hall Lane	Between points labelled BM and BN on sheet 11
Stones Green Road	Between points labelled BO and BP on sheets 11 and 12
B1035	Between points labelled BQ and BR on sheets 12
Access track to Wix Farms from B1035	Between points labelled BS and BT on sheet 12
Access track to Wix Farms from Colchester Road	Between points labelled BU and BV on sheet 12
B1035	Between points labelled BW and BX on sheet 12
Access track to Wix Farms from A120	Between points labelled BY and BZ on sheet 12 and 13
A120	Between points labelled CA and CB on sheets 12 and 13
Access track to A120 from Bradfield Lodge	Between points labelled CC and CD on sheet 13
B1035, Clacton Road	Between points labelled CE and CF on sheet 13
A120, Pelhams Corner	Between points labelled CG and CH on sheet 15

Bentley Road	Between points labelled CI and CJ on sheets 14 and 15
Payne's Lane	Between points labelled CK and CL on sheets 14, 15 and 16
Spratts Lane	Between points labelled CM and CN on sheet 16
Barlon Road	Between points labelled CO and CP on sheet 16 and 17
Access track from Barlon Road to Carrington Road	Between points labelled CQ and CR on sheet 16 and 17
Access track to Cattisgreen Farm	Between points labelled CS and CT on sheet 17 and 18
Ardleigh Road	Between points labelled CU and CV on sheet 17 and 18
Grange Road	Between points labelled CW and CX on sheet 17 and 18

PART 2

Rights of way to be temporarily closed or restricted

In the District of Tendring:

<i>(1) Street or right of way to be temporarily closed or restricted</i>	<i>(2) Extent of temporary closure or restriction</i>
FP29 167	Between points Ax and Ay as shown on sheets 1 and 2 of the temporary closure of public rights of way plan
FP6 164	Between points Bx and By as shown on sheet 4 of the temporary closure of public rights of way plan
FP38 164	Between points Cx and Cy as shown on sheet 4 of the temporary closure of public rights of way plan
FP11 164	Between points Dx and Dy as shown on sheet 4 of the temporary closure of public rights of way plan
FP13 180	Between points Ex and Ey as shown on sheet 7 of the temporary closure of public rights of way plan
FP7 180	Between points Fx and Fy as shown on sheet 8 of the temporary closure of public rights of way plan
FP4 180	Between points Gu and Gv, Gw to Gx and Gy to Gz as shown on sheet 8 of the temporary closure of public rights of way plan
FP3 180	Between points Hw and Hx and Hy to Hz as shown on sheets 8 and 9 of the temporary closure of public rights of way plan
FP1 180	Between points Ix and Iy as shown on sheet 9 of the temporary closure of public rights of way plan
FP18 180 and FP 18 159	Between points Jx and Jy as shown on sheet 9 of the temporary closure of public rights of way plan
FP22 179 and FP17 179	Between points Lw and Lx and Ly to Lz as shown on sheet 10 of the temporary closure of public rights of way plan
FP8 179	Between points Mw to Mx and My to Mz as shown on sheets 10 and 11 of the temporary closure of public rights of way plan
FP25 179	Between points Nx and Ny as shown on sheet 11 of the temporary closure of public rights of way plan
FP1 179	Between points Ox and Oy as shown on sheet 11 of the temporary closure of public rights of way plan
FP31 183	Between points Px and Py as shown on sheet 12 of the temporary closure of public rights of way plan
FP37 183	Between points Qx and Qy as shown on sheet 12 of the temporary closure of public rights of way plan
FP32 183	Between points Rx and Ry as shown on sheet 12 of the temporary closure of public rights of way plan

FP15 183	Between points Sx and Sy as shown on sheet 12 of the temporary closure of public rights of way plan
FP17 172	Between points Tx and Ty as shown on sheet 16 of the temporary closure of public rights of way plan
FP16 172	Between points Ux and Uy as shown on sheets 16 and 17 of the temporary closure of public rights of way plan
FP15 172	Between points Vx and Vy as shown on sheets 17 and 18 of the temporary closure of public rights of way plan

PART 3

Traffic regulation orders not applicable to the undertaker

<i>(1) Area</i>	<i>(2) Road</i>	<i>(3) Title of order</i>	<i>(4) Extent of exception</i>
District of Tendring	A120	The A120 Trunk Road (Little Bentley, Essex) (Closure of Gap in the Central Reservation) Order 2019(a)	All abnormal or oversize vehicles used for or in connection with the construction, maintenance or decommissioning of the authorised development, and any escort vehicles accompanying the abnormal or oversized vehicle turning into Bentley Road from the A120 trunk road.

PART 4

Speed limits

<i>(1) Area</i>	<i>(2) Road name, number, and length</i>	<i>(3) Speed limit</i>
District of Tendring	B1033 (Thorpe Road / Frinton Road) for a distance of 1.4 kilometres shown with a dashed line on sheet 1 on the Temporary Speed Reduction Plans	40 miles per hour
District of Tendring	Golden Lane for a distance of 1 kilometres shown with a dashed line on sheet 2 of the Temporary Speed Reduction Plans	40 miles per hour
District of Tendring	B1035 Thorpe Road/Tendring Road/Swan Road/Whitehall Road for a distance of 1.4 kilometres shown with a dashed line on sheet 3 of the Temporary Speed Reduction Plans	40 miles per hour

District of Tendring	B1035 (Clacton Road) for a distance of 0.5 kilometres as shown with a dashed line on sheet 4 on the Temporary Speed Reduction Plans	40 miles per hour
District of Tendring	Bentley Road, for a distance of 1.6 kilometres shown with a dashed line on sheets 5 and 6 of the Temporary Speed Reduction Plans	40 miles per hour
District of Tendring	Ardleigh Road, for a distance of 1.2 kilometres shown with a dashed line on sheet 7 of the Temporary Speed Reduction Plans	30 miles per hour

SCHEDULE 5

Article 15

Access to works

In the District of Tendring:

<i>(1) Reference as shown on the street works and access plan</i>	<i>(2) Description of new access</i>
AC-0	Temporary access from the Holland Haven Country Park car park access road to temporary works during construction as shown on sheet 1 of the street works and access plan.
AC-1	Temporary access from the public highway B1032 Clacton Road, for access to temporary works during construction as shown on sheet 3 of the street works and access plan.
AC-2	Temporary access from the public highway B1032 Clacton Road, for access to temporary works during construction as shown on sheet 3 of the street works and access plan.
CR-1	For access across the public highway, Little Clacton Road, Great Holland during construction, as shown on sheet 4 of the street works and access plan.
AC-3A	Temporary access from the public highway B1033 Thorpe Road, for access to temporary works during construction as shown on sheet 6 of the street works and access plan.
AC-3B	Temporary access from the public highway B1033 Thorpe Road, for access to temporary works during construction as shown on sheet 6 of the street works and access plan.
CR-2	For access across the public highway, B1034 Sneating Hall Lane, Thorpe Cross during construction, as shown on sheets 6 and 7 of the street works and access plan.
CR-3	For access across the public highway, Damant's Farm Lane, Thorpe Cross during construction, as shown on sheet 7 of the street works and access plan.
CR-4	For access across the public highway, B1414, Landemere Road during construction, as shown on sheets 7 and 8 of the street works and access plan.
CR-5	For access across the public highway, Golden Lane, Thorpe Green during construction, as shown on sheet 8 of the street works and access plan

AC-4	From the public highway B1035, Tendring Road, for access to temporary works during construction and operational access, as shown on sheet 9 of the street works and access plan
AC-5	From the public highway B1035 Thorpe Road, for access to temporary works during construction as shown on sheet 9 of the street works and access plan
AC-6	From the public highway B1035 south of A120 and existing farm access track, for access to temporary works during construction as shown on sheet 12 of the street works and access plan
CR-6	For access across the public highway, Lodge Lane, Tendring Lodge during construction, as shown on sheet 10 of the street works and access plan
CR-7	For access across the public highway, Wolves Hall Lane, Tendring Green during construction, as shown on sheet 11 of the street works and access plan
CR-8A and 8B	For access across the public highway, Stones Green Road, Tendring Heath during construction, as shown on sheet 12 of the street works and access plan
AC-7	From the public highway B1035 south of A120, for access to temporary works during construction as shown on sheets 12 and 13 of the street works and access plan
AC-8A	From the public highway B1035 Clacton Road, for access to temporary works during construction as shown on sheet 13 of the street works and access plan
AC-8B	From the public highway B1035 Clacton Road, for access to temporary works during construction as shown on sheet 13 of the street works and access plan
AC-9	From the public highway west of Bentley Road, for access to temporary works during construction as shown on sheets 14 and 15 of the street works and access plan
AC-10	From the public highway east of Bentley Road, for access to temporary works during construction as shown on sheets 14 and 15 of the street works and access plan
AC-11	From the public highway west of Bentley Road, for access to temporary works during construction as shown on sheets 14 and 15 of the street works and access plan
CR-9 and 9A	For access across the public highway, Payne's Lane, Little Bromley during construction, as shown on sheets 14, 15 and 16 of the street works and access plan
CR-10 and 10A	For access across the public highway, Spratts Lane, Little Bromley during construction, as shown on sheet 16 of the street works and access plan
CR-11 and 11A	For access across the public highway, Barlon Road, Little Bromley during construction, as shown on sheets 16 and 17 of the street works and access plan
AC-12, AC-12A and CR12	From and across the public highway Ardleigh Road, for access to works during construction and operation as shown on sheets 17 and 18 of the street works and access plan
AC13	From and across the public highway Ardleigh Road, for access to works during construction and operation as shown on sheets 17 and 19 of the street works and access plan

SCHEDULE 6

Article 31

Land of which temporary possession may be taken

In the District of Tendring:

<i>(1) Number of plot shown on land plans (onshore)</i>	<i>(2) Purpose for which temporary possession may be taken</i>	<i>(3) Relevant part of authorised development</i>
01-001, 01-002	Temporary use for access to facilitate construction of the authorised development	Work Nos. 2A, 3, 4, 4B, 5, 5A, 6, 6a and 17
01-003	Temporary use as a construction compound (Work No 4B) and construction working area to facilitate construction of the authorised development	Work Nos. 2A, 3, 4, 4B, 5, 5A, 6, 6a and 17
01-004, 01-005, 01-006	Temporary use for access to facilitate construction of the authorised development	Work Nos. 2A, 3, 4, 4B, 5, 5A, 6, 6A and 17
03-002	Temporary use as a construction compound (Work No 6B) and construction working area to facilitate construction of the authorised development	Work Nos. 5, 5A, 6, 6A, 6B, 7, 7A, 7C, 7D, 7E, 8, 8A and 17
03-004, 03-004A, 03-006	Temporary use for access to facilitate construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 5, 5A, 6, 6A, 6B, 7, 7A, 7C, 7D, 7E, 8, 8A and 17
03-008, 03-009, 03-010	Temporary use for access to facilitate construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 5, 5A, 6, 6A, 7, 7A, 7B, 7C, 7D, 7E, 8, 8A and 17
03-012	Temporary use as a construction compound (Work No 7B) and construction working area to facilitate construction of the authorised development	Work Nos. 5, 5A, 6, 6A, 7, 7A, 7B, 7C, 7D, 7E, 8, 8A and 17
04-005, 04-006	Temporary use as a haul route (Work No. 7C) and construction working area to facilitate construction of the authorised development	Work Nos. 6, 6A, 7, 7A, 7B, 7C, 7D, 7E, 8, 8A and 17
04-008, 04-009, 04-010, 04-011, 04-012, 04-013	Temporary use as a haul route (Work No. 7D) and construction working area to	Work Nos. 6, 6A, 7, 7A, 7B, 7C, 7D, 7E, 8, 8A and 17

	facilitate construction of the authorised development	
05-007, 05-008, 05-010, 05-011	Temporary use as a haul route (Work No. 7E) and construction working area to facilitate construction of the authorised development	Work Nos. 6, 6A, 7, 7A, 7B, 7C, 7D, 7E, 8, 8A and 17
05-021, 05-022, 05-023	Temporary use as a haul route (Work No. 8C) and construction working area to facilitate construction of the authorised development	Work Nos. 7, 7A, 8, 8A, 8B and 17
06-002	Temporary use for access to facilitate construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A and 17
06-005, 06-007	Temporary use as a construction compound (Work No. 8B) and construction working area to facilitate construction of the authorised development	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A and 17
06-008, 06-009	Temporary use for access to facilitate construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9, 10, 10A and 17
07-002, 07-003, 07-005, 07-006	Temporary use as a haul route (Work No. 9C) and construction working area to facilitate construction of the authorised development	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B and 17
07-009, 07-010	Temporary use as a haul route (Work No. 9D) and construction working area to facilitate construction of the authorised development	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B and 17
07-012, 08-003, 08-004, 08-005, 08-007	Temporary use as a haul route (Work No. 9E) and construction working area to facilitate construction of the authorised development, including improvement and temporary maintenance of visibility splays	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B and 17
08-001	Temporary use to facilitate access for construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B and 17

08-024, 08-025	Temporary use as a haul route (Work No. 9F) and construction working area to facilitate construction of the authorised development	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B and 17
09-002, 09-004	Temporary use to facilitate access for construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B, 10C and 17
09-003, 09-005	Temporary use as a construction compound (Work No. 9B) and construction working area to facilitate construction of the authorised development	Work Nos. 8, 8A, 8B, 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B, 10C and 17
09-015, 09-016, 09-018, 09-019	Temporary use as a construction compound (Work No. 10B) and construction working area to facilitate construction of the authorised development	Work Nos 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B, 10C, 11 11A and 17
10-004, 10-005, 10-006, 10-007	Temporary use as a haul route (Work No. 10C) and construction working area to facilitate construction of the authorised development	Work Nos 9, 9A, 9B, 9C, 9D, 9E, 9F, 10, 10A, 10B, 10C, 11 11A and 17
11-013	Temporary use as a haul route (Work No. 11C) and construction working area to facilitate construction of the authorised development	Work Nos.10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17
11-014	Temporary use as a haul route (Work No. 11D) and construction working area to facilitate construction of the authorised development	Work Nos.10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17
11-015, 11-016	Temporary use as a haul route (Work No. 11C) and construction working area to facilitate construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos.10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17
11-017	Temporary use as a haul route (Work No. 11D) and construction working area to facilitate construction of the authorised development	Work Nos.10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17
12-001	Temporary use to facilitate access for construction of the authorised development including improvement and	Work Nos.10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17

	temporary maintenance of visibility splays	
12-002	Temporary use as a haul route (Work No. 11D) and construction working area to facilitate construction of the authorised development	Work Nos. 10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17
12-003	Temporary use as a haul route (Work No. 11C) and construction working area to facilitate construction of the authorised development	Work Nos.10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17
12-006, 12-007	Temporary use as a construction compound (Work No. 11B), construction working area, and haul route to facilitate construction of the authorised development	All onshore works
12-008, 12-009, 12-010, 12-011	Temporary use to facilitate access for construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos.10, 10A, 10B, 10C, 11 11A, 11B, 11C, 11D, 12, 12A and 17
13-009	Temporary use as a construction compound (Work No. 12B) and construction working area, and haul route to facilitate construction of the authorised development	Work Nos. 11 11A, 11B, 11C, 11D, 12, 12A, 13, 13A, 14, 14A, 15, 16 and 17
13-010, 13-012, 13-013, 13-014, 13-015, 13-016,	Temporary use as a construction compound (Work No. 12C), construction working area, and haul route to facilitate construction of the authorised development, including improvement and temporary maintenance of visibility splays	Work Nos. 11 11A, 11B, 11C, 11D, 12, 12A, 13, 13A, 14, 14A, 15, 16 and 17
13-017	Temporary use as a construction compound (Work No. 14B) and construction working area, and haul route to facilitate construction of the authorised development,	Work Nos. 12, 12A, 13, 13A, 14, 14A, 14B, 14C, 14D, 15, 16 and 17
14-006	Creation use and restoration of a public non-motorised user path	Work Nos. 12, 12A, 13, 13A, 14, 14A, 14B, 14C, 14D, 15, 16 and 17
14-014, 14-015	Temporary use to facilitate access for construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 12, 12A, 13, 13A, 14, 14A, 14B, 14C, 14D, 15, 16 and 17

14-018, 14-019, 14-021, 14-022, 14-023, 14-024	Creation, use and restoration of a public non-motorised user path	Work Nos. 12, 12A, 13, 13A, 14, 14A, 14B, 14C, 14D, 15, 16 and 17
14-035, 14-036	Temporary use as a construction compound (Work No. 14C) and construction working area, and haul route to facilitate construction of the authorised development	Work Nos. 13 and 13A
15-012, 15-015, 15-016, 15-017, 15-018, 15-019, 15-020, 15-021, 15-022	Creation, use and restoration of a public non-motorised user path	Work Nos. 14, 14A, 14B, 14C, 14D and 17
16-017	Temporary use as a construction compound and construction working area to facilitate construction of the authorised development, including improvement and temporary maintenance of visibility splays. Creation, use and restoration of a public non-motorised user path	Work Nos. 14, 14A, 14B, 14C, 14D, 15, 15A, 15B, 15C, 15D, 15E, 16 and 17
17-003	Temporary use for the purposes of carrying out Work Nos. 13 and 13A	Work Nos. 14, 14A, 14B, 14C, 14D, 15, 15A, 15B, 15C, 15D, 15E, 16 and 17
17-012, 17-013, 17-014	Temporary use to facilitate access for construction of the authorised development including improvement and temporary maintenance of visibility splays	Work Nos. 2A, 3, 4, 4B, 5, 5A, 6, 6a and 17

SCHEDULE 7

Article 24

Land in which only new rights etc. may be acquired

In the District of Tendring:

<i>(1) Number of plot shown on land plans (onshore)</i>	<i>(2) Purpose for which rights may be acquired</i>
01-007 01-008 01-009 01-010 01-011 01-012 02-001 02-001A 02-004 02-005 02-008 02-009 02-010 03-001 03-003	Cable rights and restrictive covenants Cable 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

03-011	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, existing infrastructure, 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 sea defences, watercourses, existing infrastructure, 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, including the right 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 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; (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 ducting, electrical infrastructure and cables, 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
03-014	
04-001	
04-003	
04-004	
04-007	
04-020	
05-001	
05-002	
05-013	
05-019	
05-020	
05-024	
06-010	
06-011	
06-017	
07-007	
07-011	
08-008	
08-011	
08-012	
08-013	
08-014	
08-019	
08-020	
08-021	
08-022	
08-026	
09-008	
09-010	
09-013	
09-014	
09-017	
09-020	
09-024	
10-001	
10-010	
10-011	
10-013	
11-001	
11-006	
11-008	
11-009	
11-012	
12-004	
12-013	
13-007	
13-008	
13-022	
13-023	
14-001	
14-004	
14-030	

14-031	including trenchless installation technique compounds and working areas;
14-037	
14-038	(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 is being carried out;
14-039	
14-040	
14-041	
14-044	
14-045	
14-046	
16-004	(k) effect access and egress to and from the highway;
16-008	(l) make such investigations in or on the Land as required;
16-009	(m) alter, fell, lop or cut, coppice wood, uproot, replant trees, hedges, 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;
16-012	
16-013	
16-014	
16-020	(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;
16-021	
17-001	(o) 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 and providing connection to the authorised development);
17-002	
17-010	(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);
17-011	(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 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; (w) 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; 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 base, substructure 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 (such consent not to be unreasonably held or delayed) save as are reasonably required for agricultural activities (being ploughing to no deeper than 0.6 metres 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.
03-007 03-007A 04-002 05-014 06-001 06-013 06-014 06-015 06-018 07-013 08-018 09-007 09-009 09-012 11-007 11-018 12-012 13-018 13-019 13-020 14-029 14-042 14-043 16-002 16-003 16-005 16-006 16-007 16-015	Cable rights and restrictive covenants under existing highway and rail infrastructure Cable 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 sea defences, existing infrastructure, 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

16-016 16-018 16-019 17-009	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, roads 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, or the use of the electrical infrastructure and 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 ducting, electrical infrastructure and the cables, including the right 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 and install and thereafter use the Land for all necessary purposes for the commissioning, construction, repair, testing and maintenance of the ducting, electrical infrastructure and cables 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 ducting, electrical infrastructure and cables 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 is being carried out; (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 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 install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, 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, 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) 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); (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) 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; (u) 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; (v) 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; 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 bases, substructures or footings thereto); (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; and (e) 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.
03-007 03-007A 04-002 05-014 06-001 06-013 06-014 06-015 06-018 07-013 08-018 09-007 09-009 09-012 11-007 11-018 12-012 13-018	Cable rights and restrictive covenants under existing highway and rail infrastructure Cable 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

13-019	(but not limited to) directional drilling beneath sea defences,
13-020	existing infrastructure, watercourses, highways and
14-029	railways;
14-042	(b) lay down, install, retain, adjust, alter, construct, operate,
14-043	erect, use, maintain, repair, renew, upgrade, inspect, remove
16-002	and replace the additional ducts for electricity cables
16-003	(including the removal of materials including spoil) in,
16-005	under, over and/or on the Land, allow the installation and use
16-006	of electrical cables in the additional ducts, together with such
16-007	telemetry and fibre-optic lines, ducting, jointing bays and
16-015	other apparatus, protection measures, cable marker posts,
16-016	chambers and manholes, manhole covers and other
16-018	equipment which is ancillary to the purposes of transmitting
16-019	electricity along such electricity cables (all collectively
17-00	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, roads 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, or the use of the electrical infrastructure and
	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 ducting, electrical
	infrastructure and the cables, including the right 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 and install and thereafter use the Land for all
	necessary purposes for the commissioning, construction,
	repair, testing and maintenance of the ducting, electrical
	infrastructure and cables 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 ducting,
	electrical infrastructure and cables 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 is being carried out; (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 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 install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, 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, 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) 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); (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) 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; (u) 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; (v) 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; 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 bases, substructures or footings thereto); (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; and (e) 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.
02-002 02-003 02-006 02-007 03-005 03-013 03-015	Access rights Rights for the purposes of the construction, installation, operation, maintenance and decommissioning of the authorised development to—

03-016	(a) pass and re-pass with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of the Authorised Development, the inspection, testing, maintenance, renewal, 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 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.
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17-026 17-027 17-028 17-029 17-030	National Grid substation works area rightsRights 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, 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 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; and (i) remove and discharge water from the Land and to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, 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; and (j) 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). 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 substructures 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;
17-004	Drainage rights and restrictive covenants
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17-022	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, 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 Covenant 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 (b) construction erection or works of any kind (including the substructures or footings thereto); and (c) 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.
20-003	Compensatory works, work rights Rights for the purposes of the construction, installation, operation, maintenance and decommissioning of the authorised development to— (a) erect, maintain, repair, improve and remove permanent fencing, gates, barriers or other means of enclosure in order to create areas where predators are excluded; (b) enter upon, pass, re-pass and remain on the Land with or without vehicles, plant, machinery, apparatus, equipment and materials for the purposes of carrying out and maintaining the Works, surveying or to carry out monitoring of fauna; (c) place, retain, and maintain apparatus on the Land for the purposes of surveying or carrying out monitoring of fauna, including use of recording devices; (d) install, execute, implement, retain, repair, improve, renew, remove, relocate and plant trees, woodland, shrubs, hedgerows, seeding and other ecological measures together

	with the right to maintain, inspect and replant such trees, shrubs and landscaping; (e) 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 and the installation of fencing for the protection of fauna; and (f) carry out such works (together with associated fencing or other means of enclosure) 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 substructures or footings thereto); (b) to prevent the planting or growing within the Land of any trees, shrubs or underwood without the prior consent in writing of the undertaker (c) to prevent any part of any fence, gate, barrier or other enclosure erected as part of the works being altered, modified or removed without the prior consent in writing of the undertaker; (d) to prevent any activity which would in the reasonable opinion of the undertaker result in the harm to or diminishment in the function of the ornithological compensation measures or areas of habitat creation including any ploughing or grazing without the prior written consent of the undertaker.
19-002 19-003	Compensatory works, access 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 Works, 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 use and maintain any quay, slipway, jetty or similar structure, with or without vessels, vehicles, plant, machinery, apparatus, equipment and materials for the purposes of taking accessing the Land, carrying out, monitoring and constructing, maintaining, improving repairing or decommissioning the Works; (c) to use, maintain, repair and improve any permanent means of access including retain, maintain, straighten, widen,

	repair, alter, upgrade and use existing access routes for the purposes of accessing the Land, adjoining land and highway; (d) construct, lay down, use and remove temporary access roads, ramps and other temporary crossings including any necessary hard standing and other surface materials including (but not limited to) matting, aggregate, trackway, footpaths, stone, tarmacadam, terram, temporary bridging, culverting or diversion of water courses and drains, and alter, widen, upgrade and improve existing roads, tracks and footpaths; (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 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; and (h) erect and remove temporary fencing, gates, walls, barriers or other means of enclosure. 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 substructures or footings thereto); (b) to prevent the planting or growing within the Land of any trees, shrubs or underwood without the prior consent in writing of the undertaker (c) to prevent any part of any fence, gate, barrier or other enclosure erected as part of the works being altered, modified or removed without the prior consent in writing of the undertaker; and (d) to prevent any activity which would in the reasonable opinion of the undertaker result in the harm to or diminishment in the function of the ornithological compensation measures or areas of habitat creation including any ploughing or grazing without the prior written consent of the undertaker.

Modification of compensation and compulsory purchase enactments for creation of new rights and imposition of restrictive covenants

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—

“(5) (a) 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 4(5) of Schedule 8 to the Five Estuaries 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 4(8) of Schedule 8 to the Five Estuaries 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 4(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 of 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 22 (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)—

- (a) with the modifications specified in sub-paragraph 4(2); and
- (b) with such other modifications as may be necessary.

(2) The modifications referred to in sub-paragraph (1) are set out in the following provisions of this Schedule.

(a) 1973 c.26.

5. 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.

6. 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.”

7. 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) (refusal to convey, failure to make title, etc.);
- (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.

8. 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.

9. 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.

10. Section 22 (interests omitted from purchase) of the 1965 Act as modified by article 29(4) is also 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.

11. 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 27 (application of the 1981 Act) of the Five Estuaries 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 Five Estuaries Offshore Wind Farm Order 202[•] which excludes the acquisition of subsoil only from this Schedule.

(3) In this Schedule, “house” includes any park or garden belonging to a house.

Counter-notice requiring purchase of land

2. 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.

3. 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

4. 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.

5. 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”).

6. If the authority decide to refer the counter-notice to the Upper Tribunal they must do so within the decision period.

7. 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.

8. 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

9. On a referral under paragraph 6, 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.

10. 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.

11. 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 9, it must determine how much of the house, building or factory the acquiring authority ought to be required to take.

12. 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.

12.—(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.

14. Any dispute as to the compensation is to be determined by the Upper Tribunal.”

SCHEDULE 9

Article 42

Protective provisions

PART 1

Protection for electricity, gas, water and sewerage undertakers

1. The provisions of this Part have effect 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—

^(a) 1989 c.29.

^(b) 1986 c.44.

- (i) any water mains or service pipes (or part of a water main or service pipe) that is the subject of an agreement to adopt made under section 51A (agreements to adopt water main or service pipe at a future date) of the Water Industry Act 1991;
- (ii) any drain or works vested in the sewerage undertaker under the Water Industry Act 1991^(a); and
- (iii) 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^(b),

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

“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.

(a) 1991 c.56.

(b) Section 104 was amended by section 42(3) of the Flood and Water Management Act 2010 (c.29).

(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 48 (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 48 (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 48 (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 development 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, section and description 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 48 (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, is to 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);

(a) 2003 c. 21.
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“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(a) (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 17 (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.

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 other expenses, loss, damage penalty or costs 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 48 (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 development.

(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.

(a) Section 106 was amended by section 4 of the Digital Economy Act 2017 (c. 30).

PART 3

For the protection of the Environment Agency

15.—(1) The following provisions apply for the protection of the Agency unless otherwise agreed in writing between the undertaker and the Agency.

(2) 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 any (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, 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, counter wall 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 a tidal main river or 8 metres of a non-tidal main river, or is otherwise 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
 - (cc) 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;
 - (dd) is within 16 metres of a drainage work involving a tidal main river;

- (ee) 8 metres of a drainage work involving a non-tidal main river;
- (ii) 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 watercourse or other surface waters or ground water;
 - (cc) cause obstruction to the free passage of fish or damage to any fishery;
 - (dd) affect the conservation, distribution or use of water resources;
 - (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 the 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 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
- (e) "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

16.—(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 (1).

(3) Any approval of the Agency required under this paragraph—

- (a) must not be unreasonably withheld or delayed;
- (b) subject to paragraph 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 is agreed between the Agency and the undertaker, and if, further particulars if such 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 (2)(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

17. Without limiting paragraph, 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; or
- (b) to secure that its efficiency for flood defence purposes is not impaired and that the risk of flooding is not otherwise increased;

by reason of specified work.

Timing of works and service of notices

18.—(1) Subject to sub-paragraph (2), any specified work, and all protective works required by the Agency under paragraph, 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 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 of 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 can relate.

Works not in accordance with this Part of this Schedule

19.—(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 (4) 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 reasonable incurred by the Agency in so doing is 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 must 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 27.

Maintenance of works

20.—(1) Subject to sub-paragraph (6) 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 (3), 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 27.

(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 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

21. Subject to paragraph 9, 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

22. 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

23.—(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

24.—(1) Prior to commencing any work using any trenchless installation technique forming part of Work Nos.3 or 4 within plots 01-007, 01-008, 01-010, 01-009 and 02-001, 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.

As built drawings

25. As soon as reasonably practicable following the completion of the construction of Works Nos.3 or 4 within plots 01-007, 01-008, 01-010, 01-009 and 02-001, 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.

Heavy vehicle movements during construction

26.—(1) Access for the undertaker over plot 01-005 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 case of an emergency.

Indemnity

27.—(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—

expenses and charges;

staff costs and overheads;

legal costs;

“losses” includes physical damage.

(4) For the avoidance of doubt, in sub-paragraph (3)—

“claims” and “demands” include as applicable—

costs (within the meaning of sub-paragraph (2)) incurred in connection with any claim or demand; and

any interest element of sums claimed or demanded;

“liabilities” includes—

contractual liabilities;

tortious liabilities (including liabilities for negligence or nuisance);

liabilities to pay statutory compensation or for breach of statutory duty;

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

28. 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 48 (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 another.

PART 4

For the protection of drainage authorities

29. 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.

30. 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;

(a) 1991 c. 59.

“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;
- (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.

31.—(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 14 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 the avoidance of doubt, any recommendation or requirement from the drainage authority relating to health and safety shall be considered reasonable.

32. Without limiting paragraph 31, 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.

33.—(1) Subject to sub-paragraph (2), any specified work, and all protective works required by the drainage authority under paragraph 32, 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 37 and 38, 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 43.

34.—(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 37 and 38, 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 43.

(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.

35. Subject to paragraphs 37 and 38 and paragraph 34(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.

36. 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.

37. 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.

38.—(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 on 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.

39.—(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.

40. 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 39, excuse the undertaker from liability under the provisions of subparagraph 40(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.

41. Nothing in paragraph 40(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.

42. 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.

43. 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 48 (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 and Infrastructure Limited

44. 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 62, of this Part of this Schedule any other person on whom rights or obligations are conferred by that paragraph.

45. 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 their 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 or maintenance of the authorised development;

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“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) 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 6 (power to maintain the authorised development) in respect of such works.

46.—(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—

- (a) article 3 (development consent granted by the Order)
- (b) article 6 (power to maintain the authorised development)
- (c) article 18 (discharge of water)
- (d) article 19 (authority to survey and investigate land)
- (e) article 22 (compulsory acquisition of land)
- (f) article 24 (compulsory acquisition of rights)
- (g) article 26 (private rights)
- (h) article 28 (acquisition of subsoil only)
- (i) article 31 (temporary use of land for carrying out the authorised development)
- (j) article 32 (temporary use of land for maintaining the authorised development)
- (k) article 33 (statutory undertakers)
- (l) article 37 (felling or lopping of trees and removal of hedgerows)
- (m) article 38 (trees subject to tree preservation orders)
- (n) the powers conferred by section 11(3) (power of entry) of the 1965 Act;
- (o) the powers conferred by section 203 (power to override easements and rights) of the Housing and Planning Act 2016;

- (p) the powers conferred by section 172 (right to enter and survey land) of the Housing and Planning Act 2016; or
- (q) any powers under in respect of the temporary possession of land under the Neighbourhood Planning Act 2017,

in respect of any railway property unless the exercise of such powers 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, article 26 (private rights) 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 diverted with the consent of Network Rail.

(5) The Undertaker must not under the powers of this Order acquire or use or acquire new rights over, or seek to impose any restrictive covenants over, any railway property, or extinguish any existing rights of Network Rail in respect of any third party property, except with the consent of Network Rail.

(6) 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.

(7) 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 including any conditions necessary to ensure operational or railway safety but must never be unreasonable to withhold consent for reasons of operational or railway safety or impose conditions necessary to ensure operational or railway safety (such matters to be in Network Rail's absolute discretion).

(8) The undertaker must enter into an asset protection agreement prior to the carrying out of any specified work.

47.—(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 48 (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 their disapproval, the undertaker may serve upon the engineer written notice requiring the engineer to intimate their 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 their approval or disapproval, the engineer will 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 (undertaker acting reasonably) and if the undertaker desires such part of the specified work to be constructed, Network Rail must construct it without reasonable delay on behalf of and to the reasonable 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 unreasonable 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 must not be required to comply with sub-paragraph (1) in a case of emergency but in that case it must give to Network Rail notice as soon as is reasonably practicable, and in addition to that notice must provide a plan, section and description of those works as soon as reasonably practicable subsequently.

48.—(1) Any specified work and any protective works to be constructed by virtue of paragraph 4(4) must, when commenced, be constructed—

- (a) without unreasonable delay in accordance with the plans approved or deemed to have been approved or settled under paragraph 47;
- (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 will 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.

49. 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.

50. 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.

51.—(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, (acting reasonably) 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 4(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 52(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.

52. 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 47(3) or in constructing any protective works under the provisions of paragraph 47(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 is 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.

53.—(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 47(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 47(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 sub-paragraph (a); and
- (c) Network Rail must allow the undertaker reasonable facilities for the inspection of Network Rail's apparatus identified pursuant to sub-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 47(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 48.

(9) To the extent that it would not otherwise do so, the indemnity in paragraph 57(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 47 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 48 (Arbitration) to the Institution of Civil Engineers shall be read as a reference to the Institution of Engineering and Technology.

54. 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.

55. 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.

56. 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.

57.—(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 46 (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; or
- (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 their supervision must 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 of this Schedule.

(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 can 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) must be relevant 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 must, 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 subparagraph (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.

58. 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 of this Schedule (including the amount of the relevant costs reasonably incurred and mentioned in paragraph 57) 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).

59. 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.

60. 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.

61. 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.

62. 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 7 (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.

63. 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 44 (certification of plans, 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 (acting reasonably).

64. In relation to any dispute arising under this Part of this Schedule the provisions of article 48 (arbitration) do not apply and 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.,

65. 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

66.—(1) Where the terms defined in article 2 (interpretation) of this Order are inconsistent with subparagraph (2) 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) in so far as it is relevant to the road works and cable works, 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.

“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 under the strategic road network and to be 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 the carrying out the SRN works (to include all costs) or such other sum as is agreed;

“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;

“highway operations and maintenance contractor” means the contractor appointed by National Highways under the DBFO contract;

“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);

“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 73 or 75 as appropriate when it considers the SRN 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;

“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;

“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. 13A, 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;

“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;

“the bond sum” means the sum equal to 200% of the cost of the 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;

“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

67. 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.

68. In respect that it 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 9 but for the purposes of any approvals required under this Part of Schedule 9 the undertaker shall liaise directly with National Highways.

Works outside the Order limits

69. 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

70.—(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 sub-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;
 - (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 roadworks, 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 70(1) of this Part.

Construction of the cable works and SRN works

71.—(1) The undertaker must give National Highways 14 days' notice in writing of the date on which the cable works and/or 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 70(1) or (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 70(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

72.—(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 70(1) and (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 sub-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 (3) 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 within 30 days of the date of receipt of a properly issued VAT invoice from National Highways addressed to the undertaker for the excess sum, the

notice a sum equal to 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 paragraph 73(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;
- (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 85.

Provisional Certificate for SRN works

73.—(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 (4)(a) and any further works notified to the undertaker pursuant to sub-paragraph 9(3)(b) have been completed to the reasonable satisfaction of National Highways; and
- (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) In this paragraph, “reasonable satisfaction” mean fair, proper and moderate under the circumstances, having regard to the details approved under paragraph 70. 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.

Provisional Certificate for cable works

74.—(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 75(2)(b) have been completed to the reasonable satisfaction of National Highways, National Highways must issue the provisional certificate.

Opening

75. 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

76.—(1) The undertaker must, as soon as reasonably practicable after making its application for a provisional certificate pursuant to paragraph 73(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 paragraph 77(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 paragraph 77(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

77.—(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

78.—(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 73(2) and provisional certificate for cable works pursuant to the 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 79(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 79(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

79. 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 72 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

80. 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

81. Prior to the commencement of the cable works and road works the undertaker 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 road works or use of the strategic road network by the undertaker.

Maintenance of the authorised development

82.—(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 authorised development, 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 83 will apply to the opening of any part of the strategic road network following occupation of any road space under this paragraph.

Land

83.—(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

84.—(1) Article 48 (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 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 48 (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 London Gateway Port

85. In this Part

“cable specification and installation plan” means the cable specification and installation plan to be approved under condition 13(1)(g) of the deemed marine licence for the transmission assets in Schedule 11;

“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

“London Gateway HEO” means London Gateway Port Harbour Empowerment Order 2008(a).

Application

86. The following provisions, unless otherwise agreed in writing between the undertaker and the London Gateway, have effect.

Approvals

87. The undertaker will obtain the approval in writing of London Gateway of the draft cable specification and installation plan (in so far as that plan relates to any area or areas of Work No.2 which are within the jurisdiction of the London Gateway HEO) before any application for approval of that plan is submitted by the undertaker in compliance with condition 13 of the deemed marine licence for the transmission assets in Schedule 11.

88. The draft cable specification and installation plan referred to in paragraph 88 must set out for Work No.2:

- (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.

Approvals and refusals

89. London Gateway must issue any approval or refusal of a draft plan submitted to it in accordance with paragraph 88 within 28 days of the date of submission of that draft unless any other period is agreed with the undertaker.

90. All decisions of London Gateway under these provisions must be made acting reasonably.

91. All decisions of London Gateway under these provisions must be issued in writing and the undertaker must provide a copy of any such decisions to the Marine Management Organisation or any other regulatory body.

92. 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.

93. Where no decision is issued within the 28 day period set out in paragraph 90, the draft plan submitted will be deemed to be approved by London Gateway.

94. 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 48 (arbitration) of this Order.

PART 8

For the protection of North Falls Offshore Wind Farm

95. The following provisions, unless otherwise agreed in writing between the undertaker and the North Falls, have effect.

96. 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 North Falls or any successor as developer or operator of any part of the North Falls 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;

“North Falls” North Falls 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 North Fall Offshore Wind Farm Order.

Application

97. This Part applies for the protection of North Falls and the following provisions, unless otherwise agreed in writing between the undertaker and North Falls, have effect.

98. This Part ceases to have effect where in the event that North Falls 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

99. 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 North Falls otherwise than by agreement, such agreement not to be unreasonably withheld or delayed.

100. If, in the exercise of the agreement reached in accordance with paragraph 99 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 North Falls to maintain that apparatus in that land must not be extinguished

101.—(1) Not less than 56 days (or such lesser period agreed by North Falls, 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 North Falls 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 North Falls 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 or renewal of any works to which subparagraph (1) or (2) applies until North Falls has given written approval of the plan so submitted.

(4) Any approval of North Falls 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, North Falls 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 56 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 the statutory undertaker for approval as a result of modifications required under this paragraph are not materially different to the modifications previously requested by North Falls, any further required modifications will be requested by North Falls 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 the statutory undertaker and in accordance with such reasonable requirements as may be made in accordance with sub-paragraph (5) or (7) by the statutory undertaker for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and the statutory undertaker 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 North Falls, 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 North Falls 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

102. If in consequence of the agreement reached in accordance with paragraph 99 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 North Falls to maintain or use the apparatus no less effectively than was possible before such obstruction.

Build option 1 scenario

103.—(1) Where the undertaker determines to proceed with Build option 1 and the parties intend for the additional ducts installed as Work Nos 5A, 6A, 7A, 8A, 9A, 10A, 11A, 12A, 14A and 15E to be transferred to North Falls then:

(2) The undertaker will consult and agree with North Falls on its detailed design and construction methodology, including means of access, before any application for discharge of requirements necessary to carry out Work Nos 5A, 6A, 7A, 8A, 9A, 10A, 11A, 12A, 14A and 15E 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 North Falls prior to discharging any requirement for the detailed design of such access 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.

Design collaboration

104. The undertaker and North Falls 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

105. Any difference or dispute arising between the undertaker and North Falls must, unless otherwise agreed in writing between the undertaker and North Falls, be determined by arbitration in accordance with article 48 (arbitration) of the Order.

PART 9

For the protection of the Port of London Authority (onshore)

Application

106. The provisions of this Part of this Schedule apply for the protection of the PLA and have effect unless otherwise agreed in writing between the undertaker and PLA.

Interpretation

107.—(1) Where the terms defined in article 2 (interpretation) of this Order are inconsistent with subparagraph (2) the latter prevail.

(2) In this Part of the Schedule –

- (a) “apparatus” means all towers, apparatus and equipment situated on the PLA Property;
- (b) “immediate” means as soon as reasonably practicable to allow access by completing any vehicle movements in progress, removing staff and barriers from the carriageway except as required to maintain health and safety and taking any other action necessary to allow passage within a target response time of no more than 5 minutes;
- (c) “physical measures” means any measure carried out by the undertaker which will restrict any part of the access to the PLA Property particularly anything that involves closure or narrowing of the access. For the avoidance of doubt it will not include measures carried out for safe movement of vehicles such as banksmen used to manage the flow of traffic;
- (d) “PLA” means the Port of London Authority;
- (e) “PLA Property” means the radar site at Manor Way, Holland Haven in the vicinity of Plots 01-001, 01-002, 01-003; and

- (f) “utilities and services” means all existing functional services above and below ground including drainage, surface water drainage, power and communications cables and pipelines, manholes and supports serving the apparatus.

Access

108.—(1) Access for the PLA or any person acting under its instruction, including access for vehicles and plant, to the PLA Property over plots 01-001 and 01-002 and 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.

(2) Unreasonable delay or restriction in subparagraph (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 sub-paragraph (3) and (4) of this paragraph.

(3) Where any part of the access to the PLA Property is restricted or controlled by the undertaker, any physical measures shall be agreed by the PLA (acting reasonably) prior to the implementation. The undertaker must provide access to the PLA Property on request by the PLA (which may be verbal) or any person acting under its instruction and take immediate steps to allow access to and from the PLA Property through or around that restriction or physical measure.

(4) The undertaker may not temporarily close, alter or divert the access route to the PLA Property over plots 01-001 and 01-002 under article 14 (temporary restriction of use of streets) or article 17 (powers to alter layout etc of streets) of this Order or any other power in this Order in so far as any such works create or result in physical measures impeding access unless the closure, alteration or diversion and the means of maintaining access for the PLA during such closure, alteration or diversion has been agreed between the undertaker and the PLA (such agreement must not be unreasonably withheld or delayed).

Extinguishment of rights

109. Regardless of any provision in this Order, the undertaker may not extinguish any interest or right vested in or benefitting the PLA unless the consent of the PLA in writing has been given to such extinguishment.

Installation of structures

110.—(1) Without prejudice to paragraph 111 and the generality of any other protection afforded to the PLA the undertaker may not erect, install, move, store or use within plots 01-002 and 01-003 any structure or plant, including any assembled crane, which would have a maximum height at any point in excess of 25m from ground level unless and until the consent of the PLA in writing has been given to the erection or installation of that structure.

(2) As part of an application for consent under this paragraph 110 the undertaker must submit to the PLA a plan, section and description of the structure or plant and the works to be executed in connection with the erection, installation, movement, storage or use of the structure and plant.

(3) Any structure or plant to which this paragraph 110 applies may only be erected, installed, moved, stored or used in the location(s), to the maximum height and in accordance with the plan, section and description submitted under sub-paragraph (2) and approved by the PLA (such approval not to be unreasonably withheld or delayed) and in accordance with such reasonable requirements as may be requested in accordance with sub-paragraph (4) by the PLA for the protection of the apparatus, or for securing access to it, and the PLA is entitled to watch and inspect the structure or plant and the execution of those works associated with the erection, installation, movement, storage or use of the structure and plant (acting reasonably).

(4) Any requirements requested by the PLA under sub-paragraph (3) must be made within a period of 28 days beginning with the date on which a plan under sub-paragraph (2) is submitted to it.

(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 or as agreed between the undertaker and the PLA in writing, before commencing the erection, installation, movement, storage or use of any structure or plant to which this paragraph 110 relates, 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.

Services

111. Without prejudice to the generality of any other protection afforded to the PLA elsewhere in the Order, the undertaker must not decommission or remove any utilities and services and any right of the owner of the utilities and services to access and maintain the utilities and services must not be extinguished until alternative utilities and services have been constructed and are in operation serving the apparatus to the PLA's reasonable satisfaction.

PART 10

For the protection of the Port of London Authority (offshore)

112. In this Part—

“Area of Interest” means the area shown shaded in yellow on the Deep Water Route Cable Installation Area (Future Dredging depths) plan encompassing the Deep Water Routes;

“cable burial risk assessment” means the cable burial risk assessment appended to the cable specification and installation plan;

“cable specification and installation plan” means the cable specification and installation plan together with the cable burial risk assessment to be approved under condition 22(1)(h) of the deemed marine licence for the transmission assets in Schedule 11;

“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 of Schedule 9 means the carrying out of any authorised development and monitoring activities;

“Deep Water Routes” mean the Sunk and Trinity deep water routes;

“installation” has the same meaning as construction and installed is to be construed accordingly

“maintain” has the same meaning as in Article 2 save that it includes monitoring within the Area of Influence and maintenance shall be construed accordingly;

“navigation and installation plan” means the navigation and installation plan to be approved under condition 22(1)(k) of the deemed marine licence for the transmission assets in Schedule 11;

“plans” includes navigational risk assessments, plans, sections, elevations, drawings, specifications, programmes, construction methods and descriptions including, where applicable, relevant hydraulic information as may be reasonably requested by the PLA;

“specified work” means Work No, 2(c), and any other part of the offshore works forming part of the authorised development (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

113. 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 of Work No.2(c) to be constructed and operated as part of the authorised development.

Consultation and notice

114.—(1) The undertaker will consult the PLA on—

- (a) the cable specification and installation plan (in so far as that plan relates to any specified work within the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition 22 of the deemed marine licence for the transmission assets in Schedule 11 and any revisions arising from such application; and
- (b) a navigation and installation plan (in so far as that plan relates to any specified work within the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition 22 of the deemed marine licence for the transmission assets in Schedule 11 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 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 survey work to be undertaken under this Order 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 disposal of unexploded ordnance within 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 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 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 the Area of Interest no less than 5 business days before such work is programmed to begin.

Cable Specification and Installation Plan

115. The cable specification and installation plan referred to in paragraph 114 must be informed by a cable burial risk assessment, and set out for Work No.2(c), in so far as it applies to the Deep Water Routes:

- (a) that any part of Work No.2(c), 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 impede the dredging of those parts of the Sunk and Trinity Deep Water Routes:
 - (i) shown shaded in yellow and outlined in a bold black line (and labelled Sunk Area A (22m CD)) to a level of 22 metres below Chart Datum;
 - (ii) shown shaded in yellow and outlined in a blue dotted line (and labelled Trinity (22m CD)) to a level of 22 metres below Chart Datum; and
 - (iii) shown shaded in yellow and cross hatched in orange (and labelled Sunk Area B (19m CD)) to a level of 19 metres below Chart Datum.;

- (b) The proposed cable installation methods and measures for management of construction risks;
- (c) Any 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) Monitoring arrangements and the results of these surveys 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 in sub paragraph a) of this paragraph 115.
- (g) A requirement for a process (subject to paragraphs 118 and 119) and timescales (both the undertaker and PLA acting reasonably) for cable re-installation should the level of the cable be such that the under keel clearance specified in Outline CSIP cannot be achieved over the lifetime of the authorised development.

Monitoring

116. If following the results of any geophysical surveys carried out using multi-beam echo sounder survey (MBES), it is confirmed that cable exposure which has resulted the cables 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.

117. The PLA must notify the undertaker of any potential cable exposure that is identified by the PLA in the relation to the Area of Interest as soon as reasonably practicable.

Remediation

118. Where, following the installation of cables forming Work No. 2(c) in relation to the Area of Interest it is identified by the undertaker (who shall notify the PLA as soon as reasonably practicable of this fact) and in any event within 2 business days) or, following inspection by the PLA, it is identified by the PLA (and the same is notified to the undertaker as soon as reasonably practicable), that the level of cable is such that the paragraph 115 (a) level has not been achieved or at any time following installation or maintenance the cable has moved such that the requirements of paragraph 115 (a) are no longer being achieved, then, unless otherwise agreed in writing with the PLA, the undertaker is required to carry out remediation works as specified in the cable specification and installation plan subject to paragraph 119 in relation to the Deep Water Routes.

119. Unless otherwise agreed in writing with the PLA, the undertaker will carry out the following arrangements for the carrying out the remediation works:

- (a) — the undertaker will re-bury the cables to the required specification to achieve the requirements of paragraph 115(a).
- (b) Following the completion of the works in sub-paragraph (1), if it is identified by the undertaker or the PLA (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 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.

- (c) The undertaker will consult the PLA on the draft updated cable specification and installation plan required under sub-paragraph (2) and the provisions of both this paragraph and paragraph 116 will apply to that updated cable specification and installation plan .
- (d) The steps in this paragraph shall be repeated until the requirement in paragraph 115(a) is achieved or the cable is permanently removed from the Area of Interest.

Provision of as built details

120. As soon as reasonably practicable following the completion of the installation of cables forming Work No. 2(c) 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. 2(c) 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 2(c) 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.

Transfer of the benefit

121. The undertaker must within 7 days after the completion of any sale, agreement or other transaction under article 7 (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 7, 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

122. 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 48 (arbitration) of this Order.

PART 11

For the protection of Essex County Council as local highway authority

Application

123. The provisions of this Part of this Schedule have effect in relation to the works (as defined under paragraph 124 unless otherwise agreed in writing between the undertaker and Essex County Council in its capacity as the local highway authority.

Definitions

124. 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.

“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.

“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;

“final certificate” means the final certificate issued by the local highway authority under paragraph 133 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 130 of this Part unless otherwise agreed in writing between the parties;

“provisional certificate” means the certificate served under paragraph 130 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

125.—(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

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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 to the nominated officer 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.

126.—(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 125 immediately above;
 - (v) the relevant email details from time to time under paragraph 125 immediately above;
 - (vi) road safety audit invitation process under paragraph 129 below; and
 - (vii) the senior representation process under paragraph 136 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 132 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

127. 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

128.—(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 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 paragraph (4) that the undertaker has requested in writing.

Road Safety Audits

129.—(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 highways 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

130.—(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

131.—(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 8 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 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

132.—(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

133. 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 130(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 highways 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 12 (construction and maintenance of new or altered highway) of this Order.

Emergency Work

134. 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

135. Following the issuing of the final certificate under paragraph 133 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

136.—(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 48 (arbitration) of this Order.

PART 12

For the protection of Anglian Water

Application

137. For the protection of Anglian Water the following provisions have effect, unless otherwise agreed in writing between the undertaker and Anglian Water.

Interpretation

138. 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;

“Anglian Water Property” means the Clacton-Holland Haven Water Recycling Centre, North side of Manor Way, Clacton on Sea, Essex, CO15 5TZ in the vicinity of Plot 01-002 and north of Plot 01-003

“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

139.—(1) Access for Anglian Water or any person acting under its instruction, including access for vehicles and plant, to the Anglian Water Property over Plot 01-002 and 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 sub-paragraphs (2) and (3).

(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 sub-paragraph (2) and (3) of this paragraph.

(3) Where any part of the access to the Anglian Water Property is restricted or controlled by the undertaker, any physical measures must be agreed by the Anglian Water (acting reasonably) prior to the implementation. The undertaker must provide access to the Anglian Water Property on request from Anglian Water or any person acting under its instruction and take steps (as soon as reasonably practicable) to allow access to and from the Anglian Water Property through or around that restriction or physical measure.

On street apparatus

140. 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 streets with temporary restrictions of use

141. Regardless of the temporary restriction in use or diversion of any highway under the powers conferred by article 14 (temporary restriction of use of streets), Anglian Water is at liberty at all times to take all necessary access across any such restricted use 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 restriction in use or diversion was in that highway.

Protective works to buildings

142. The undertaker, in the case of the powers conferred by article 20 (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

143. 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 (such agreement not to be unreasonably withheld).

Removal of apparatus

144.—(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 145.

(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 48 (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 48 (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

145.—(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 48 (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

146.—(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 137 to 139 and 142 to 144 apply as if the removal of the apparatus had been required by the undertaker under paragraph 144(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) 6 metres where the diameter of the pipe exceeds 400 millimetres.

Expenses and costs

147.—(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 48 (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.

148.—(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 144(1) or 144(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.

(6) The total amount which would be payable to Anglian Water arising out of or in connection with this Part of the Schedule in relation to any costs, compensation, expenses, losses, damages, penalties or any other liabilities is subject to the total liability cap of £30,000,000 (thirty million pounds).

Cooperation

149. 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.

150. 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 144(2) or Anglian Water makes requirements for the protection or alteration of apparatus under paragraph 146, 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.

151. 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.

152. 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.

153. 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 13

For the protection of Affinity Water

Application

154. The following provisions have effect for the protection of Affinity Water, unless otherwise agreed in writing between the undertaker and Affinity Water.

Interpretation

155. 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 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()

“authorised development” has the same meaning as is given to the term “authorised development” in article 2 of the Order;

“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;

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“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)) (<https://www.hauc-uk.org.uk/resources/diversionary-works-calculator>) referred to at paragraph 29.4 of that advice note;

“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 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 development;

“specified works” means any authorised works under the Order (including any works of maintenance) that—

- (a) may in any way adversely affect any easement or other property interest held or used by Affinity Water;
- (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 161(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).

“water main” has the meaning given in the Water Industry Act 1991.

On street apparatus

156. Except for paragraphs 4 (apparatus in stopped up streets), 9 (specified works), 10 (expenses) and 11 (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 streets with temporary restrictions of use

157. Regardless of the temporary restriction in use, alteration, diversion or restriction of use of any street under the powers conferred by article 14 (temporary restriction of use of streets), Affinity Water is at liberty at all times to take all necessary access across any such restricted use 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 apparatus which at the time of the restriction in use or diversion was in that street.

(1)

Protective works to buildings

158. The undertaker, in the case of the exercise of the powers conferred by article 20 (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 Affinity Water's apparatus unless otherwise agreed in writing with Affinity Water, such agreement not to be unreasonably withheld.

Acquisition of land

159. 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 apparatus held by Affinity Water; 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 require; and
 - (ii) where Affinity Water's apparatus is to remain in, on, under or over any works or property of the undertaker that is to be present as a result of any appropriation, acquisition, extinguishment, interference or overriding within subparagraph 160(1)(b), reasonable provisions signifying in advance any 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 undertaker's works or property resulting from the carrying out of any works or the exercise of any other powers by Affinity Water in respect of such apparatus PROVIDED THAT such consent will not allow any activity by Affinity Water that will involve actual works to cables belonging to the undertaker or interrupt the transmission of electricity through such cables without the further specific written prior consent of the undertaker (which may be subject to reasonable conditions).

Removal of apparatus

160.—(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 apparatus is placed or over which any access to any 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 162 (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 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 will include reasonable provisions signifying in advance any 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 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 PROVIDED THAT such consent will not allow any activity by Affinity Water that will involve actual works to cables belonging to the undertaker or interrupt the transmission of electricity through such cables without the further, specific written prior consent of the undertaker (which may be subject to any reasonable conditions).

(3) 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.

(4) 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 (3).

(5) 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 48 (arbitration).

(6) Affinity Water must, after the alternative apparatus to be provided or constructed has been agreed or settled by arbitration in accordance with article 48 (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 (3), proceed in accordance with a programme that has been agreed or settled by arbitration in accordance with article 48 (arbitration) 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.

(7) Regardless of anything in sub-paragraph (6) 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 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 the 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 48 (arbitration), without unnecessary delay under the superintendence, if given, and to the reasonable approval of Affinity Water.

(8) 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.

(9) 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 48 (arbitration).

(10) In carrying out any work under sub-paragraph (7), the undertaker must comply with all statutory obligations which would have been applicable had the works been carried out by Affinity Water.

(11) Nothing in sub-paragraph (7) 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 apparatus, or execute any excavation and filling around any 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.

(12) Whenever alternative apparatus is to be or is being substituted for existing 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

161.—(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 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 the apparatus to be removed unless otherwise agreed by Affinity Water or in default of agreement settled by expert determination in accordance with paragraph 170 (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 the 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 the 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

162.—(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 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 apparatus,

the removal of which has not been required by the undertaker under paragraph 161(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 (7)(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 its 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 its apparatus; and

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:

- (a) the placing, installation, bedding, packing, removal, connection or disconnection of any apparatus, or execute any excavation and filling around any 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. 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.

(7) 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 48 (arbitration).

(8) 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.

(9) 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 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) .

(10) If Affinity Water in accordance with this paragraph 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/sub-paragraphs ???? ***** apply as if the removal of the apparatus had been required by the undertaker under paragraph *****.

(11) 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 acting reasonably.

(12) 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.

(13) 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.

(14) Nothing in sub-paragraph (11) authorises the undertaker to carry out the works comprising of the matters listed in sub-paragraph (6) and should any works need to be undertaken they will be undertaken by Affinity Water.

(15) 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 its apparatus and can recover any such costs in line with paragraph 165 (expenses and costs).

Expenses and costs

163.—(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 in, or in connection with—

- (a) the supervision, inspection, removal, relaying, replacing, alteration or protection of any 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-paragraph (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 161(3); 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 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 as referred to in this Part of this Schedule; and
- (g) any costs reasonably necessary in consequence of the execution of any such works as are referred to in this Part of this Schedule.

(3) The value of any 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 48 (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 paragraph ***** 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 *****.

(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 ***** 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 ***** 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 171.

Indemnity

164.—(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 161(1) or 161(2), or by reason of any subsidence resulting from the authorised works or such 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 pursuant to paragraph ***** 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 provision of this paragraph 166, the undertaker must—

- (a) bear and pay the cost reasonably incurred by Affinity Water, accompanied by an invoice, in making good such damage or restoring the supply; and
- (b) indemnify Affinity Water against all liabilities, claims, demands, losses, damages, proceedings, penalty 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 ***** 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

165.—(1) Where in consequence of the proposed construction of any of the authorised works, the undertaker or Affinity Water requires the removal of apparatus under paragraph 161(2) or Affinity Water makes requirements for the protection or alteration of apparatus under paragraph 162, 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.

166. 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.

167. 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 apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

168. 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

169.—(1) Article 48 (arbitration) of the Order does not apply to paragraph 162 (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.

The expert must—

- (i) 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;
- (ii) permit a party to comment on the submissions made by the other party within 7 days of receipt of the submission;
- (iii) issue a decision within 7 days of receipt of the submissions under sub-paragraph (b); and
- (iv) give reasons for the decision.

(5) 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 48 (arbitration).

(6) 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

170. If in consequence of any agreement reached in accordance with paragraph 6 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 the apparatus no less effectively than was possible before such obstruction.

PART 14

For the protection of National Grid Electricity Transmission

Application

171. The provisions of this Part have effect unless otherwise agreed in writing between the undertaker and National Grid.

Interpretation

172. 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 17-031, 18-001 and 18-002, 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 fence

line 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;

“Transmission Owner” means as defined in the STC.

Compulsory acquisition of land and rights

173. 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.

174. 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 17-031, 18-001 and 18-002 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 17-031, 18-001 and 18-002 being exercised.

175. 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.

176.—(1) Subject to sub-paragraph (2), the undertaker must not permanently acquire any interest in plots 17-031, 18-001 and 18-002 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 17-031, 18-001 and 18-002 means that it is necessary for the Undertaker to acquire permanent land rights in plots 17-031, 18-001 and 18-002;

then the undertaker may—

- (c) exercise powers under this Order to compulsorily acquire the necessary rights for the cables and access thereto over all of plots 17-031, 18-001 and 18-002.

177. In so far as National Grid has acquired an interest in plots 17-001, 18-001 and 18-002 and/or is in occupation of any part of those plots, the undertaker may not exercise Temporary Possession Powers over plots 17-001, 18-001 and 18-002 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

178.—(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.

179. 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

180. At all times after NGET has commenced construction and when the undertaker is:

- (a) working within plots 17-001, 18-001 and 18-002; 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 183 and 183 of this Part

181.—(1) Not less than 56 days before the commencement of any works to which paragraph 181 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 181 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 to 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 181 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 181 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

182.—(1) Where paragraph 181 applies, the undertaker must comply with the following indemnity provision:

(2) 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 181 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.

(3) 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.

(4) 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 181 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 7 (benefit of Order) subject to the proviso that once such works become apparatus ("new apparatus"), any works to which paragraph 181 applies yet to be executed and not falling within this sub-section 3(b) will be subject to the full terms of this Part of this Schedule including this paragraph 183; 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.

(5) 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.

(6) 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.

(7) 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.

183. 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 48 (arbitration).

PART 15

For the protection of Cadent Gas Limited

Application

184. For the protection of Cadent the following provisions will, unless otherwise agreed in writing between the undertaker and Cadent, have effect.

Interpretation

185. 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 sub-paragraph 190(2) or otherwise;
- (b) may in any way adversely affect any apparatus the removal of which has not been required by the undertaker under sub-paragraph 190(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

“undertaker” means the undertaker as defined in article 2 of this Order.

On Street apparatus

186.—(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 187, 192, 193 and 194; and
- (b) where sub-paragraph (2) applies, paragraphs 190 and 191.

(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 11 (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

187. Notwithstanding the temporary restriction of use of any street under the powers of article 14 (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

188.—(1) The undertaker, in the case of the powers conferred by article 20 (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 shall 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

189.—(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 191 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 189 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

190.—(1) If, in the exercise of the powers conferred by this Order, including pursuant to any agreement reached in accordance with paragraph 189, 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 191(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

191.—(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 197 (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

192.—(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 196.

(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 proper and

convenient means of access to maintain or use the apparatus no less effectively than was possible before the specified works means of access to any apparatus.

(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 184 to 186 and 189 to 191 apply as if the removal of the apparatus had been required by the undertaker under paragraph 190(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 193.

(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

193.—(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 76(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 sub-paragraph 192(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 48 (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

194. 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

195.—(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 190(2) or Cadent makes requirements for the protection or alteration of apparatus under paragraph 192, 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

196. If in consequence of any agreement reached in accordance with paragraph 189(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

197. Save for differences or disputes arising under sub-paragraphs 190(2), 190(4), 191(1) and 192) 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 48 (arbitration).

SCHEDULE 10

Article 5

Deemed marine licence – Generation Assets

PART 1

General

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);

“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 12 of this licence;

“array area” means the area covered by Work No. 1 as shown on the offshore works plan;

“array area disposal site” means the site to be used for disposal of inert material of natural origin produced during construction, drilling and seabed preparation for works associated with

(a) 2004 c. 20

(b) 2008 c. 29

(c) 2009 c. 23.

(d) S.I. 2017/13

foundations, cables or installation vessels (including sandwave clearance) to be located within the array area;

“authorised deposits” means the substances and articles specified in paragraph 4 of Part 1 of this marine licence;

“authorised development” means Work No. 1 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” means cables for the transmission of electricity and includes fibre optic and other communications cables either within the cable or laid alongside;

“cable crossings” means a crossing of existing sub-sea cables or pipelines or other existing infrastructure by a cable or, where cables run together in parallel, a set of cables, 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, bagged solutions, 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;

“commence” means the first carrying out of any licensed marine activities authorised by this marine licence, save for pre-construction surveys and monitoring approved under this marine licence and the activities set out in paragraph 2 of part 1 of this licence, 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 design objectives, 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, and any successor body to its functions;

“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;

“emergency response co-operation plan” means the plan approved by the MCA the arrangements for liaison between the undertaker and HM Coastguard in the event of an emergency response;

“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 44 (certification of plans 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 Hydrographics Surveys;

“inter-array cable” means the network of offshore subsea cables connecting the wind turbine generators in Work No. 1 and the offshore substations forming part of Work No. 2 of and licenced under the deemed marine licence in Schedule 11 of the Order;

“jacket foundation” means a lattice type structure constructed of steel, which may include additional equipment such as, J-tubes, corrosion protection systems and access platforms;

“JNCC” means the Joint Nature Conservation Committee;

“JNCC Guidance” means the statutory nature conservation body ‘Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs’ Joint Nature Conservation Committee Report No.654, May 2020 published in June 2020 as amended, updated or superseded;

“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 to be contacted at kingfisher@seafish.co.uk;

“LAT” means lowest astronomical tide;

“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, 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, an executive agency of the Department for Transport;

“MCMS” means the Marine Case Management System web portal provided and operated by the MMO;

“MHW” or “mean high water” means the highest level which spring tides reach on average over a period of time;

“MHWS” or “mean high water springs” means the boundary of the landward jurisdiction of the 2009 act;

“monopile foundation” means a steel pile, typically cylindrical, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“offshore in-principle monitoring plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“the offshore order limits and grid co-ordinates plan” means the plan certified as such by the Secretary of State for the purposes of the Order under article 44 (certification of plans and documents etc.);

“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;

“works plans - offshore” means the plan certified as such by the Secretary of State for the purposes of the Order under article 44 (certification of plans etc.);

“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 Five Estuaries Offshore Wind Farm Order 202[];

“the Order limits” means the limits shown on the offshore Order limits plans and the onshore Order limits plan within which the authorised development may be carried out, the grid coordinates for the area of which seaward of MHWS are set out in Schedule 16;

“outline cable specification and installation plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline fisheries liaison and co-existence plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline marine mammal mitigation protocol” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline marine written schemes of investigation” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline offshore operations and maintenance plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline project environmental management plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline sediment disposal management plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline southern north sea special area of conservation site integrity plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline working in proximity to wildlife plan” means the document forming an appendix to the outline project environmental management plan;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“pin piled jacket” means a jacket attached to the seabed using pin piles;

“statutory historic body” means Historic England or its successor in function;

“statutory nature conservation body” means the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017 or its equivalent in the 2017 Regulations;

“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)

“transition piece” means the metal and / or concrete 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, radar, 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 Five Estuaries Offshore Wind Farm Limited, incorporated under company number 12292474 and having its registered office at Windmill Hill Business Park, Whitehill Way, Swindon, Wiltshire, United Kingdom, SN5 6PB;

“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, helicopter

landing facilities and other associated equipment, and radar equipment, fixed to a foundation or transition piece; and

“working day” means a day which is not a weekend, bank holiday or public holiday in England.

(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 Ringroad
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)

Miranda House
The Quay
Harwich
CO12 3HH

(e) Maritime and Coastguard Agency

Navigation Safety Branch
Bay 2/20, Spring Place
105 Commercial Road
Southampton
SO15 1EG
Tel: 020 3817 2433;

(f) Ministry of Defence (as requested 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 of the MMO is required, harwich@marinemanagement.org.uk.

(6) Unless otherwise advised in writing by the MMO, the "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 at Part 2, this licence authorises the undertaker (and any agent or contractor acting on their 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 when combined with the disposal authorised within the cable corridor disposal site by the deemed marine licence granted under Schedule 11 of the Order, of up to 22,374,371 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 cable installation preparation works within the array area disposal site (TH017 and TH018);
- (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 of over 100 megawatts comprising up to 79 wind turbine generators each fixed to the seabed by one of monopile foundations or mono suction caisson foundations, pin-piled jacket foundations or suction caisson jacket foundations;
- (b) a network of subsea inter-array cables connecting to the offshore substations consented in Work No.2 of schedule 1 to the Order and licenced under the deemed marine licence set out in schedule 11 of the Order, including cable crossings and cable protection; and
- (c) floating buoys.

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.

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 and cable installation preparation 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 shown on the offshore Order limits and grid coordinates plan.

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 115(2) of the 2008 Act.

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 7 (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 Schedule, 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 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 79.

(2) Subject to sub-paragraph (3), each wind turbine generator forming part of the authorised scheme must not—

- (a) exceed a height of 370 metres when measured from LAT to the tip of the vertical blade;
- (b) exceed a rotor diameter of 340 metres;
- (c) be less than 28 metres from MHWS to the lowest point of the rotating blade; and
- (d) be less than 830 metres from the nearest wind turbine generator in all directions.

(3) The minimum distance in sub-paragraph 10(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 caisson foundations;
- (c) pin-piled jacket foundations;
- (d) suction caisson jacket foundations.

(5) No wind turbine generator with a piled foundation may -

- (a) employ more than 4 pin piles per foundation;
- (b) in the case of monopile foundations, exceed a monopile diameter of 15 metres;
- (c) in the case of a two or three pile foundation, exceed a pile diameter of 4 metres per pile; or
- (d) in the case of a four pile foundation, exceed a pile diameter of 3.5 metres per pile.

(6) The total seabed footprint area for wind turbine generator foundations must not exceed—

- (a) 99,274 square metres excluding scour protection; and
- (b) 834,896 square metres including scour protection.

(7) The total volume of scour protection material for wind turbine generator foundations must not exceed 1,248,850 cubic metres.

11. The total length of the cables in Work No. 1(b) and the volume of their cable protection (including cable crossings) must not exceed the following—

<i>Work</i>	<i>Length</i>	<i>Cable protection</i>
Work No.1	200 kilometres	321,600 square metres 187,600 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 provides otherwise.

(2) Maintenance works include but are not limited to—

- (a) major wind turbine component;
- (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 condition 12(2)(d), (e) and (f) the undertaker must not reduce water depth by more than 5% unless agreed with the MMO in writing following consultation with the MCA.

(4) An operation and maintenance plan substantially in accordance with the outline offshore operations and maintenance plan must be submitted to the MMO for approval in consultation with the relevant SNCB and the MCA at least six months prior to the commencement of the operation of the licensed activities. 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 in accordance with the provisions of the working in proximity to wildlife 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) 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—
 - (i) all agents and contractors notified to the MMO in accordance with condition 25; and
 - (ii) the masters and offshore operations managers responsible for the vessels notified to the MMO in accordance with condition 25;

- (b) within 28 days of receipt of a copy of this marine licence and any subsequent variations to it, those persons referred to in sub-paragraph (1)(a) above must provide a completed confirmation form to the MMO confirming receipt of this marine licence.
- (2) Only those persons and vessels notified to the MMO in accordance with condition 25 are permitted to carry out the licensed activities
- (3) Copies of this marine licence must also 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 documents referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at the locations set out in sub-paragraph (3)(b) above.
- (5) 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 25(3), and that a copy of this marine licence is held on board any such vessel.
- (6) 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.
- (7) The undertaker must inform the MMO Local Office in writing at least 14 days prior to the commencement of the licensed activities and within five days of the completion of the licensed activity.
- (8) The undertaker must inform the Kingfisher Information Service of Seafish details regarding the vessel routes, timings and locations relating to the construction of the authorised development or relevant stage thereof by notice via the Kingfisher Information Service portal <https://kingfisherbulletin.org/submit-notice> and be email send to kingfisher@seafish.co.uk—
- (a) at least fourteen days prior to the commencement of offshore activities, for inclusion in the Kingfisher Fortnightly 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.
- (9) 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.
- (10) 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). 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.
- (11) The undertaker must notify the UK Hydrographic Office of the commencement (within fourteen days), progress and completion of construction (within fourteen 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.

(12) 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 MCA, Trinity House, the Kingfisher Information Service and the UK Hydrographic Office.

(13) 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.

(14) The undertaker must notify the MMO in writing a minimum of five 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.

(15) 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 five days of completion of each instance of cable repair, replacement or protection replenishment activity.

(16) 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 of this fact in writing as soon as is reasonably practicable. The undertaker must explain in writing what information was material 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.

(1) The undertaker must during the period from the start of construction of the authorised scheme 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.

(2) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aid to navigation management plan agreed pursuant to condition 21(1)(g) using the reporting system provided by Trinity House.

(3) 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.

(4) In the event that the provisions of condition 15(12) or 15(13) 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.

(5) 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.

(6) Colouring of structures

17.—(1) The undertaker must colour all structures yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House or must colour the structure as directed by Trinity House from time to time.

(1) 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 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.

(1) 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
- (f) 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) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised development must be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002^(b) (as amended) as maintained by the Centre for Environment, Fisheries and Aquaculture Science.

(2) 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 and, in so far as they are applicable, the Environment Agency Pollution Prevention Control Guidelines.

(3) 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.

(4) 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.

(5) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation or seabed preparation for foundations, vessels or cables, and drilling mud is disposed of within the Order limits seaward of MHWS.

^(a) S.I. 2016/765

^(b) S.I. 2002/1355

(6) The undertaker must ensure that any rock material used in the construction of the authorised scheme is from a recognised source, free from contaminants and containing minimal fines.

(7) 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.

(8) 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.

(9) 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)—

(10)

- (a) debris is dropped objects which are considered a danger or hazard to navigation must be reports 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 and the UK Hydrographic Office email navwarnings@btconnect.com;
- (b) all dropped objects within the Order limits, objects including those in (a) 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 by the MMO; and
- (c) on receipt of 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 seabed 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, within 48 hours full details of the circumstances of the deposit must be notified to the MMO in the manner provided in condition 19(10).

(2) The unauthorised deposits 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, prepared in accordance with the offshore project design principles document 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, 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, and offshore 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 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 21(2)(d) or relating to any habitats of principal importance identified as part of surveys undertaken in accordance with condition 26;
- to ensure conformity with the description of Work No. 1 and compliance with conditions 1, 2 and 3 above;
- (b) a construction programme for the relevant stage 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, offshore platforms and cable comprised in the works at paragraph 2 to 3(b) of Part 1 (licensed marine activities) of this Schedule (insofar as not shown in 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 having regard to any mitigation scheme pursuant to sub-paragraph 21(1)(g);
 - (ii) cable installation works including cable protection;
 - (iii) contractors; and
 - (iv) associated ancillary works;
 - (d) a project environmental management plan in accordance with the outline 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 to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
 - (iii) a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised;
 - (iv) waste management and disposal arrangements;
 - (v) a working in proximity to wildlife plan, in accordance with the outline working in proximity to wildlife plan;
 - (e) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting in accordance with conditions 26, 27 and 29;
 - (f) 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 outline 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 statutory nature conservation bodies;

- (g) an aids to navigation management plan to be agreed in writing by the MMO following consultation with Trinity House, 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;
 - (h) an offshore monitoring plan for the relevant stage which accords with the principles set out in the offshore in principle monitoring plan;
 - (i) 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; and
 - (j) 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 condition 21(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 marine written schemes 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 marine written schemes 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 7,000kJ and the hammer energy used to drive or part-drive pin pile foundations must not exceed 3,000kJ.
- (5) No more than two main installation vessels may be engaged at any time in activities related to piling for the licenced activities. There will only be a maximum installation of two monopiles foundations or 8 pin piles within a 24-hour period. It is possible for installation of two piled

foundations to occur concurrently i.e. within a 24-hour period at up to two locations within the area of Work No. 1.

(6) Percussive piling associated with wind turbine generator foundations, together with cable laying or seabed preparation must not take place between 1 November to 24 January (inclusive) in any year within the southern array area for the protection of spawning herring unless otherwise agreed in writing by the MMO. For the purposes of this condition “southern array area” means the area identified as having medium to high confidence in terms of suitability for herring spawning within the heatmapping exercise detailed within the Fish and Shellfish Ecology Technical Baseline Report.

(7) 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 other undertaker to whom part of the benefit of this Order has been transferred or leased pursuant to article 7 (benefit of the order) of the Order.

(8) The undertaker to whom part of the benefit of the Order has been transferred or leased pursuant to article 7 (benefit of the order) must provide any comments on the plans and documentation to the undertaker within 14 days of receipt.

(9) 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)(e)) 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)(e), 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.

Site Integrity Plan

23.—(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

24.—(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 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

(2) No stage of the authorised development may commence until the MMO, in consultation with the MCA, has confirmed in writing that an emergency response co-operation plan has been prepared by the undertaker.

Reporting of engaged agents, contractors and vessels

25.—(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 not less than 24 hours 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

26.—(1) The undertaker must in discharging condition 21(1)(e) for construction submit a monitoring plan in accordance with the offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant statutory bodies, 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 marine 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 that meets the requirements of IHO S44ed5 Order 1a, of the Order limits and a buffer outside to—

(i) determine the location, extent and composition of any biogenic or geogenic reef features, as set out within the outline marine monitoring plan;

(ii) inform future navigation risk assessments; 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 condition 26(2)(a)(ii) and 26(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 monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

(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 statutory nature conservation body, the MCA and UK Hydrographic Office as relevant.

Construction monitoring

27.—(1) The undertaker must, in discharging condition 21(1)(e), submit a construction monitoring plan or plans for that stage in accordance with the offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body, 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 specify each survey’s objectives and explain how it 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) Subject to receipt from the undertaker of specific proposals pursuant to this condition 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 licence granted under Schedule 11 of the Order.

(3) The undertaker must carry out the surveys specified within the construction monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

Marine mammal condition

28.—(1) In the event that piled foundations are proposed, the monitoring plan submitted under condition 27(2)(b) must include measurements of noise generated by the installation of four of the first 12 piled foundations of each piled foundation type to be installed unless the MMO otherwise agrees in writing.

(2) The results of the initial noise measurements monitored in accordance with sub-paragraph 27(2)(b) must be provided in writing to the MMO within nine weeks of the installation (unless otherwise agreed) of the first of the four piled foundations monitored in accordance with sub-paragraph (1). The assessment of this report by the MMO will determine whether any further noise monitoring is required. If, in the reasonable opinion of the MMO in consultation with the statutory nature conservation body, determines that the assessment shows impacts significantly in excess to those assessed in the environmental statement or 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.

Post-construction monitoring

29.—(1) The undertaker must, in discharging condition 21(1)(e), submit a post-construction monitoring plan or plans for that stage in accordance with the offshore in-principle monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body 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 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 preconstruction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) Subject to receipt of specific proposals the post-construction survey plan or plans must include, in outline—

- (a) 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 schemes of archaeological investigation required under condition 21(2); and
- (b) 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 agreed under 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 statutory nature conservation body.

(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.

(5) In the event that the reports provided to the MMO under sub-paragraph (4) identify a need for additional monitoring, the requirement for any additional monitoring will be agreed with the MMO in writing and implemented as agreed.

Timing of monitoring report

30. Any monitoring report compiled in accordance with the monitoring plans provided under conditions 26, 27 and 29 must be provided to the MMO no later than four months following receipt by the undertaker of the results of monitoring to which it relates, unless otherwise agreed with the MMO 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) 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) 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; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry's Close Out requirements.

(2) The undertaker must notify the MMO in writing of the successful submission of Forward Look or Close Out data pursuant to 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 condition 32(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

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 statutory nature conservation body 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.

35. The undertaker must submit a close out report to the MCA 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 offshore platform; and
- (c) latitude and longitude coordinates of the centre point of the location of each wind turbine generator and offshore platform, provided as Geographical Information System data referenced to WGS84 datum.

Reporting of scour and cable protection;

36.—(1) Not more than four months following completion of the construction of the authorised development, the undertaker must provide the MMO and the relevant statutory nature conservation bodies with a report setting out details of the cable protection and scour protection used for the authorised development.

(2) The report must include the following information—

- (a) the location of cable protection and scour protection;
- (b) the volume of cable protection and scour protection; and
- (c) any other information relating to the cable protection and scour protection as agreed between the MMO and the undertaker

Deployment of cable protection

37. Any cable protection authorised under this licence must be deployed within 10 years from the date of the grant of the Order unless otherwise agreed by the MMO in writing.

SCHEDULE 11

Article 5

Deemed marine licence – Transmission Assets

PART 1

General

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);

“2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017(d);

“aids to navigation management plan” means the aids to navigation and management plan to be submitted to the MMO under the conditions of this licence;

(a) 2004 c. 20

(b) 2008 c. 29

(c) 2009 c. 23

(d) S.I. 2017/13

“array area” means the area covered by Work No. 1 as shown on the offshore works plan;

“array area disposal site” means the site to be used for disposal of inert material of natural origin produced during construction, drilling and seabed preparation for works associated with foundations, cables or installation vessels (including sandwave clearance) to be located within the array area;

“authorised deposits” means the substances and articles specified in paragraph 4 of Part 1 of this marine licence;

“authorised development” means Work Nos. 2, 2A and 3 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” means cables for the transmission of electricity and includes fibre optic and other communications cables either within the cable or laid alongside;

“cable crossings” means a crossing of existing sub-sea cables or pipelines or other existing infrastructure by a cable or, where cables run together in parallel, a set of cables, 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, bagged solutions, 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;

“commence” means the first carrying out of any licensed marine activities authorised by this marine licence, save for pre-construction surveys and monitoring approved under this marine licence and the activities set out in paragraph 2 of part 1 of this licence, 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 design objectives, 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 and any successor body to its functions;

“Defra” means the Department for Environment, Food and Rural Affairs;

“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;

“emergency response co-operation plan” means the plan approved by the MCA the arrangements for liaison between the undertaker and HM Coastguard in the event of an emergency response;

“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 44 (certification of plans 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 Hydrographics Surveys;

“inter-array cable” means the network of offshore subsea cables connecting the wind turbine generators in Work No. 1 of and licenced under the deemed marine licence in Schedule 10 of the Order, and the offshore substations forming part of Work No. 2;

“jacket foundation” means a lattice type structure constructed of steel, which may include additional equipment such as, J-tubes, corrosion protection systems and access platforms;

“JNCC” means the Joint Nature Conservation Committee;

“JNCC Guidance” means the statutory nature conservation body ‘Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs’ Joint Nature Conservation Committee Report No.654, May 2020 published in June 2020 as amended, updated or superseded;

“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;

“LAT” means lowest astronomical tide;

“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;

“Margate and Long Sands special area of conservation benthic mitigation plan” means the document forming an appendix to the outline cable specification and installation plan;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, 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, an executive agency of the Department for Transport;

“MHW” or “mean high water” means the highest level which spring tides reach on average over a period of time;

“MHWS” or “mean high water springs” means the boundary of the landward jurisdiction of the 2009 act;

“monopile foundation” means a steel pile, typically cylindrical, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“offshore in principle monitoring plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44(certification of plans etc.);

“the offshore Order limits and grid co-ordinates plan” means the plan certified as such by the Secretary of State for the purposes of the Order under article 44 (certification of plans etc.);

“offshore project design principles” means the document certified as such by the Secretary of State for the purposes of the Order under article 44 (certification of plans etc.);

“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 LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing—

- (a) electrical equipment required to switch, transform, convert electricity generated at the wind turbine generators to a higher voltage and provide reactive power compensation; and
- (b) storage, workshop auxiliary equipment, radar and facilities for operating, maintaining and controlling the substation or wind turbine generators;

“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 Five Estuaries Offshore Wind Farm Order 202[];

“the Order limits” means the limits shown on the offshore Order limits plans and the onshore Order limits plan within which the authorised development may be carried out, the grid coordinates for the area of which seaward of MHWS are set out in Schedule 16;

“outline cable specification and installation plan” means the document certified such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline fisheries liaison and co-existence plan” means the document certified such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline marine mammal mitigation protocol” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline marine written scheme of investigation” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline navigation and installation plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline offshore operations and maintenance plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline project environmental management plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline sediment disposal management plan” means the document certified as such by the Secretary of State under article 44 (certification of plans, etc) for the purposes of this Order;

“outline southern north sea special area of conservation site integrity plan” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.);

“outline working in proximity to wildlife plan” means the document forming an appendix to the outline project environmental management plan;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“pin piled jacket” means a jacket attached to the seabed using pin piles;

“PLA” means the Port of London Authority;

“statutory historic body” means Historic England or its successor in function;

“statutory nature conservation body” means the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017 or its equivalent in the 2017 Regulations;

“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 Five Estuaries Offshore Wind Farm Limited, incorporated under company number 12292474 and having its registered office at Windmill Hill Business Park, Whitehill Way, Swindon, Wiltshire, United Kingdom, SN5 6PB;

“vessel” means every description of vessel, however propelled or moved, and includes a nondisplacement 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; and

“working day” means a day which is not a weekend, bank holiday or public holiday in England;

“works plan - offshore” means the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans 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 Ringroad
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)

Miranda House
The Quay
Harwich
CO12 3HH

- (e) Maritime and Coastguard Agency
Navigation Safety Branch
Bay 2/20, Spring Place
105 Commercial Road
Southampton
SO15 1EG
Tel: 020 3817 2433;
- (f) Ministry of Defence (as requested 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) Port of London Authority
London River House
Royal Pier Road
Gravesend
Kent
Tel: 01474 562200
- (j) 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 of 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.marinemangement.org.uk/>.

Details of licensed marine activities

2. Subject to the licence conditions at Part 2, this licence authorises the undertaker (and any agent or contractor acting on their 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—
 - (i) the array area disposal sites (TH017 and TH018), when combined with the disposal authorised by the deemed marine licence granted under Schedule 10 of the Order, of up to 22,374,371 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 cable installation preparation and excavation of horizontal directional drilling pits works within the parts of Work No. 2 that lie within the array area; and
 - (ii) the cable corridor disposal site (TH019) of up to 9,214,386 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 cable installation preparation and excavation of horizontal directional drilling pits works within Work Nos. 2, 2A and 3;
- (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 installation of foundations, 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— Electrical export works comprising:

- (a) up to two offshore substation platforms each fixed to the seabed by a foundation;
- (b) up to two subsea cable circuits between the offshore platforms forming Work No.2(a) including cable crossings and cable protection; and
- (c) up to two subsea cable circuits between Work No. 2(a) and Work No. 3, cable protection and cable crossings.

Work No. 2A—Sheet piling works and creation of pits for trenchless installation techniques, including installation of up to two cable ducts, installation and use of temporary construction working areas, cable installation vessel anchoring and works to allow vessels to remain in place at low tide.

Work No. 3—Installation of up to two subsea cable circuits between Work No. 2 and Work No. 4, including up to two cable ducts, cable protection and cable crossings and further including;

- (a) sheet piling works including creation of pits for trenchless installation techniques, trenchless installation technique works including the creation of entrance and exit pits; and

- (b) installation and use of temporary construction working areas, cable installation vessel anchoring, works to allow vessels to remain in place at low tide and laydown area.

In connection with such Works Nos. 2, 2A and 3 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 electrical installations;
- (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, and 3;
- (d) temporary landing places, moorings or other means of accommodating or anchoring vessels in the construction and/or maintenance of the authorised development.

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 cable installation preparation works and excavation of horizontal directional drilling pits;
- (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 Nos. 2, 2A and 3 are shown on the offshore Order limits and grid coordinates plan.

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 7 (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 Schedule, 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 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. The dimensions of any offshore platform forming part of the authorised development (excluding stowed cranes, helidecks, masts and auxiliary structures) must not exceed—

- (a) 105 metres in height when measured from LAT;
- (b) 125 metres in length; and
- (c) 100 metres in width.

11.—(1) Offshore substation platform foundation structures forming part of the authorised scheme must be one of either monopile foundations or jacket foundations.

(2) No offshore substation platform with a piled foundation may -

- (a) employ more than 6 piles per foundation;
- (b) in the case of monopile foundations, exceed a monopile diameter of 15 metres; or
- (c) in the case of a two or more pile foundation, exceed a pile diameter of 4 metres per pile.

12.—(1) The total length of the cables in Work Nos. 2, 2A and 3, and the volume of their cable protection (including cable crossings) must not exceed the following—

<i>Work</i>	<i>Length</i>	<i>Cable protection</i>
Work Nos 2, 2A and 3	196 kilometres	321,600 square metres 187,600 cubic metres

(2) Within 1600 metres seawards of MHWS, cable protection measures and cable protection remediation carried out as part of the must not include any use of loose rock or gravel.

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 provides otherwise.

(2) Maintenance works include but are not limited to—

- (a) 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; and
- (h) J-tube repair/replacement.

(3) In undertaking activities under condition 13(2)(d), (e) and (f), other than in areas shown shaded in yellow on the Deep Water Route Cable Installation Area (Future Dredging depths) plan where navigable depth may not be reduced to any extent, the undertaker must not reduce water depth by more than 5% referenced to Chart Datum unless agreed with the MMO in writing following consultation with the MCA.

(4) An operation and maintenance plan substantially in accordance with the outline offshore operations and maintenance plan, and, in so far as is relevant, the principles of the outline cable installation and maintenance plan, must be submitted to the MMO for approval in consultation with the relevant SNCB and the MCA at least six months prior to the commencement of the operation of the licensed activities. All operation and maintenance activities must be carried out in accordance with the approved 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 in accordance with the provisions of the working in proximity to wildlife 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) 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—
 - (i) all agents and contractors notified to the MMO in accordance with condition 26; and
 - (ii) the masters and offshore operations managers responsible for the vessels notified to the MMO in accordance with condition 26;
- (b) within 28 days of receipt of a copy of this marine licence and any subsequent variations to it those persons referred to in paragraph (1)(a) above must provide a completed confirmation form to the MMO confirming receipt of this marine licence.

(2) Only those persons and vessels notified to the MMO in accordance with condition 26 are permitted to carry out the licensed activities.

(3) Copies of this marine licence must also 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 documents referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at the locations set out in sub-paragraph (3)(b) above.

(5) 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.

(6) 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.

(7) The undertaker must inform the MMO Local Office in writing at least five days prior to the commencement of the licensed activities and within five days of the completion of the licensed activity.

(8) The undertaker must inform the Kingfisher Information Service of details regarding the vessel routes, timings and locations relating to the construction of the authorised development or relevant stage thereof by notice via the Kingfisher Information Service portal <https://kingfisherbulletin.org/submit-notice> and by email sent to kingfisher@seafish.co.uk—

- (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.

(9) 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 Nos. 2, 2A and 3 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.

(10) 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.

(11) The undertaker must notify the UK Hydrographic Office of the commencement (within fourteen days), progress and completion of construction (within fourteen 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, MCA and PLA within five days of the notification.

(12) 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 MCA, PLA, Trinity House, the Kingfisher Information Service and the UK Hydrographic Office.

(13) 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.

(14) The undertaker must notify the MMO in writing a minimum of five 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.

(15) The undertaker must ensure that the MMO, the MMO Local Office, local mariners, local fishermen's organisations, PLA and the Source Data Receipt Team at the UK Hydrographic Office, Taunton, Somerset, TA1 2DN (sdr@ukho.gov.uk) are notified within five days of completion of each instance of cable repair, replacement or protection replenishment activity.

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 scheme 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 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) or 16(13) 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. The undertaker must colour all offshore substation platform foundations yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House, or must colour the structure as directed by Trinity House from time to time.

Aviation safety

19.—(1) The undertaker must exhibit such lights, with such shape, colour and character as are required in writing by 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;
- (b) the date any offshore electrical installations are to be installed;
- (c) the maximum height of any construction equipment or vessels to be used;
- (d) the maximum heights of offshore electrical installations to be constructed (including any antennae);
- (e) the latitude and longitude of each offshore electrical installations 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) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised development must be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002^(b) (as amended) as maintained by the Centre for Environment, Fisheries and Aquaculture Science.

^(a) S.I. 2016/765

^(b) S.I. 2002/1355

(2) 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.

(3) 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.

(4) 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 31 January each year for the months August to January inclusive, and by 31 July each year for the months February to July inclusive.

(5) 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 and drilling mud is disposed of within the Order limits seaward of MHWS.

(6) The undertaker must ensure that any rock material used in the construction of the authorised scheme is from a recognised source, free from contaminants and containing minimal fines.

(7) 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.

(8) 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.

(9) 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)—

- (a) (a) Debris or dropped objects 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 the incident, to the relevant HM Coastguard Maritime Rescue Co-ordination Centre by telephone, and the UK Hydrographic Office email navwarnings@btconnect.com;
- (b) (b) All dropped objects within the Order limits including those in paragraph (a) above must be reported to the MMO, UKHO and HMCG 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 following the undertaker becoming aware of an incident unless otherwise agreed in writing.
- (c) (c) On receipt of 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 seabed 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, within 48 hours full details of the circumstances of the deposit must be notified to the MMO in the manner provided in condition 20(10).

(2) The unauthorised deposits 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, in so far as it affects the Deep Water Routes the PLA, in so far as it affects the intertidal area Essex County Council as the discharging authority for the purposes of Requirement 9 in Part 1 of Schedule 2 of the Order, UK Hydrographic Office and relevant SNCB—

- (a) A design plan, prepared in accordance with the offshore project design principles document 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, 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 electrical installations;
 - (ii) the dimensions of all offshore electrical installations to be installed, including any antennae;
 - (iii) the length and arrangement of cables comprised in Work Nos. 2, 2A and 3;
 - (iv) the type and dimensions of all foundations for the offshore substation platforms;
 - (v) the proposed layout of all offshore electrical installations including any exclusion zones identified under sub-paragraph 22(2)(d); and
 - (vi) any exclusion zones or micro-siting requirements identified in any mitigation plan pursuant to sub-paragraph 22(2)(d) or relating to any habitats of principal importance identified as part of surveys undertaken in accordance with condition 27to ensure conformity with the description of Work Nos. 2, 2A and 3 and compliance with conditions 1, 2 and 3 above;
- (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 all offshore electrical installations and cable comprised in the works at paragraphs 2 and 3 of Part 1 (licensed marine activities) of this Schedule (insofar as not shown in 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 having regard to any mitigation scheme pursuant to sub-paragraph 22(1)(f);
 - (ii) contractors; and
 - (iii) associated ancillary works;
- (d) a project environmental management plan in accordance with the outline 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 to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
- (iii) a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised;
- (iv) waste management and disposal arrangements; and
- (v) a working in proximity to wildlife plan in accordance with the outline working in proximity to wildlife plan and including details of a best practice protocol for the protection of red throated divers restricting the laying of the electrical export cables forming part of Work No 2(c) within the Outer Thames Estuary special protection area between 1st November and 1st March (inclusive) in any year without the prior consent in writing of the MMO;
- (e) details of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting in accordance with conditions 27, 28 and 30;
- (f) 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 outline 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 statutory nature conservation bodies;
- (g) a Margate and Long Sands special area of conservation - benthic mitigation plan, substantially in accordance with document number 9.13 Revision G certified under this Order.
- (h) a cable specification and installation plan for the relevant stage which accords with the principles of 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 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;
 - (iv) proposals for the cable laying methodology, volume and areas of cable protection within the Margate and Long Sands special area of conservation, and proposals for timing and methodology for reporting on actual volumes and areas post construction, in accordance with the Margate and Long Sands special area of conservation - benthic mitigation plan to be approved pursuant to sub-paragraph 22(1)(g); 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, 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 offshore in-principle monitoring plan setting out the circumstances in which monitoring will be required and the monitoring to be carried out in such circumstances;

- (k) a navigation and installation plan for the relevant stage which accords with the principles set out in the outline navigation and installation plan;
- (l) 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; and
- (m) 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 condition 22(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 marine written schemes 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 marine written schemes 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 7,000kJ 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 licensed activities. There will only be a maximum installation of two monopile foundations or 8 pin piles within a 24-hour period. It is possible for installation of the two piled foundations to occur concurrently i.e. within a 24-hour period at up to two locations within the area of Work No. 2 or up to two locations within the array. The two piled foundation locations may also be piled sequentially.

(6) Percussive piling associated with wind turbine generator foundations, together with cable laying or seabed preparation must not take place between 1 November to 24 January (inclusive) in

any year within the southern array area for the protection of spawning herring unless otherwise agreed in writing by the MMO. For the purposes of this condition “southern array area” means the area identified as having medium to high confidence in terms of suitability for herring spawning within the heatmapping exercise detailed within the Fish and Shellfish Ecology Technical Baseline Report..

(7) 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 other undertaker to whom part of the benefit of this Order has been transferred or leased pursuant to article 7 (benefit of the order) of the Order.

(8) The undertaker to whom part of the benefit of the Order has been transferred or leased pursuant to article 7 (benefit of the order) must provide any comments on the plans and documentation to the undertaker within 14 days of receipt.

(9) 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.

(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.—(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 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

(2) No stage of the authorised development may commence until the MMO, in consultation with the MCA, has confirmed in writing that an emergency response co-operation plan has been prepared by the undertaker.

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 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)(e) for construction submit a monitoring plan in accordance with an offshore in principle monitoring plan for written approval by the MMO in consultation with the relevant statutory bodies, 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 marine 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 that meets the requirements of IHO S44ed5 Order 1a, of the Order limits and a buffer outside to—
 - (i) determine the location, extent and composition of any biogenic or geogenic reef features, as set out within the outline marine 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 condition 27(2)(a)(ii) and 27(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 monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.
- (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 statutory nature conservation body, the MCA, the PLA and UK Hydrographic Office as relevant.

Construction monitoring

28.—(1) The undertaker must, in discharging condition 22(1)(e), submit a construction monitoring plan or plans for that stage in accordance with the offshore in principle monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body, 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 specify each survey’s objectives and explain how it 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) Subject to receipt from the undertaker of specific proposals pursuant to this condition the construction monitoring plan must include, in outline 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.

(3) The undertaker must carry out the surveys specified within the construction monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

Marine mammal condition

29.—(1) In the event that piled foundations are proposed, the monitoring plan submitted under condition 28(1) must include measurements of noise generated by the installation of the first 12 piled foundations of each piled foundation type to be installed unless the MMO otherwise agrees in writing.

(2) The results of the initial noise measurements monitored in accordance with sub-paragraph 28(1) must be provided in writing to the MMO within nine weeks of the installation (unless otherwise agreed) of four of the first piled foundation monitored in accordance with sub-paragraph (1). The assessment of this report by the MMO will determine whether any further noise monitoring is required. If the MMO determines, in consultation with the statutory nature conservation body, that the assessment shows impacts significantly in excess to those assessed in the environmental statement or 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.

Post-construction monitoring

30.—(1) The undertaker must, in discharging condition 22(1)(e), submit a post-construction monitoring plan or plans for that stage in accordance with an offshore in principle monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body 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 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 preconstruction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) Subject to receipt of specific proposals the post-construction survey plan or plans must include, in outline—

- (a) 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
- (b) 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 agreed under 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 statutory nature conservation body.

(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

31. Any monitoring report compiled in accordance with the monitoring plans provided under conditions 27, 28 and 30 must be provided to the MMO no later than four months following receipt by the undertaker of the results of monitoring to which it relates, unless otherwise agreed with the MMO in writing.

Reporting of impact pile driving

32.—(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) 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) 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; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry's Close Out requirements.

(2) The undertaker must notify the MMO in writing of the successful submission of Forward Look or Close Out data pursuant to 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

33.—(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 condition 33(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

34.—(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

35.—(1) The undertaker must submit a close out report in writing to the MMO and the relevant statutory nature conservation body 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 electrical installations

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

36. The undertaker must submit a close out report to the MCA 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 electrical installations;
- (b) a plan of the layout of installed offshore electrical installations; and
- (c) latitude and longitude coordinates of the centre point of the location of each offshore electrical installation, provided as Geographical Information System data referenced to WGS84 datum.

Reporting cable protection

37.—(1) Not more than four months following completion of the construction of the authorised development, the undertaker must provide the MMO and the relevant statutory nature conservation bodies with a report setting out details of the cable protection used for the authorised development.

(2) The report must include the following information—

- (a) the location of cable protection;
- (b) the volume of cable protection; and
- (c) any other information relating to the cable protection as agreed between the MMO and the undertaker

Deployment of cable protection

38. Any cable protection authorised under this licence must be deployed within 10 years from the date of the grant of the Order unless otherwise agreed by the MMO in writing.

SCHEDULE 12

Articles 37 and 38

PART 1

Tree Preservation Orders

In the District of Tendring:

<i>(1) Tree Preservation Order reference</i>	<i>(2) Tree Preservation Order Location</i>	<i>(3) Trees which may be damaged, lopped or cut back, or the roots of which may be encroached upon, as listed in the Tree Preservation Order</i>
23/00005/TPO	Stones Green Lane, Tendring	T.1, T.2, T.3, T.4, T.5, T.6 and G.2 (comprising 2 oaks)
21/00091/TPO	Welhams Farm, Bentley Road, Little Bentley	G.1 (comprising 3 oaks and 2 ash)

PART 2

Removal of hedgerows

In the District of Tendring:

<i>(1) Grid coordinates</i>		<i>(2) Identifier as shown on the tree preservation and important hedgerow plan</i>	<i>(3) Grid coordinates</i>		<i>(4) Identifier as shown on the tree preservation and important hedgerow plan</i>
Easting	Northing		Easting	Northing	
622174.73	218175.45	1a	622152.98	218357.82	1b
622161.62	218365.93	2a	622294.98	218417.97	2b
621319.92	218822.95	3a	621331.11	218912.90	3b
621301.18	218815.55	4a	621189.08	218790.08	4b
621253.28	218522.68	5a	621238.85	218512.76	5b
621239.56	218511.96	6a	621227.54	218589.49	6b
621213.79	218651.11	6c	621187.56	218763.10	6d
621180.98	218795.90	7a	621179.59	218799.88	7b
621174.91	218813.26	7c	621159.95	218902.25	7d
621015.58	218798.28	9a	620967.62	218954.47	9b
620428.51	219011.74	10a	620508.84	219035.16	10b
620388.32	219361.48	11a	620497.22	219421.21	11b

620502.52	219434.39	13a	620500.70	219441.12	13b
620104.84	220039.69	14a	620131.92	220063.98	14b
620095.10	220042.57	15a	620116.60	220059.85	15b
619662.19	222124.15	16a	619656.15	222171.57	16b
619464.05	222281.12	17a	619410.66	222250.97	17b
619177.90	222452.82	18a	619180.19	222457.92	18b
619100.23	222582.62	20a	619170.49	222717.00	20b
618923.88	222604.04	21a	618921.62	222605.84	21b
618593.85	222836.37	23a	618647.86	222951.02	23b
618580.08	222843.98	24a	618631.50	222953.66	24b
618472.13	222930.00	25a	618469.85	222960.88	25b
617752.41	223342.51	26a	617874.10	223419.42	26b
617719.50	223317.13	27a	617781.03	223383.66	27b
617751.63	223364.22	28a	617663.76	223364.03	28b
617746.10	223599.12	29a	617742.18	223598.49	29b
617394.18	223532.96	30a	617399.20	223567.39	30b
616953.70	223794.95	33a	616961.16	223867.75	33b
616637.24	223982.35	34a	616495.49	224014.70	34b
616315.85	224060.72	37a	616208.25	224073.52	37b
616306.48	224071.96	38a	616138.02	224082.53	38b
616136.55	224087.09	40a	616157.50	224425.55	40b
615773.76	224597.65	41a	615813.58	224679.65	41b
615119.80	224983.84	42a	615171.95	225085.90	42b
614451.96	226198.86	43a	614397.33	226208.65	43b
614333.67	226194.10	44a	614353.57	226206.14	44b
613724.43	226697.22	45a	613903.44	226728.64	45b
612603.81	226960.58	46a	612439.50	227301.04	46b
613049.68	227510.52	47a	613139.95	227541.89	47b
613029.89	227535.10	48a	613121.48	227564.85	48b
612050.59	227805.79	49a	612110.96	228062.89	49b
611743.07	227699.80	50a	611727.12	227788.77	50b
611742.09	227699.53	51a	611726.01	227788.47	51b
611225.41	227528.03	52a	611164.32	227598.10	52b
611336.37	226634.90	53a	611282.42	226578.51	53b
611281.29	226568.33	54a	611277.90	226553.07	54b
611202.31	226609.14	55a	611204.75	226614.26	55b
611096.24	226714.78	56a	610953.00	226826.63	56b
611011.13	226762.54	57a	611013.18	226767.84	57b
611012.78	226770.23	58a	610832.87	226921.16	58b
610804.67	226974.71	59a	610603.90	227263.44	59b
610618.81	227187.33	60a	610523.21	227475.25	60b
610602.48	227281.87	61a	610554.70	227437.87	61b
610538.19	227461.79	62a	610380.20	227645.30	62b
609681.97	227343.38	63a	609622.36	227516.86	63b
608261.14	229217.46	65a	608120.47	229048.26	65b
608072.69	229025.51	66a	607870.04	229088.64	66b

PART 3

Removal of important hedgerows

In the county of Tendring:

(1) Grid coordinates		(2) Identifier as shown on the tree preservation and important hedgerow plan	(3) Coordinates		(4) Identifier as shown on the tree preservation and important hedgerow plans
Easting	Northing		Easting	Northing	
621165.60	218774.98	8a	621164.57	218779.43	8b
620380.37	219359.51	12a	620506.88	219423.62	12b
619101.34	222569.28	19a	619174.25	222713.43	19b
618929.23	222620.66	22a	618989.31	222782.71	22b
617329.93	223502.68	31a	617350.46	223539.22	31b
617320.43	223507.87	32a	617339.39	223600.06	32b
616436.85	223930.23	35a	616421.54	224007.84	35b
616327.28	224057.05	35c	616321.74	224058.42	35d
616441.24	224060.48	36a	616471.37	224098.83	36b
616268.19	224015.65	39a	616260.27	224067.92	39b

SCHEDULE 13

Articles 3 and 49

Compensation

PART 1

Lesser Black Backed Gull

1. In this Schedule—

“compensation measure” means predator control and/or habitat creation, improvement or restoration;

“LBBG” means lesser black-backed gulls (*Larus fuscus*);

“LIMP” means the LBBG implementation and monitoring plan to be developed in accordance with the outline LIMP;

“outline LIMP” means the outline Lesser Black-Backed Gull implementation and monitoring plan being the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.); and

“OOEG” means the Offshore Ornithology Engagement Group.

2. The undertaker will form and administer the OOEG before carrying out any works to deliver the compensation measure under a LIMP to be approved under this Schedule. The undertaker will invite representatives from the following organisations to participate in the OOEG;

- (a) Marine Management Organisation;
- (b) The SCNB;
- (c) the relevant planning authority;

(d) The Royal Society for the Protection of Birds; and

(e) Landowners of the site upon which the compensation measure is to be delivered.

(2) The OOEG must be convened and consulted on the proposed LIMP before any approval of the LIMP is sought by the undertaker under paragraph 2.

3.—(1) Unless the Secretary of State confirms in writing that the compensation measure has been delivered to his satisfaction, then the following details contained with the LIMP, which must be in accordance with the outline LIMP, must be submitted to the Secretary of State for approval in consultation with the SCNB and the relevant planning authority for the compensation measure prior to the commencement of the offshore works.

(2) The LIMP 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 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; and
- (i) a plan for reporting to the OOEG and consulting the OOEG on the details of any proposed adaptive management measures and/or amendments to the LIMP.

4. The undertaker must carry out the compensation measure as approved by the Secretary of State in consultation with the SCNB and the relevant planning authority.

5. No wind turbine generator forming part of Work No. 1 may commence operation until the compensation measure has been implemented for three breeding seasons, unless commencement of operation at an earlier date is approved in writing by the Secretary of State. For the purposes of this paragraph each breeding season is 1 March to 30 September of each year inclusive.

6. The undertaker must notify the Secretary of State of implementation of the onshore compensation measure.

7. The details approved under paragraph 3 include any amendments that may subsequently be approved in writing by the Secretary of State.

8. Where the compensation measure as approved in the LIMP 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.

9. In the event of any conflict between the terms of this Order and the LIMP then the provisions of this Order will prevail.

PART 2

Kittiwake

10. In this Part of this Schedule—

“compensation measure” means an artificial nesting structure onshore, designed to provide a suitable nesting environment for kittiwake;

“FFC SPA” means the site designated as the Flamborough and Filey Coast Special Protection Area;

“KIMP” means a kittiwake implementation and monitoring plan to be developed in accordance with the outline KIMP;

“Marine Recovery Fund” means the fund to be established and operated by Defra pursuant to the Offshore Wind Environmental Improvement Package of the British Energy Security Strategy (April 2022) for the implementation of strategic compensation or any equivalent fund established by a Government body for that purpose;

“Marine Recovery Fund Payment” means a contribution to the Marine Recovery Fund to compensate for the predicted loss of adult kittiwakes 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 otherwise to be agreed with the Secretary of State; and

“outline KIMP” means the outline kittiwake implementation and monitoring plan being the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.).

11. No offshore works are to commence until the undertaker has confirmed in writing to the Secretary of State whether it—

- (a) has secured nesting space within the Gateshead kittiwake tower constructed by Dogger Bank South (DBS) OWF; or
- (b) will make a Marine Recovery Fund Payment, or
- (c) will submit a KIMP for a compensation measure not utilising the Gateshead kittiwake tower to the Secretary of State for approval.

12. Where the undertaker has confirmed in writing to the Secretary of State that it has secured nesting space within the Gateshead kittiwake tower constructed by Dogger Bank South (DBS) OWF, it must submit a monitoring and management plan in accordance with the relevant sections of the outline KIMP to the Secretary of State for approval. The monitoring and management plan must be implemented as approved under this paragraph.

13. Unless the Secretary of State confirms in writing that either:

- (a) it has been demonstrated to his satisfaction that sufficient capacity within the Gateshead kittiwake tower constructed by Dogger Bank South (DBS) OWF has been secured and will be maintained on behalf of the undertaker for the operational period of the authorised development; or
- (b) the Marine Recovery Fund Payment has been made,
then a KIMP, which must be in accordance with the outline KIMP, must be submitted to the Secretary of State for approval in consultation with the statutory nature conservation body and the relevant planning authority for the compensation measure, prior to the commencement of the offshore works.

(2) The KIMP under sub-paragraph (1) (if required) 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) where the compensation measures comprise an artificial nesting structure details of the capacity of such structure(s) and its ability to accommodate at least 16 additional nesting spaces for pairs of kittiwake to compensate for the impact of the authorised development on the population of the FFC SPA;
- (d) an implementation timetable for delivery of the compensation measure (where the measure is not already in place);
- (e) details of monitoring and maintenance programmes,
- (f) success criteria;
- (g) survey and reporting programmes for kittiwake and predators;

- (h) details of any adaptive management measures, with details of the factors used to trigger any such measures; and
- (i) provision for reporting to the Secretary of State.

14. Where a KIMP is approved under this Part, the undertaker must carry out the compensation measure as approved by the Secretary of State in consultation with statutory nature conservation body and the relevant planning authority unless otherwise agreed by the Secretary of State following consultation with the relevant statutory nature conservation body and the local planning authority for the area in which the compensation measure is to be provided.

15. (1) Where a KIMP is approved under paragraph 13 of this Part, no wind turbine generator forming part of Work No. 1 may commence operation until the compensation measure has been in place for at least three full kittiwake breeding seasons prior to such operation, unless commencement of operation at an earlier date is approved in writing by the Secretary of State. For the purposes of this paragraph each breeding season is 1 March to 30 September of each year inclusive.

(2) Where the undertaker has confirmed that it will make a payment to the Marine Recovery Fund there may be no operation of a wind turbine generator forming part of Work No. 1 unless and until the Marine Recovery Fund Payment has been quantified and such payment has been made by the undertaker and the Secretary of State has confirmed in writing that such payment fulfils the requirement for compensation measures. Following such payment the undertaker will not be required to implement any further compensation for kittiwake pursuant to this Part 2 of Schedule 13.

16. The undertaker must notify the Secretary of State of any implementation of a KIMP approved under paragraph 4 of this Part.

17. The details approved under paragraph 13 include any amendments that may subsequently be approved in writing by the Secretary of State. Any amendments to or variations of the approved KIMP must be in accordance with the principles set out in the outline KIMP and may only be approved where it has been demonstrated to the satisfaction of the Secretary of State that it is unlikely to give rise to any new or materially different environmental effects.

18. In the event of any conflict between the terms of this Order and the KIMP then the provisions of this Order prevail.

PART 3

Guillemot and Razorbill

19. In this Part of this Schedule —

“compensation measure” means the funding, provision or support of small scale management measures at [Guillemot] [Razorbill] [Guillemot and Razorbill] colonies in the southwest of England including; recreational disturbance reduction; wardening; signage; education; visitor access statements; and engagement with local businesses and organisations;

“the FFC SPA” means the site designated as the Flamborough and Filey Coast Special Protection Area;

“GRIMP” means a Guillemot and Razorbill implementation and monitoring plan to be developed in accordance with the outline GRIMP;

“Marine Recovery Fund” means the fund to be established and operated by Defra pursuant to the Offshore Wind Environmental Improvement Package of the British Energy Security Strategy (April 2022) for the implementation of strategic compensation or any equivalent fund established by a Government body for that purpose;

“Marine Recovery Fund Payment” means a contribution to the Marine Recovery Fund to compensate for the predicted loss of adult Guillemot and Razorbill 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 otherwise to be agreed with the Secretary of State;

“OOEG” means the Offshore Ornithology Engagement Group; and

“outline GRIMP” means the outline Guillemot and Razorbill implementation and monitoring plan being the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.).

20. No offshore works are to commence until the undertaker has confirmed in writing to the Secretary of State whether it will—

- (a) a Marine Recovery Fund Payment, or
- (b) submit a GRIMP to the Secretary of State for approval.

21. (1) Where the undertaker elects to submit a GRIMP, the undertaker will form and administer the OOEG before carrying out any works to deliver the compensation measure under a GRIMP to be approved under this Schedule. The undertaker will invite representatives from the following organisations to participate in the OOEG:

- (a) Marine Management Organisation
- (b) Natural England;
- (c) the relevant planning authority;
- (d) The Royal Society for the Protection of Birds; and
- (e) Landowners of the site upon which the compensation measure is to be delivered.

(2) The OOEG must be convened and consulted on the proposed GRIMP before any approval of the GRIMP is sought by the undertaker under paragraph 22.

22. (1) Unless the Secretary of State confirms in writing that the compensation measure has been delivered to his satisfaction or the Marine Recovery Fund Payment has been made, then the GRIMP, which must be in accordance with the outline GRIMP, must be submitted to the Secretary of State for approval in consultation with the statutory nature conservation body and the relevant planning authority for the compensation measure prior to the commencement of the offshore works.

(2) The GRIMP 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 monitoring and maintenance programmes,
- (e) success criteria;
- (f) survey and reporting programmes for Guillemot and Razorbill 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; and
- (i) a plan for reporting to the OOEG and consulting the OOEG on the details of any proposed adaptive management measures and/or amendments to the GRIMP.

23. The undertaker must carry out the compensation measure as approved by the Secretary of State in consultation with statutory nature conservation body and the relevant planning authority.

24. (1) No wind turbine generator forming part of Work No. 1 may commence operation until the compensation measure has been implemented, unless commencement of operation at an earlier date is approved in writing by the Secretary of State.

(2) Where the undertaker has confirmed that it will make a payment to the Marine Recovery Fund there may be no operation of a wind turbine generator forming part of Work No. 1 unless and until the Marine Recovery Fund Payment has been quantified and such payment has been made by the undertaker and the Secretary of State has confirmed in writing that such payment fulfils the requirement for compensation measures. Following such payment the undertaker

will not be required to implement any further compensation measures for Guillemot and Razorbill pursuant to this Part 3 of Schedule 13.

25. The undertaker must notify the Secretary of State of implementation of the compensation measure.

26. The details approved under paragraph 22 include any amendments that may subsequently be approved in writing by the Secretary of State. Any amendments to or variations of the approved GRIMP must be in accordance with the principles set out in the outline GRIMP and may only be approved where it has been demonstrated to the satisfaction of the Secretary of State that it is unlikely to give rise to any new or materially different environmental effects.

27. In the event of any conflict between the terms of this Order and the GRIMP then the provisions of this Order prevail.

PART 4

28. Margate and Long Sands SAC benthic compensation In this Part —

“BCSG” means Benthic Compensation Steering Group;

“BIMP” means the benthic implementation and monitoring plan to be developed in accordance with the outline BIMP;

“compensation measure” means the funding, provision or support of measures to remove anthropogenic pressure from the MLS SAC including but not limited to removal of redundant infrastructure or removal of aggregate pressure as identified in the MLS SAC benthic mitigation plan;

“Marine Recovery Fund” means the fund to be established and operated by Defra pursuant to the Offshore Wind Environmental Improvement Package of the British Energy Security Strategy (April 2022) for the implementation of strategic compensation or any equivalent fund established by a Government body for that purpose;

“Marine Recovery Fund Payment” means a contribution to the Marine Recovery Fund to compensate for impacts on protected features of the MLS SAC through extension of SAC by Defra, the sum of which will be calculated in accordance with any guidance issued by Defra or otherwise to be agreed with the Secretary of State;

“the MLS SAC” means the site designated as the Margate and Long Sands Special Area of Conservation; and

“Outline BIMP” means the outline benthic implementation and monitoring plan being the document certified as such by the Secretary of State for the purposes of this Order under article 44 (certification of plans etc.).

29. (1) No offshore works within the MLS SAC are to commence until the undertaker has confirmed in writing to the Secretary of State whether it will—

(a) make a Marine Recovery Fund Payment; or

(b) submit a BIMP in accordance with outline BIMP to the Secretary of State, in consultation with statutory nature conservation body and the MMO, for approval.

(2) Where the undertaker elects to submit a BIMP, the undertaker will form and administer the BCSG before carrying out any works to deliver the compensation measure under a BIMP to be approved under this Schedule. The undertaker will invite representatives from the following organisations to participate in the BCSG:

(2)

(a) Marine Management Organisation; and

(b) Natural England

(3) The BCSG must be convened and consulted on the proposed BIMP before any approval of the BIMP is sought by the undertaker under this paragraph.

(4) Any BIMP submitted under this paragraph must include a plan for reporting to the BCSG on the implementation of the BIMP, and consulting the BCSG on the details of any proposed adaptive management measures and/or amendments to the BIMP.

(5) Where a BIMP required under sub-paragraph (1), the undertaker must carry out the compensation measure in the BIMP as approved by the Secretary of State unless otherwise agreed by the Secretary of State following consultation with the relevant statutory nature conservation body.

30. Where the undertaker has confirmed that it will make a payment to the Marine Recovery Fund there may be no installation of cable protection within the MLS SAC unless and until the Marine Recovery Fund payment has been quantified and such payment has been made by the undertaker and the Secretary of State has confirmed in writing that such payment fulfils the requirement for compensation measures. Following such payment the undertaker will not be required to implement any further compensation measures for benthic impacts to the MLS SAC pursuant to this Part 4 of Schedule 13.

31. The undertaker must notify the Secretary of State of the implementation of the compensation measure.

32. The details approved under paragraph 29 include any amendments that may subsequently be approved in writing by the Secretary of State.

33. In the event of any conflict between the terms of this Order and the BIMP then the provisions of this Order prevail.

SCHEDULE 14

Article 48

Arbitration rules

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 48 (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 business 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 business 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.

SCHEDULE 15

Article 44

Documents to be certified

The following documents in Table 1 of this schedule are the list referred to in article 44.

Table 1

<i>Document Number</i>	<i>Name</i>	<i>Version</i>	<i>Date</i>
2.1	Location plan - Onshore	Revision B	September 2024
2.2	Location plan - Offshore	Revision B	September 2024
2.3	Land plans (Onshore)	Revision E	February 2025
2.4	Special Category Land Plans	Revision C	February 2025
2.5	Works Plans - Onshore	Revision D	February 2025
2.6	Works plans - Offshore	Revision B	October 2024
2.7	Offshore Order Limits and Grid Coordinates Plan	Revision B	September 2024
2.8	Street Works and Access Plan	Revision C	January 2025
2.9	Temporary closure of Public Rights of Way Plan	Revision D	February 2025
2.10	Tree Preservation Order and Hedgerow Plan	Revision B	September 2024
2.11	Historic Environment Plan - Onshore	Revision B	September 2024
2.12	Historic Environment Plan - Offshore	Revision A	March 2024
2.13	Statutory or Non-Statutory Sites and Features of Nature Conservation -Onshore	Revision B	September 2024
2.14	Statutory or Non-Statutory Sites and Features of Nature Conservation - Offshore	Revision A	March 2024

2.15	Water Bodies in a River Basin Management Plan	Revision B	October 2024
2.16	Crown Land Plan - Offshore	Revision A	March 2024
2.17	Crown Land Plan (Onshore)	Revision D	February 2025
2.18	Temporary Speed Reduction Plan	Revision C	December 2024
4.1	Book of Reference	Revision F	March 2025
5.56	Lesser Black-Backed Gull Implementation and Monitoring Plan	Revision D	March 2025
8.1	Cable Statement	Revision A	March 2024
8.2	Safety Zone Statement	Revision A	March 2024
9.3	Offshore Project Design Principles	Revision A	March 2024
9.4	Onshore Substation Design Principles Document	Revision C	March 2025
9.12	Outline Cable Specification and Installation Plan	Revision D	March 2025
9.13	Margate and Long Sands SAC Benthic Mitigation Plan	Revision G	March 2025
9.14.1	Outline Marine Mammal Mitigation Protocol - Piling	Revision D	March 2025
9.14.2	Outline Marine Mammal Mitigation Protocol - UXO	Revision C	March 2025
9.15	Outline Southern North Sea Special Area of Conservation Site Integrity Plan	Revision B	February 2025
9.16	Outline Fisheries Liaison and Co-existence Plan	Revision D	February 2025
9.17	Outline Offshore Operations and Maintenance Plan	Revision A	March 2024
9.18	Outline Project Environmental Management Plan	Revision A	March 2024
9.18.1	Working in proximity to Wildlife in the Marine Environment	Revision B	March 2025
9.19	Outline Marine Written Schemes of Investigation	Revision C	December 2024
9.20	Outline Navigation and Installation Plan	Revision D	March 2025
9.21	Code of Construction Practice	Revision E	March 2025
9.22	Outline Landscape and Ecological Management Plan	Revision F (for avoidance of doubt because of a discrepancy of cover sheet showing Revision E)	March 2025
9.23	Outline Onshore Written Scheme of Investigation	Revision B	March 2025

9.24	Outline Construction Traffic Management Plan	Revision F	March 2025
9.25	Outline Public Access Management Plan	Revision D	March 2025
9.26	Outline Workforce Travel Plan	Revision C	March 2024
9.27	Outline Skills and Employment Strategy	Revision A	March 2024
9.32	Offshore In-Principle Monitoring Plan	Revision G	March 2025
10.30	Outline Sediment Disposal Management Plan	Revision D	March 2025
10.47	Archaeological mitigation strategy	Revision B	March 2025
10.51	Deep Water Route Cable Installation Area (Future Dredging depths)	Version 3	February 2025
10.65	Outline groundwater monitoring plan	Revision A	March 2025
Environmental Statement			
6.1.1	Introduction	Revision A	March 2024
6.1.2	Policy & Legislation	Revision A	March 2024
6.1.3	EIA Methodology	Revision A	March 2024
6.1.3.1	Cumulative Effects Assessment Methodology	Revision B	December 2024
6.1.3.2	Transboundary Screening	Revision A	March 2024
6.1.4	Site Selection and Alternatives	Revision A	March 2024
6.1.5	Non-Technical Summary	Revision A	March 2024
6.1.6	Scoping Report and Scoping Opinion	Revision A	March 2024
6.2.1	Offshore Project Description	Revision A	March 2024 (for avoidance of doubt because of a discrepancy of cover sheet showing 2023)
6.2.1.1	Detailed Offshore Project Design Envelope	Revision A	March 2024
6.2.2	Marine Geology, Oceanography and Physical processes	Revision A	March 2024
6.2.3	Marine Water and Sediment Quality	Revision A	March 2024
6.2.4	Offshore Ornithology	Revision A	March 2024

6.2.5	Benthic and Intertidal Ecology	Revision A	March 2024
6.2.6	Fish and Shellfish Ecology	Revision A	March 2024
6.2.7	Marine Mammal Ecology	Revision A	March 2024
6.2.8	Commercial Fisheries	Revision A	March 2024
6.2.9	Shipping and Navigation	Revision A	March 2024
6.2.10	Seascape, Landscape and Visual	Revision A	March 2024
6.2.11	Offshore Archaeology and Cultural Heritage	Revision A	March 2024
6.2.12	Infrastructure and Other Marine Users	Revision B	September 2024
6.2.13	Military and Civil Aviation	Revision A	March 2024
6.3.1	Onshore Project Description	Revision C	October 2024
6.3.2	Onshore Landscape and Visual Impact Assessment	Revision A	March 2024
6.3.3	Socio-Economic, Tourism and Recreation	Revision A	March 2024
6.3.4	Onshore Biodiversity and Nature Conservation	Revision A	March 2024
6.3.5	Ground Conditions and Land Use	Revision A	March 2024
6.3.6	Hydrology, Hydrogeology and Flood Risk	Revision A	March 2024
6.3.7	Archaeology and Cultural Heritage	Revision A	March 2024
6.3.8	Traffic and Transport	Revision D	March 2025
6.3.9	Airborne Noise and Vibration	Revision A	March 2024
6.3.10	Air Quality	Revision A	March 2024
6.4.1	Climate Change	Revision A	March 2024
6.4.1.1	Greenhouse Gas Assessment	Revision A	March 2024
6.4.2	Human Health and Major Disasters	Revision B	April 2024
6.4.3	Inter-Relationships	Revision A	March 2024
6.8.1	Lesser Black Backed Gull Compensatory Areas Environmental Assessment	Revision C	December 2024
6.8.1.1	Lesser Black Backed Gull Compensatory Areas Flood Risk Assessment	Revision B	October 2024
6.8.1.2	Lesser Black Backed Gull Landscape and Visual Impact Assessment	Revision B	October 2024
6.8.1.3	Lesser Black Backed Gull Compensation Site - Ecological Impact Assessment	Revision C	December 2024

SCHEDULE 16

Article 2

Offshore co-ordinates

<i>Coordinates provided in DCO for Offshore Order Limits</i>	<i>WGS84 (Degrees Minutes Seconds)</i>	
	<i>Latitude</i>	<i>Longitude</i>
1	51° 49' 9.392" N	1° 14' 11.869" E
2	51° 49' 9.387" N	1° 14' 11.910" E
3	51° 49' 9.386" N	1° 14' 11.923" E
4	51° 49' 9.384" N	1° 14' 11.942" E
5	51° 49' 9.377" N	1° 14' 12.012" E
6	51° 49' 9.358" N	1° 14' 12.213" E
7	51° 49' 9.355" N	1° 14' 12.243" E
8	51° 49' 9.268" N	1° 14' 13.120" E
9	51° 49' 9.265" N	1° 14' 13.151" E
10	51° 49' 8.819" N	1° 14' 17.679" E
11	51° 49' 19.660" N	1° 14' 52.180" E
12	51° 49' 20.745" N	1° 14' 55.635" E
13	51° 49' 20.788" N	1° 14' 57.190" E
14	51° 49' 21.395" N	1° 15' 19.103" E
15	51° 49' 21.456" N	1° 15' 21.299" E
16	51° 49' 21.987" N	1° 15' 40.506" E
17	51° 49' 23.084" N	1° 16' 18.402" E
18	51° 49' 23.097" N	1° 16' 18.835" E
19	51° 49' 23.465" N	1° 16' 31.584" E
20	51° 49' 23.517" N	1° 16' 33.402" E
21	51° 49' 23.582" N	1° 16' 35.629" E
22	51° 49' 23.701" N	1° 16' 39.784" E
23	51° 49' 23.704" N	1° 16' 39.941" E
24	51° 49' 23.708" N	1° 16' 40.204" E
25	51° 49' 23.708" N	1° 16' 40.270" E
26	51° 49' 23.714" N	1° 16' 40.671" E
27	51° 49' 23.747" N	1° 16' 42.903" E
28	51° 49' 23.821" N	1° 16' 45.418" E
29	51° 49' 24.108" N	1° 16' 55.168" E
30	51° 49' 24.130" N	1° 16' 55.910" E
31	51° 49' 24.205" N	1° 16' 58.472" E
32	51° 49' 24.622" N	1° 17' 12.644" E
33	51° 49' 24.701" N	1° 17' 15.343" E
34	51° 49' 24.824" N	1° 17' 19.510" E
35	51° 49' 24.846" N	1° 17' 20.286" E
36	51° 49' 24.862" N	1° 17' 20.810" E
37	51° 49' 25.292" N	1° 17' 35.476" E
38	51° 49' 25.368" N	1° 17' 38.082" E
39	51° 49' 25.400" N	1° 17' 39.173" E
40	51° 49' 26.177" N	1° 18' 5.696" E

41	51° 49' 26.227" N	1° 18' 7.413" E
42	51° 49' 26.498" N	1° 18' 16.672" E
43	51° 49' 26.890" N	1° 18' 30.099" E
44	51° 49' 27.018" N	1° 18' 34.473" E
45	51° 49' 27.805" N	1° 19' 1.476" E
46	51° 49' 27.907" N	1° 19' 4.977" E
47	51° 49' 28.764" N	1° 19' 34.440" E
48	51° 49' 28.771" N	1° 19' 34.687" E
49	51° 49' 29.125" N	1° 19' 46.867" E
50	51° 49' 29.382" N	1° 19' 55.742" E
51	51° 49' 33.283" N	1° 20' 7.402" E
52	51° 49' 33.823" N	1° 20' 9.016" E
53	51° 49' 38.077" N	1° 20' 21.737" E
54	51° 49' 38.448" N	1° 20' 22.847" E
55	51° 49' 42.698" N	1° 20' 35.554" E
56	51° 49' 43.966" N	1° 20' 39.345" E
57	51° 49' 48.421" N	1° 20' 52.668" E
58	51° 49' 51.784" N	1° 21' 2.729" E
59	51° 49' 54.701" N	1° 21' 11.455" E
60	51° 49' 57.845" N	1° 21' 20.863" E
61	51° 50' 0.847" N	1° 21' 29.842" E
62	51° 50' 4.309" N	1° 21' 40.203" E
63	51° 50' 8.875" N	1° 21' 53.869" E
64	51° 50' 10.761" N	1° 21' 59.513" E
65	51° 50' 10.860" N	1° 21' 59.811" E
66	51° 50' 15.972" N	1° 22' 15.111" E
67	51° 50' 17.271" N	1° 22' 19.001" E
68	51° 50' 22.109" N	1° 22' 33.486" E
69	51° 50' 24.315" N	1° 22' 40.093" E
70	51° 50' 28.198" N	1° 22' 51.721" E
71	51° 50' 28.998" N	1° 22' 54.116" E
72	51° 50' 30.002" N	1° 22' 57.124" E
73	51° 50' 32.425" N	1° 23' 4.382" E
74	51° 50' 32.451" N	1° 23' 4.460" E
75	51° 50' 34.049" N	1° 23' 9.246" E
76	51° 50' 34.613" N	1° 23' 10.938" E
77	51° 50' 37.704" N	1° 23' 20.196" E
78	51° 50' 37.802" N	1° 23' 20.490" E
79	51° 50' 39.005" N	1° 23' 24.093" E
80	51° 50' 40.050" N	1° 23' 27.224" E
81	51° 50' 40.830" N	1° 23' 29.561" E
82	51° 50' 43.106" N	1° 23' 36.381" E
83	51° 50' 45.481" N	1° 23' 43.498" E
84	51° 50' 45.640" N	1° 23' 43.975" E
85	51° 50' 45.902" N	1° 23' 44.761" E
86	51° 50' 48.913" N	1° 23' 53.783" E
87	51° 50' 50.644" N	1° 23' 58.971" E
88	51° 50' 50.831" N	1° 23' 59.533" E

89	51° 50' 52.115" N	1° 24' 3.382" E
90	51° 50' 52.996" N	1° 24' 6.022" E
91	51° 50' 56.039" N	1° 24' 15.143" E
92	51° 50' 57.581" N	1° 24' 19.766" E
93	51° 50' 59.132" N	1° 24' 24.416" E
94	51° 51' 1.498" N	1° 24' 31.509" E
95	51° 51' 2.366" N	1° 24' 34.113" E
96	51° 51' 5.837" N	1° 24' 44.520" E
97	51° 51' 6.109" N	1° 24' 45.335" E
98	51° 51' 6.210" N	1° 24' 45.637" E
99	51° 51' 6.432" N	1° 24' 46.304" E
100	51° 51' 6.509" N	1° 24' 46.537" E
101	51° 51' 7.258" N	1° 24' 48.780" E
102	51° 51' 7.307" N	1° 24' 48.929" E
103	51° 51' 7.403" N	1° 24' 49.215" E
104	51° 51' 7.410" N	1° 24' 49.238" E
105	51° 51' 20.292" N	1° 25' 27.876" E
106	51° 51' 20.293" N	1° 25' 27.878" E
107	51° 51' 50.695" N	1° 26' 3.601" E
108	51° 52' 0.191" N	1° 26' 6.120" E
109	51° 52' 15.034" N	1° 26' 10.057" E
110	51° 52' 15.051" N	1° 26' 10.062" E
111	51° 52' 17.195" N	1° 26' 10.631" E
112	51° 52' 17.863" N	1° 26' 10.808" E
113	51° 52' 29.683" N	1° 26' 13.944" E
114	51° 52' 34.386" N	1° 26' 15.192" E
115	51° 52' 34.436" N	1° 26' 15.205" E
116	51° 52' 34.591" N	1° 26' 15.247" E
117	51° 52' 35.322" N	1° 26' 15.448" E
118	51° 52' 36.051" N	1° 26' 15.664" E
119	51° 52' 36.090" N	1° 26' 15.676" E
120	51° 52' 37.307" N	1° 26' 16.066" E
121	51° 52' 38.523" N	1° 26' 16.494" E
122	51° 52' 39.730" N	1° 26' 16.958" E
123	51° 52' 39.751" N	1° 26' 16.967" E
124	51° 52' 40.975" N	1° 26' 17.478" E
125	51° 52' 42.196" N	1° 26' 18.028" E
126	51° 52' 43.406" N	1° 26' 18.615" E
127	51° 52' 43.426" N	1° 26' 18.625" E
128	51° 52' 44.486" N	1° 26' 19.174" E
129	51° 52' 45.538" N	1° 26' 19.750" E
130	51° 52' 45.551" N	1° 26' 19.757" E
131	51° 52' 46.592" N	1° 26' 20.360" E
132	51° 52' 46.612" N	1° 26' 20.371" E
133	51° 52' 47.609" N	1° 26' 20.979" E
134	51° 52' 48.604" N	1° 26' 21.615" E
135	51° 52' 49.592" N	1° 26' 22.277" E
136	51° 52' 50.570" N	1° 26' 22.963" E

137	51° 52' 50.591" N	1° 26' 22.978" E
138	51° 52' 51.554" N	1° 26' 23.684" E
139	51° 52' 52.513" N	1° 26' 24.418" E
140	51° 52' 53.465" N	1° 26' 25.176" E
141	51° 52' 54.406" N	1° 26' 25.957" E
142	51° 49' 9.392" N	1° 14' 11.869" E
143	51° 49' 9.387" N	1° 14' 11.910" E
144	51° 49' 9.386" N	1° 14' 11.923" E
145	51° 49' 9.384" N	1° 14' 11.942" E
146	51° 49' 9.377" N	1° 14' 12.012" E
147	51° 49' 9.358" N	1° 14' 12.213" E
148	51° 49' 9.355" N	1° 14' 12.243" E
149	51° 49' 9.268" N	1° 14' 13.120" E
150	51° 49' 9.265" N	1° 14' 13.151" E
151	51° 49' 8.819" N	1° 14' 17.679" E
152	51° 49' 19.660" N	1° 14' 52.180" E
153	51° 49' 20.745" N	1° 14' 55.635" E
154	51° 49' 20.788" N	1° 14' 57.190" E
155	51° 49' 21.395" N	1° 15' 19.103" E
156	51° 49' 21.456" N	1° 15' 21.299" E
157	51° 49' 21.987" N	1° 15' 40.506" E
158	51° 49' 23.084" N	1° 16' 18.402" E
159	51° 49' 23.097" N	1° 16' 18.835" E
160	51° 49' 23.465" N	1° 16' 31.584" E
161	51° 49' 23.517" N	1° 16' 33.402" E
162	51° 49' 23.582" N	1° 16' 35.629" E
163	51° 49' 23.701" N	1° 16' 39.784" E
164	51° 49' 23.704" N	1° 16' 39.941" E
165	51° 49' 23.708" N	1° 16' 40.204" E
166	51° 49' 23.708" N	1° 16' 40.270" E
167	51° 49' 23.714" N	1° 16' 40.671" E
168	51° 49' 23.747" N	1° 16' 42.903" E
169	51° 49' 23.821" N	1° 16' 45.418" E
170	51° 49' 24.108" N	1° 16' 55.168" E
171	51° 49' 24.130" N	1° 16' 55.910" E
172	51° 49' 24.205" N	1° 16' 58.472" E
173	51° 49' 24.622" N	1° 17' 12.644" E
174	51° 49' 24.701" N	1° 17' 15.343" E
175	51° 49' 24.824" N	1° 17' 19.510" E
176	51° 49' 24.846" N	1° 17' 20.286" E
177	51° 49' 24.862" N	1° 17' 20.810" E
178	51° 49' 25.292" N	1° 17' 35.476" E
179	51° 49' 25.368" N	1° 17' 38.082" E
180	51° 49' 25.400" N	1° 17' 39.173" E
181	51° 49' 26.177" N	1° 18' 5.696" E
182	51° 49' 26.227" N	1° 18' 7.413" E
183	51° 49' 26.498" N	1° 18' 16.672" E
184	51° 49' 26.890" N	1° 18' 30.099" E

185	51° 49' 27.018" N	1° 18' 34.473" E
186	51° 49' 27.805" N	1° 19' 1.476" E
187	51° 49' 27.907" N	1° 19' 4.977" E
188	51° 49' 28.764" N	1° 19' 34.440" E
189	51° 49' 28.771" N	1° 19' 34.687" E
190	51° 49' 29.125" N	1° 19' 46.867" E
191	51° 49' 29.382" N	1° 19' 55.742" E
192	51° 49' 33.283" N	1° 20' 7.402" E
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206	51° 50' 10.860" N	1° 21' 59.811" E
207	51° 50' 15.972" N	1° 22' 15.111" E
208	51° 50' 17.271" N	1° 22' 19.001" E
209	51° 50' 22.109" N	1° 22' 33.486" E
210	51° 50' 24.315" N	1° 22' 40.093" E
211	51° 50' 28.198" N	1° 22' 51.721" E
212	51° 50' 28.998" N	1° 22' 54.116" E
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214	51° 50' 32.425" N	1° 23' 4.382" E
215	51° 50' 32.451" N	1° 23' 4.460" E
216	51° 50' 34.049" N	1° 23' 9.246" E
217	51° 50' 34.613" N	1° 23' 10.938" E
218	51° 50' 37.704" N	1° 23' 20.196" E
219	51° 50' 37.802" N	1° 23' 20.490" E
220	51° 50' 39.005" N	1° 23' 24.093" E
221	51° 50' 40.050" N	1° 23' 27.224" E
222	51° 50' 40.830" N	1° 23' 29.561" E
223	51° 50' 43.106" N	1° 23' 36.381" E
224	51° 50' 45.481" N	1° 23' 43.498" E
225	51° 50' 45.640" N	1° 23' 43.975" E
226	51° 50' 45.902" N	1° 23' 44.761" E
227	51° 50' 48.913" N	1° 23' 53.783" E
228	51° 50' 50.644" N	1° 23' 58.971" E
229	51° 50' 50.831" N	1° 23' 59.533" E
230	51° 50' 52.115" N	1° 24' 3.382" E
231	51° 50' 52.996" N	1° 24' 6.022" E
232	51° 50' 56.039" N	1° 24' 15.143" E

233	51° 50' 57.581" N	1° 24' 19.766" E
234	51° 50' 59.132" N	1° 24' 24.416" E
235	51° 51' 1.498" N	1° 24' 31.509" E
236	51° 51' 2.366" N	1° 24' 34.113" E
237	51° 51' 5.837" N	1° 24' 44.520" E
238	51° 51' 6.109" N	1° 24' 45.335" E
239	51° 51' 6.210" N	1° 24' 45.637" E
240	51° 51' 6.432" N	1° 24' 46.304" E
241	51° 51' 6.509" N	1° 24' 46.537" E
242	51° 51' 7.258" N	1° 24' 48.780" E
243	51° 51' 7.307" N	1° 24' 48.929" E
244	51° 51' 7.403" N	1° 24' 49.215" E
245	51° 51' 7.410" N	1° 24' 49.238" E
246	51° 51' 20.292" N	1° 25' 27.876" E
247	51° 51' 20.293" N	1° 25' 27.878" E
248	51° 51' 50.695" N	1° 26' 3.601" E
249	51° 52' 0.191" N	1° 26' 6.120" E
250	51° 52' 15.034" N	1° 26' 10.057" E
251	51° 52' 15.051" N	1° 26' 10.062" E
252	51° 52' 17.195" N	1° 26' 10.631" E
253	51° 52' 17.863" N	1° 26' 10.808" E
254	51° 52' 29.683" N	1° 26' 13.944" E
255	51° 52' 34.386" N	1° 26' 15.192" E
256	51° 52' 34.436" N	1° 26' 15.205" E
257	51° 52' 34.591" N	1° 26' 15.247" E
258	51° 52' 35.322" N	1° 26' 15.448" E
259	51° 52' 36.051" N	1° 26' 15.664" E
260	51° 52' 36.090" N	1° 26' 15.676" E
261	51° 52' 37.307" N	1° 26' 16.066" E
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270	51° 52' 45.538" N	1° 26' 19.750" E
271	51° 52' 45.551" N	1° 26' 19.757" E
272	51° 52' 46.592" N	1° 26' 20.360" E
273	51° 52' 46.612" N	1° 26' 20.371" E
274	51° 52' 47.609" N	1° 26' 20.979" E
275	51° 52' 48.604" N	1° 26' 21.615" E
276	51° 52' 49.592" N	1° 26' 22.277" E
277	51° 52' 50.570" N	1° 26' 22.963" E
278	51° 52' 50.591" N	1° 26' 22.978" E
279	51° 52' 51.554" N	1° 26' 23.684" E
280	51° 52' 52.513" N	1° 26' 24.418" E

281	51° 52' 53.465" N	1° 26' 25.176" E
282	51° 52' 54.406" N	1° 26' 25.957" E
283	51° 49' 9.392" N	1° 14' 11.869" E
284	51° 49' 9.387" N	1° 14' 11.910" E
285	51° 49' 9.386" N	1° 14' 11.923" E
286	51° 49' 9.384" N	1° 14' 11.942" E
287	51° 49' 9.377" N	1° 14' 12.012" E
288	51° 49' 9.358" N	1° 14' 12.213" E
289	51° 49' 9.355" N	1° 14' 12.243" E
290	51° 49' 9.268" N	1° 14' 13.120" E
291	51° 49' 9.265" N	1° 14' 13.151" E
292	51° 49' 8.819" N	1° 14' 17.679" E
293	51° 49' 19.660" N	1° 14' 52.180" E
294	51° 49' 20.745" N	1° 14' 55.635" E
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297	51° 49' 21.456" N	1° 15' 21.299" E
298	51° 49' 21.987" N	1° 15' 40.506" E
299	51° 49' 23.084" N	1° 16' 18.402" E
300	51° 49' 23.097" N	1° 16' 18.835" E
301	51° 49' 23.465" N	1° 16' 31.584" E
302	51° 49' 23.517" N	1° 16' 33.402" E
303	51° 49' 23.582" N	1° 16' 35.629" E
304	51° 49' 23.701" N	1° 16' 39.784" E
305	51° 49' 23.704" N	1° 16' 39.941" E
306	51° 49' 23.708" N	1° 16' 40.204" E
307	51° 49' 23.708" N	1° 16' 40.270" E
308	51° 49' 23.714" N	1° 16' 40.671" E
309	51° 49' 23.747" N	1° 16' 42.903" E
310	51° 49' 23.821" N	1° 16' 45.418" E
311	51° 49' 24.108" N	1° 16' 55.168" E
312	51° 49' 24.130" N	1° 16' 55.910" E
313	51° 49' 24.205" N	1° 16' 58.472" E
314	51° 49' 24.622" N	1° 17' 12.644" E
315	51° 49' 24.701" N	1° 17' 15.343" E
316	51° 49' 24.824" N	1° 17' 19.510" E
317	51° 49' 24.846" N	1° 17' 20.286" E
318	51° 49' 24.862" N	1° 17' 20.810" E
319	51° 49' 25.292" N	1° 17' 35.476" E
320	51° 49' 25.368" N	1° 17' 38.082" E
321	51° 49' 25.400" N	1° 17' 39.173" E
322	51° 49' 26.177" N	1° 18' 5.696" E
323	51° 49' 26.227" N	1° 18' 7.413" E
324	51° 49' 26.498" N	1° 18' 16.672" E
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326	51° 49' 27.018" N	1° 18' 34.473" E
327	51° 49' 27.805" N	1° 19' 1.476" E
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329	51° 49' 28.764" N	1° 19' 34.440" E
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331	51° 49' 29.125" N	1° 19' 46.867" E
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348	51° 50' 15.972" N	1° 22' 15.111" E
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355	51° 50' 32.425" N	1° 23' 4.382" E
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357	51° 50' 34.049" N	1° 23' 9.246" E
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359	51° 50' 37.704" N	1° 23' 20.196" E
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363	51° 50' 40.830" N	1° 23' 29.561" E
364	51° 50' 43.106" N	1° 23' 36.381" E
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366	51° 50' 45.640" N	1° 23' 43.975" E
367	51° 50' 45.902" N	1° 23' 44.761" E
368	51° 50' 48.913" N	1° 23' 53.783" E
369	51° 50' 50.644" N	1° 23' 58.971" E
370	51° 50' 50.831" N	1° 23' 59.533" E
371	51° 50' 52.115" N	1° 24' 3.382" E
372	51° 50' 52.996" N	1° 24' 6.022" E
373	51° 50' 56.039" N	1° 24' 15.143" E
374	51° 50' 57.581" N	1° 24' 19.766" E
375	51° 50' 59.132" N	1° 24' 24.416" E
376	51° 51' 1.498" N	1° 24' 31.509" E

377	51° 51' 2.366" N	1° 24' 34.113" E
378	51° 51' 5.837" N	1° 24' 44.520" E
379	51° 51' 6.109" N	1° 24' 45.335" E
380	51° 51' 6.210" N	1° 24' 45.637" E
381	51° 51' 6.432" N	1° 24' 46.304" E
382	51° 51' 6.509" N	1° 24' 46.537" E
383	51° 51' 7.258" N	1° 24' 48.780" E
384	51° 51' 7.307" N	1° 24' 48.929" E
385	51° 51' 7.403" N	1° 24' 49.215" E
386	51° 51' 7.410" N	1° 24' 49.238" E
387	51° 51' 20.292" N	1° 25' 27.876" E
388	51° 51' 20.293" N	1° 25' 27.878" E
389	51° 51' 50.695" N	1° 26' 3.601" E
390	51° 52' 0.191" N	1° 26' 6.120" E
391	51° 52' 15.034" N	1° 26' 10.057" E
392	51° 52' 15.051" N	1° 26' 10.062" E
393	51° 52' 17.195" N	1° 26' 10.631" E
394	51° 52' 17.863" N	1° 26' 10.808" E
395	51° 52' 29.683" N	1° 26' 13.944" E
396	51° 52' 34.386" N	1° 26' 15.192" E
397	51° 52' 34.436" N	1° 26' 15.205" E
398	51° 52' 34.591" N	1° 26' 15.247" E
399	51° 52' 35.322" N	1° 26' 15.448" E
400	51° 52' 36.051" N	1° 26' 15.664" E
401	51° 52' 36.090" N	1° 26' 15.676" E
402	51° 52' 37.307" N	1° 26' 16.066" E
403	51° 52' 38.523" N	1° 26' 16.494" E
404	51° 52' 39.730" N	1° 26' 16.958" E
405	51° 52' 39.751" N	1° 26' 16.967" E
406	51° 52' 40.975" N	1° 26' 17.478" E
407	51° 52' 42.196" N	1° 26' 18.028" E
408	51° 52' 43.406" N	1° 26' 18.615" E
409	51° 52' 43.426" N	1° 26' 18.625" E
410	51° 52' 44.486" N	1° 26' 19.174" E
411	51° 52' 45.538" N	1° 26' 19.750" E
412	51° 52' 45.551" N	1° 26' 19.757" E
413	51° 52' 46.592" N	1° 26' 20.360" E
414	51° 52' 46.612" N	1° 26' 20.371" E
415	51° 52' 47.609" N	1° 26' 20.979" E
416	51° 52' 48.604" N	1° 26' 21.615" E
417	51° 52' 49.592" N	1° 26' 22.277" E
418	51° 52' 50.570" N	1° 26' 22.963" E
419	51° 52' 50.591" N	1° 26' 22.978" E
420	51° 52' 51.554" N	1° 26' 23.684" E
421	51° 52' 52.513" N	1° 26' 24.418" E
422	51° 52' 53.465" N	1° 26' 25.176" E
423	51° 52' 54.406" N	1° 26' 25.957" E
424	51° 49' 9.392" N	1° 14' 11.869" E

425	51° 49' 9.387" N	1° 14' 11.910" E
426	51° 49' 9.386" N	1° 14' 11.923" E
427	51° 49' 9.384" N	1° 14' 11.942" E
428	51° 49' 9.377" N	1° 14' 12.012" E
429	51° 49' 9.358" N	1° 14' 12.213" E
430	51° 49' 9.355" N	1° 14' 12.243" E
431	51° 49' 9.268" N	1° 14' 13.120" E
432	51° 49' 9.265" N	1° 14' 13.151" E
433	51° 49' 8.819" N	1° 14' 17.679" E
434	51° 49' 19.660" N	1° 14' 52.180" E
435	51° 49' 20.745" N	1° 14' 55.635" E
436	51° 49' 20.788" N	1° 14' 57.190" E
437	51° 49' 21.395" N	1° 15' 19.103" E
438	51° 49' 21.456" N	1° 15' 21.299" E
439	51° 49' 21.987" N	1° 15' 40.506" E
440	51° 49' 23.084" N	1° 16' 18.402" E
441	51° 49' 23.097" N	1° 16' 18.835" E
442	51° 49' 23.465" N	1° 16' 31.584" E
443	51° 49' 23.517" N	1° 16' 33.402" E
444	51° 49' 23.582" N	1° 16' 35.629" E
445	51° 49' 23.701" N	1° 16' 39.784" E
446	51° 49' 23.704" N	1° 16' 39.941" E
447	51° 49' 23.708" N	1° 16' 40.204" E
448	51° 49' 23.708" N	1° 16' 40.270" E
449	51° 49' 23.714" N	1° 16' 40.671" E
450	51° 49' 23.747" N	1° 16' 42.903" E
451	51° 49' 23.821" N	1° 16' 45.418" E
452	51° 49' 24.108" N	1° 16' 55.168" E
453	51° 49' 24.130" N	1° 16' 55.910" E
454	51° 49' 24.205" N	1° 16' 58.472" E
455	51° 49' 24.622" N	1° 17' 12.644" E
456	51° 49' 24.701" N	1° 17' 15.343" E
457	51° 49' 24.824" N	1° 17' 19.510" E
458	51° 49' 24.846" N	1° 17' 20.286" E
459	51° 49' 24.862" N	1° 17' 20.810" E
460	51° 49' 25.292" N	1° 17' 35.476" E
461	51° 49' 25.368" N	1° 17' 38.082" E
462	51° 49' 25.400" N	1° 17' 39.173" E
463	51° 49' 26.177" N	1° 18' 5.696" E
464	51° 49' 26.227" N	1° 18' 7.413" E
465	51° 49' 26.498" N	1° 18' 16.672" E
466	51° 49' 26.890" N	1° 18' 30.099" E
467	51° 49' 27.018" N	1° 18' 34.473" E
468	51° 49' 27.805" N	1° 19' 1.476" E
469	51° 49' 27.907" N	1° 19' 4.977" E
470	51° 49' 28.764" N	1° 19' 34.440" E
471	51° 49' 28.771" N	1° 19' 34.687" E
472	51° 49' 29.125" N	1° 19' 46.867" E

473	51° 49' 29.382" N	1° 19' 55.742" E
474	51° 49' 33.283" N	1° 20' 7.402" E
475	51° 49' 33.823" N	1° 20' 9.016" E
476	51° 49' 38.077" N	1° 20' 21.737" E
477	51° 49' 38.448" N	1° 20' 22.847" E
478	51° 49' 42.698" N	1° 20' 35.554" E
479	51° 49' 43.966" N	1° 20' 39.345" E
480	51° 49' 48.421" N	1° 20' 52.668" E
481	51° 49' 51.784" N	1° 21' 2.729" E
482	51° 49' 54.701" N	1° 21' 11.455" E
483	51° 49' 57.845" N	1° 21' 20.863" E
484	51° 50' 0.847" N	1° 21' 29.842" E
485	51° 50' 4.309" N	1° 21' 40.203" E
486	51° 50' 8.875" N	1° 21' 53.869" E
487	51° 50' 10.761" N	1° 21' 59.513" E
488	51° 50' 10.860" N	1° 21' 59.811" E
489	51° 50' 15.972" N	1° 22' 15.111" E
490	51° 50' 17.271" N	1° 22' 19.001" E
491	51° 50' 22.109" N	1° 22' 33.486" E
492	51° 50' 24.315" N	1° 22' 40.093" E
493	51° 50' 28.198" N	1° 22' 51.721" E
494	51° 50' 28.998" N	1° 22' 54.116" E
495	51° 50' 30.002" N	1° 22' 57.124" E
496	51° 50' 32.425" N	1° 23' 4.382" E
497	51° 50' 32.451" N	1° 23' 4.460" E
498	51° 50' 34.049" N	1° 23' 9.246" E
499	51° 50' 34.613" N	1° 23' 10.938" E
500	51° 50' 37.704" N	1° 23' 20.196" E
501	51° 50' 37.802" N	1° 23' 20.490" E
502	51° 50' 39.005" N	1° 23' 24.093" E
503	51° 50' 40.050" N	1° 23' 27.224" E
504	51° 50' 40.830" N	1° 23' 29.561" E
505	51° 50' 43.106" N	1° 23' 36.381" E
506	51° 50' 45.481" N	1° 23' 43.498" E
507	51° 50' 45.640" N	1° 23' 43.975" E
508	51° 50' 45.902" N	1° 23' 44.761" E
509	51° 50' 48.913" N	1° 23' 53.783" E
510	51° 50' 50.644" N	1° 23' 58.971" E
511	51° 50' 50.831" N	1° 23' 59.533" E
512	51° 50' 52.115" N	1° 24' 3.382" E
513	51° 50' 52.996" N	1° 24' 6.022" E
514	51° 50' 56.039" N	1° 24' 15.143" E
515	51° 50' 57.581" N	1° 24' 19.766" E
516	51° 50' 59.132" N	1° 24' 24.416" E
517	51° 51' 1.498" N	1° 24' 31.509" E
518	51° 51' 2.366" N	1° 24' 34.113" E
519	51° 51' 5.837" N	1° 24' 44.520" E
520	51° 51' 6.109" N	1° 24' 45.335" E

521	51° 51' 6.210" N	1° 24' 45.637" E
522	51° 51' 6.432" N	1° 24' 46.304" E
523	51° 51' 6.509" N	1° 24' 46.537" E
524	51° 51' 7.258" N	1° 24' 48.780" E
525	51° 51' 7.307" N	1° 24' 48.929" E
526	51° 51' 7.403" N	1° 24' 49.215" E
527	51° 51' 7.410" N	1° 24' 49.238" E
528	51° 51' 20.292" N	1° 25' 27.876" E
529	51° 51' 20.293" N	1° 25' 27.878" E
530	51° 51' 50.695" N	1° 26' 3.601" E
531	51° 52' 0.191" N	1° 26' 6.120" E
532	51° 52' 15.034" N	1° 26' 10.057" E
533	51° 52' 15.051" N	1° 26' 10.062" E
534	51° 52' 17.195" N	1° 26' 10.631" E
535	51° 52' 17.863" N	1° 26' 10.808" E
536	51° 52' 29.683" N	1° 26' 13.944" E
537	51° 52' 34.386" N	1° 26' 15.192" E
538	51° 52' 34.436" N	1° 26' 15.205" E
539	51° 52' 34.591" N	1° 26' 15.247" E
540	51° 52' 35.322" N	1° 26' 15.448" E
541	51° 52' 36.051" N	1° 26' 15.664" E
542	51° 52' 36.090" N	1° 26' 15.676" E
543	51° 52' 37.307" N	1° 26' 16.066" E
544	51° 52' 38.523" N	1° 26' 16.494" E
545	51° 52' 39.730" N	1° 26' 16.958" E
546	51° 52' 39.751" N	1° 26' 16.967" E
547	51° 52' 40.975" N	1° 26' 17.478" E
548	51° 52' 42.196" N	1° 26' 18.028" E
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551	51° 52' 44.486" N	1° 26' 19.174" E
552	51° 52' 45.538" N	1° 26' 19.750" E
553	51° 52' 45.551" N	1° 26' 19.757" E
554	51° 52' 46.592" N	1° 26' 20.360" E
555	51° 52' 46.612" N	1° 26' 20.371" E
556	51° 52' 47.609" N	1° 26' 20.979" E
557	51° 52' 48.604" N	1° 26' 21.615" E
558	51° 52' 49.592" N	1° 26' 22.277" E
559	51° 52' 50.570" N	1° 26' 22.963" E
560	51° 52' 50.591" N	1° 26' 22.978" E
561	51° 52' 51.554" N	1° 26' 23.684" E
562	51° 52' 52.513" N	1° 26' 24.418" E
563	51° 52' 53.465" N	1° 26' 25.176" E
564	51° 52' 54.406" N	1° 26' 25.957" E
565	51° 49' 9.392" N	1° 14' 11.869" E
566	51° 49' 9.387" N	1° 14' 11.910" E
567	51° 49' 9.386" N	1° 14' 11.923" E
568	51° 49' 9.384" N	1° 14' 11.942" E

569	51° 49' 9.377" N	1° 14' 12.012" E
570	51° 49' 9.358" N	1° 14' 12.213" E
571	51° 49' 9.355" N	1° 14' 12.243" E
572	51° 49' 9.268" N	1° 14' 13.120" E
573	51° 49' 9.265" N	1° 14' 13.151" E
574	51° 49' 8.819" N	1° 14' 17.679" E
575	51° 49' 19.660" N	1° 14' 52.180" E
576	51° 49' 20.745" N	1° 14' 55.635" E
577	51° 49' 20.788" N	1° 14' 57.190" E
578	51° 49' 21.395" N	1° 15' 19.103" E
579	51° 49' 21.456" N	1° 15' 21.299" E
580	51° 49' 21.987" N	1° 15' 40.506" E
581	51° 49' 23.084" N	1° 16' 18.402" E
582	51° 49' 23.097" N	1° 16' 18.835" E
583	51° 49' 23.465" N	1° 16' 31.584" E
584	51° 49' 23.517" N	1° 16' 33.402" E
585	51° 49' 23.582" N	1° 16' 35.629" E
586	51° 49' 23.701" N	1° 16' 39.784" E
587	51° 49' 23.704" N	1° 16' 39.941" E
588	51° 49' 23.708" N	1° 16' 40.204" E
589	51° 49' 23.708" N	1° 16' 40.270" E
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591	51° 49' 23.747" N	1° 16' 42.903" E
592	51° 49' 23.821" N	1° 16' 45.418" E
593	51° 49' 24.108" N	1° 16' 55.168" E
594	51° 49' 24.130" N	1° 16' 55.910" E
595	51° 49' 24.205" N	1° 16' 58.472" E
596	51° 49' 24.622" N	1° 17' 12.644" E
597	51° 49' 24.701" N	1° 17' 15.343" E
598	51° 49' 24.824" N	1° 17' 19.510" E
599	51° 49' 24.846" N	1° 17' 20.286" E
600	51° 49' 24.862" N	1° 17' 20.810" E
601	51° 49' 25.292" N	1° 17' 35.476" E
602	51° 49' 25.368" N	1° 17' 38.082" E
603	51° 49' 25.400" N	1° 17' 39.173" E
604	51° 49' 26.177" N	1° 18' 5.696" E
605	51° 49' 26.227" N	1° 18' 7.413" E
606	51° 49' 26.498" N	1° 18' 16.672" E
607	51° 49' 26.890" N	1° 18' 30.099" E
608	51° 49' 27.018" N	1° 18' 34.473" E
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610	51° 49' 27.907" N	1° 19' 4.977" E
611	51° 49' 28.764" N	1° 19' 34.440" E
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613	51° 49' 29.125" N	1° 19' 46.867" E
614	51° 49' 29.382" N	1° 19' 55.742" E
615	51° 49' 33.283" N	1° 20' 7.402" E
616	51° 49' 33.823" N	1° 20' 9.016" E

617	51° 49' 38.077" N	1° 20' 21.737" E
618	51° 49' 38.448" N	1° 20' 22.847" E
619	51° 49' 42.698" N	1° 20' 35.554" E
620	51° 49' 43.966" N	1° 20' 39.345" E
621	51° 49' 48.421" N	1° 20' 52.668" E
622	51° 49' 51.784" N	1° 21' 2.729" E
623	51° 49' 54.701" N	1° 21' 11.455" E
624	51° 49' 57.845" N	1° 21' 20.863" E
625	51° 50' 0.847" N	1° 21' 29.842" E
626	51° 50' 4.309" N	1° 21' 40.203" E
627	51° 50' 8.875" N	1° 21' 53.869" E
628	51° 50' 10.761" N	1° 21' 59.513" E
629	51° 50' 10.860" N	1° 21' 59.811" E
630	51° 50' 15.972" N	1° 22' 15.111" E
631	51° 50' 17.271" N	1° 22' 19.001" E
632	51° 50' 22.109" N	1° 22' 33.486" E
633	51° 50' 24.315" N	1° 22' 40.093" E
634	51° 50' 28.198" N	1° 22' 51.721" E
635	51° 50' 28.998" N	1° 22' 54.116" E
636	51° 50' 30.002" N	1° 22' 57.124" E
637	51° 50' 32.425" N	1° 23' 4.382" E
638	51° 50' 32.451" N	1° 23' 4.460" E
639	51° 50' 34.049" N	1° 23' 9.246" E
640	51° 50' 34.613" N	1° 23' 10.938" E
641	51° 50' 37.704" N	1° 23' 20.196" E
642	51° 50' 37.802" N	1° 23' 20.490" E
643	51° 50' 39.005" N	1° 23' 24.093" E
644	51° 50' 40.050" N	1° 23' 27.224" E
645	51° 50' 40.830" N	1° 23' 29.561" E
646	51° 50' 43.106" N	1° 23' 36.381" E
647	51° 50' 45.481" N	1° 23' 43.498" E
648	51° 50' 45.640" N	1° 23' 43.975" E
649	51° 50' 45.902" N	1° 23' 44.761" E
650	51° 50' 48.913" N	1° 23' 53.783" E
651	51° 50' 50.644" N	1° 23' 58.971" E
652	51° 50' 50.831" N	1° 23' 59.533" E
653	51° 50' 52.115" N	1° 24' 3.382" E
654	51° 50' 52.996" N	1° 24' 6.022" E
655	51° 50' 56.039" N	1° 24' 15.143" E
656	51° 50' 57.581" N	1° 24' 19.766" E
657	51° 50' 59.132" N	1° 24' 24.416" E
658	51° 51' 1.498" N	1° 24' 31.509" E
659	51° 51' 2.366" N	1° 24' 34.113" E
660	51° 51' 5.837" N	1° 24' 44.520" E
661	51° 51' 6.109" N	1° 24' 45.335" E
662	51° 51' 6.210" N	1° 24' 45.637" E
663	51° 47' 37.877" N	1° 52' 7.951" E
664	51° 47' 37.913" N	1° 52' 8.077" E

665	51° 47' 45.229" N	1° 52' 33.164" E
666	51° 47' 46.700" N	1° 52' 38.210" E
667	51° 47' 49.271" N	1° 52' 47.029" E
668	51° 47' 49.679" N	1° 52' 48.430" E
669	51° 48' 1.707" N	1° 53' 29.699" E
670	51° 48' 11.740" N	1° 54' 4.140" E
671	51° 48' 17.684" N	1° 54' 24.551" E
672	51° 48' 27.495" N	1° 54' 58.254" E
673	51° 48' 41.575" N	1° 55' 46.640" E
674	51° 48' 44.128" N	1° 55' 55.419" E
675	51° 49' 0.860" N	1° 56' 52.961" E
676	51° 49' 2.032" N	1° 56' 56.994" E
677	51° 49' 16.966" N	1° 57' 48.388" E
678	51° 49' 32.164" N	1° 58' 40.724" E
679	51° 49' 36.897" N	1° 58' 57.029" E
680	51° 49' 47.730" N	1° 59' 34.359" E
681	51° 49' 47.957" N	1° 59' 35.177" E
682	51° 49' 47.967" N	1° 59' 35.216" E
683	51° 49' 48.155" N	1° 59' 35.956" E
684	51° 49' 48.486" N	1° 59' 37.318" E
685	51° 49' 48.573" N	1° 59' 37.615" E
686	51° 49' 48.868" N	1° 59' 38.474" E
687	51° 49' 49.044" N	1° 59' 39.000" E
688	51° 49' 49.055" N	1° 59' 39.032" E
689	51° 49' 49.294" N	1° 59' 39.796" E
690	51° 49' 49.612" N	1° 59' 40.853" E
691	51° 49' 49.990" N	1° 59' 42.081" E
692	51° 49' 50.118" N	1° 59' 42.504" E
693	51° 49' 50.127" N	1° 59' 42.536" E
694	51° 49' 50.376" N	1° 59' 43.422" E
695	51° 49' 53.753" N	1° 59' 56.060" E
696	51° 49' 53.782" N	1° 59' 56.167" E
697	51° 49' 53.804" N	1° 59' 56.250" E
698	51° 49' 53.862" N	1° 59' 56.471" E
699	51° 49' 54.054" N	1° 59' 57.216" E
700	51° 49' 54.205" N	1° 59' 57.821" E
701	51° 49' 54.386" N	1° 59' 58.572" E
702	51° 49' 54.427" N	1° 59' 58.743" E
703	51° 49' 54.459" N	1° 59' 58.881" E
704	51° 49' 59.279" N	2° 0' 19.652" E
705	51° 50' 10.339" N	2° 1' 7.330" E
706	51° 50' 16.741" N	2° 1' 34.943" E
707	51° 50' 20.726" N	2° 1' 52.133" E
708	51° 50' 21.415" N	2° 1' 55.108" E
709	51° 50' 26.665" N	2° 2' 17.765" E
710	51° 50' 29.544" N	2° 2' 30.192" E
711	51° 50' 31.922" N	2° 2' 40.457" E
712	51° 50' 33.556" N	2° 2' 47.515" E

713	51° 50' 34.987" N	2° 2' 53.694" E
714	51° 50' 36.559" N	2° 3' 0.484" E
715	51° 50' 36.717" N	2° 3' 1.180" E
716	51° 50' 36.741" N	2° 3' 1.287" E
717	51° 50' 36.746" N	2° 3' 1.311" E
718	51° 50' 37.010" N	2° 3' 2.562" E
719	51° 50' 37.017" N	2° 3' 2.593" E
720	51° 50' 37.262" N	2° 3' 3.854" E
721	51° 50' 37.267" N	2° 3' 3.886" E
722	51° 50' 37.492" N	2° 3' 5.157" E
723	51° 50' 37.498" N	2° 3' 5.189" E
724	51° 50' 37.703" N	2° 3' 6.468" E
725	51° 50' 37.707" N	2° 3' 6.500" E
726	51° 50' 37.892" N	2° 3' 7.788" E
727	51° 50' 37.896" N	2° 3' 7.815" E
728	51° 50' 38.015" N	2° 3' 8.734" E
729	51° 50' 38.018" N	2° 3' 8.760" E
730	51° 50' 38.167" N	2° 3' 10.048" E
731	51° 50' 38.171" N	2° 3' 10.081" E
732	51° 50' 38.175" N	2° 3' 10.130" E
733	51° 50' 38.180" N	2° 3' 10.173" E
734	51° 50' 38.184" N	2° 3' 10.208" E
735	51° 50' 38.222" N	2° 3' 10.596" E
736	51° 50' 38.299" N	2° 3' 11.373" E
737	51° 50' 38.302" N	2° 3' 11.405" E
738	51° 50' 38.312" N	2° 3' 11.522" E
739	51° 50' 38.322" N	2° 3' 11.624" E
740	51° 50' 38.325" N	2° 3' 11.660" E
741	51° 50' 38.358" N	2° 3' 12.076" E
742	51° 50' 38.411" N	2° 3' 12.702" E
743	51° 50' 38.413" N	2° 3' 12.735" E
744	51° 50' 38.426" N	2° 3' 12.920" E
745	51° 50' 38.439" N	2° 3' 13.082" E
746	51° 50' 38.441" N	2° 3' 13.114" E
747	51° 50' 38.475" N	2° 3' 13.642" E
748	51° 50' 38.502" N	2° 3' 14.036" E
749	51° 50' 38.504" N	2° 3' 14.069" E
750	51° 50' 38.510" N	2° 3' 14.190" E
751	51° 50' 38.519" N	2° 3' 14.324" E
752	51° 50' 38.521" N	2° 3' 14.354" E
753	51° 50' 38.542" N	2° 3' 14.830" E
754	51° 50' 38.551" N	2° 3' 14.966" E
755	51° 50' 38.555" N	2° 3' 15.056" E
756	51° 50' 38.572" N	2° 3' 15.373" E
757	51° 50' 38.574" N	2° 3' 15.406" E
758	51° 50' 38.576" N	2° 3' 15.481" E
759	51° 50' 38.581" N	2° 3' 15.565" E
760	51° 50' 38.582" N	2° 3' 15.596" E

761	51° 50' 38.608" N	2° 3' 16.342" E
762	51° 50' 38.622" N	2° 3' 16.712" E
763	51° 50' 38.623" N	2° 3' 16.745" E
764	51° 50' 38.623" N	2° 3' 16.775" E
765	51° 50' 38.624" N	2° 3' 16.809" E
766	51° 50' 38.625" N	2° 3' 16.840" E
767	51° 50' 38.651" N	2° 3' 18.065" E
768	51° 50' 38.655" N	2° 3' 18.489" E
769	51° 50' 38.656" N	2° 3' 18.578" E
770	51° 50' 38.657" N	2° 3' 19.772" E
771	51° 50' 38.656" N	2° 3' 19.802" E
772	51° 50' 38.641" N	2° 3' 20.985" E
773	51° 50' 38.640" N	2° 3' 21.015" E
774	51° 50' 38.607" N	2° 3' 22.197" E
775	51° 50' 38.606" N	2° 3' 22.226" E
776	51° 50' 38.557" N	2° 3' 23.407" E
777	51° 50' 38.556" N	2° 3' 23.437" E
778	51° 50' 38.490" N	2° 3' 24.616" E
779	51° 50' 38.488" N	2° 3' 24.653" E
780	51° 50' 38.276" N	2° 3' 27.340" E
781	51° 50' 38.272" N	2° 3' 27.380" E
782	51° 50' 38.224" N	2° 3' 27.864" E
783	51° 50' 37.806" N	2° 3' 36.385" E
784	51° 50' 37.492" N	2° 3' 42.790" E
785	51° 50' 33.090" N	2° 5' 12.302" E
786	51° 50' 32.312" N	2° 5' 28.069" E
787	51° 50' 31.186" N	2° 5' 50.882" E
788	51° 50' 30.593" N	2° 6' 2.889" E
789	51° 50' 30.521" N	2° 6' 4.346" E
790	51° 50' 30.268" N	2° 6' 9.467" E
791	51° 50' 30.235" N	2° 6' 10.130" E
792	51° 50' 30.217" N	2° 6' 10.494" E
793	51° 50' 30.166" N	2° 6' 11.521" E
794	51° 50' 33.603" N	2° 6' 14.130" E
795	51° 50' 36.550" N	2° 6' 16.368" E
796	51° 52' 33.720" N	2° 7' 45.410" E
797	51° 54' 43.233" N	2° 8' 59.504" E
798	51° 54' 50.821" N	2° 8' 33.527" E
799	51° 54' 54.274" N	2° 8' 21.703" E
800	51° 54' 59.225" N	2° 8' 4.749" E
801	51° 55' 9.316" N	2° 6' 37.670" E
802	51° 55' 9.433" N	2° 6' 36.665" E
803	51° 55' 9.459" N	2° 6' 36.439" E
804	51° 54' 47.970" N	2° 5' 21.542" E
805	51° 54' 47.970" N	2° 5' 21.543" E
806	51° 54' 47.971" N	2° 5' 21.543" E
807	51° 54' 49.412" N	2° 5' 22.194" E
808	51° 54' 49.412" N	2° 5' 22.195" E

809	51° 55' 5.880" N	2° 5' 29.641" E
810	51° 57' 15.660" N	2° 6' 16.679" E
811	51° 59' 17.250" N	2° 6' 11.506" E
812	51° 59' 17.251" N	2° 6' 11.506" E
813	52° 0' 1.310" N	2° 9' 30.624" E
814	52° 0' 1.310" N	2° 9' 30.625" E
815	52° 0' 1.310" N	2° 9' 30.626" E
816	52° 0' 1.310" N	2° 9' 30.627" E
817	52° 0' 1.310" N	2° 9' 30.628" E
818	52° 0' 0.938" N	2° 9' 32.595" E
819	51° 58' 25.043" N	2° 17' 59.266" E
820	51° 58' 8.256" N	2° 17' 0.002" E
821	51° 56' 37.354" N	2° 11' 42.892" E
822	51° 56' 37.331" N	2° 11' 42.811" E
823	51° 56' 37.331" N	2° 11' 42.810" E
824	51° 56' 33.924" N	2° 11' 41.629" E
825	51° 56' 6.546" N	2° 11' 32.142" E
826	51° 55' 51.465" N	2° 11' 26.917" E
827	51° 54' 32.426" N	2° 9' 48.834" E
828	51° 52' 22.921" N	2° 8' 34.705" E
829	51° 51' 35.830" N	2° 8' 7.781" E
830	51° 50' 48.737" N	2° 7' 40.873" E
831	51° 51' 5.834" N	2° 8' 55.087" E
832	51° 51' 6.315" N	2° 8' 57.176" E
833	51° 51' 8.472" N	2° 9' 6.545" E
834	51° 51' 8.645" N	2° 9' 7.269" E
835	51° 51' 15.516" N	2° 9' 37.145" E
836	51° 51' 0.346" N	2° 9' 46.248" E
837	51° 51' 9.825" N	2° 10' 27.448" E
838	51° 51' 10.085" N	2° 10' 28.577" E
839	51° 51' 10.334" N	2° 10' 29.488" E
840	51° 51' 10.561" N	2° 10' 30.415" E
841	51° 51' 10.764" N	2° 10' 31.357" E
842	51° 51' 10.943" N	2° 10' 32.310" E
843	51° 51' 11.100" N	2° 10' 33.285" E
844	51° 51' 11.232" N	2° 10' 34.270" E
845	51° 51' 11.339" N	2° 10' 35.262" E
846	51° 51' 11.421" N	2° 10' 36.261" E
847	51° 51' 11.478" N	2° 10' 37.264" E
848	51° 51' 11.509" N	2° 10' 38.271" E
849	51° 51' 11.514" N	2° 10' 39.278" E
850	51° 51' 11.494" N	2° 10' 40.285" E
851	51° 51' 11.449" N	2° 10' 41.290" E
852	51° 51' 11.378" N	2° 10' 42.291" E
853	51° 51' 11.282" N	2° 10' 43.286" E
854	51° 51' 11.161" N	2° 10' 44.274" E
855	51° 51' 11.015" N	2° 10' 45.254" E
856	51° 51' 10.844" N	2° 10' 46.223" E

857	51° 51' 10.649" N	2° 10' 47.180" E
858	51° 51' 10.429" N	2° 10' 48.123" E
859	51° 51' 10.186" N	2° 10' 49.051" E
860	51° 51' 9.920" N	2° 10' 49.962" E
861	51° 51' 9.631" N	2° 10' 50.855" E
862	51° 51' 9.320" N	2° 10' 51.728" E
863	51° 51' 8.986" N	2° 10' 52.579" E
864	51° 51' 8.632" N	2° 10' 53.408" E
865	51° 51' 8.256" N	2° 10' 54.213" E
866	51° 51' 7.861" N	2° 10' 54.992" E
867	51° 51' 7.446" N	2° 10' 55.745" E
868	51° 51' 7.013" N	2° 10' 56.470" E
869	51° 51' 6.561" N	2° 10' 57.165" E
870	51° 51' 6.093" N	2° 10' 57.830" E
871	51° 51' 5.608" N	2° 10' 58.464" E
872	51° 51' 5.107" N	2° 10' 59.065" E
873	51° 51' 4.591" N	2° 10' 59.632" E
874	51° 51' 4.062" N	2° 11' 0.165" E
875	51° 51' 3.520" N	2° 11' 0.662" E
876	51° 51' 2.965" N	2° 11' 1.124" E
877	51° 51' 2.884" N	2° 11' 1.184" E
878	51° 51' 2.399" N	2° 11' 1.548" E
879	51° 51' 1.823" N	2° 11' 1.935" E
880	51° 51' 1.237" N	2° 11' 2.283" E
881	51° 51' 0.645" N	2° 11' 2.591" E
882	51° 51' 2.081" N	2° 11' 8.837" E
883	51° 47' 17.653" N	2° 10' 35.576" E
884	51° 45' 50.900" N	2° 4' 20.399" E
885	51° 45' 15.142" N	2° 3' 48.280" E
886	51° 44' 57.718" N	2° 2' 53.135" E
887	51° 44' 55.357" N	2° 2' 47.506" E
888	51° 47' 6.900" N	2° 3' 12.481" E
889	51° 49' 25.968" N	2° 3' 25.319" E
890	51° 49' 27.952" N	2° 3' 25.557" E
891	51° 49' 30.530" N	2° 3' 25.867" E
892	51° 49' 30.217" N	2° 3' 24.600" E
893	51° 49' 30.365" N	2° 3' 24.538" E
894	51° 49' 34.213" N	2° 3' 21.387" E
895	51° 49' 34.687" N	2° 3' 20.998" E
896	51° 49' 35.161" N	2° 3' 20.610" E
897	51° 49' 45.500" N	2° 3' 12.143" E
898	51° 50' 0.191" N	2° 3' 0.109" E
899	51° 50' 0.089" N	2° 2' 59.669" E
900	51° 49' 57.712" N	2° 2' 49.406" E
901	51° 49' 38.510" N	2° 1' 26.557" E
902	51° 49' 36.448" N	2° 1' 17.662" E
903	51° 49' 22.670" N	2° 0' 18.278" E
904	51° 49' 22.604" N	2° 0' 18.004" E

905	51° 49' 22.534" N	2° 0' 17.732" E
906	51° 49' 19.356" N	2° 0' 5.841" E
907	51° 49' 19.147" N	2° 0' 5.161" E
908	51° 49' 19.073" N	2° 0' 4.917" E
909	51° 49' 18.923" N	2° 0' 4.420" E
910	51° 49' 18.786" N	2° 0' 4.021" E
911	51° 49' 18.764" N	2° 0' 3.956" E
912	51° 49' 18.647" N	2° 0' 3.608" E
913	51° 49' 18.372" N	2° 0' 2.774" E
914	51° 49' 18.182" N	2° 0' 2.180" E
915	51° 49' 18.173" N	2° 0' 2.151" E
916	51° 49' 17.995" N	2° 0' 1.561" E
917	51° 49' 17.487" N	1° 59' 59.816" E
918	51° 49' 17.267" N	1° 59' 59.027" E
919	51° 49' 17.257" N	1° 59' 58.988" E
920	51° 49' 17.053" N	1° 59' 58.188" E
921	51° 49' 16.718" N	1° 59' 56.808" E
922	51° 49' 6.121" N	1° 59' 20.291" E
923	51° 48' 50.765" N	1° 58' 27.398" E
924	51° 48' 47.492" N	1° 58' 16.131" E
925	51° 48' 30.091" N	1° 57' 16.241" E
926	51° 48' 16.973" N	1° 56' 31.123" E
927	51° 48' 13.362" N	1° 56' 18.707" E
928	51° 47' 48.067" N	1° 54' 51.783" E
929	51° 47' 40.980" N	1° 54' 27.445" E
930	51° 47' 30.948" N	1° 53' 53.008" E
931	51° 47' 30.494" N	1° 53' 51.448" E
932	51° 47' 18.924" N	1° 53' 11.745" E
933	51° 47' 15.945" N	1° 53' 1.527" E
934	51° 47' 7.160" N	1° 52' 31.398" E
935	51° 47' 7.137" N	1° 52' 31.321" E
936	51° 46' 52.976" N	1° 51' 43.249" E
937	51° 46' 47.835" N	1° 51' 25.804" E
938	51° 46' 47.631" N	1° 51' 25.112" E
939	51° 46' 38.597" N	1° 50' 56.670" E
940	51° 46' 37.209" N	1° 50' 52.300" E
941	51° 46' 13.109" N	1° 49' 34.270" E
942	51° 45' 57.292" N	1° 49' 37.441" E
943	51° 45' 57.275" N	1° 49' 37.217" E
944	51° 45' 57.247" N	1° 49' 36.754" E
945	51° 45' 57.219" N	1° 49' 36.212" E
946	51° 45' 57.201" N	1° 49' 35.747" E
947	51° 45' 57.187" N	1° 49' 35.203" E
948	51° 45' 57.180" N	1° 49' 34.738" E
949	51° 45' 57.180" N	1° 49' 34.191" E
950	51° 45' 57.183" N	1° 49' 33.729" E
951	51° 45' 57.196" N	1° 49' 33.178" E
952	51° 45' 57.211" N	1° 49' 32.722" E

953	51° 45' 57.238" N	1° 49' 32.164" E
954	51° 45' 57.262" N	1° 49' 31.717" E
955	51° 45' 57.304" N	1° 49' 31.147" E
956	51° 45' 57.337" N	1° 49' 30.716" E
957	51° 45' 57.396" N	1° 49' 30.122" E
958	51° 45' 57.437" N	1° 49' 29.721" E
959	51° 45' 57.518" N	1° 49' 29.066" E
960	51° 45' 57.560" N	1° 49' 28.733" E
961	51° 45' 57.706" N	1° 49' 27.754" E
962	51° 46' 0.800" N	1° 49' 8.743" E
963	51° 46' 26.142" N	1° 46' 32.786" E
964	51° 46' 26.789" N	1° 46' 28.801" E
965	51° 46' 47.984" N	1° 44' 18.049" E
966	51° 46' 48.141" N	1° 44' 17.144" E
967	51° 46' 48.319" N	1° 44' 16.248" E
968	51° 46' 48.516" N	1° 44' 15.364" E
969	51° 46' 48.733" N	1° 44' 14.491" E
970	51° 46' 48.970" N	1° 44' 13.632" E
971	51° 46' 51.902" N	1° 44' 3.472" E
972	51° 46' 52.500" N	1° 44' 1.398" E
973	51° 46' 59.984" N	1° 43' 35.460" E
974	51° 47' 0.260" N	1° 43' 34.549" E
975	51° 47' 0.558" N	1° 43' 33.655" E
976	51° 47' 0.877" N	1° 43' 32.782" E
977	51° 47' 1.218" N	1° 43' 31.929" E
978	51° 47' 1.578" N	1° 43' 31.097" E
979	51° 47' 1.958" N	1° 43' 30.290" E
980	51° 47' 2.358" N	1° 43' 29.506" E
981	51° 47' 7.527" N	1° 43' 19.758" E
982	51° 47' 7.926" N	1° 43' 19.034" E
983	51° 47' 8.341" N	1° 43' 18.334" E
984	51° 47' 8.772" N	1° 43' 17.659" E
985	51° 47' 9.218" N	1° 43' 17.010" E
986	51° 47' 9.679" N	1° 43' 16.389" E
987	51° 47' 10.154" N	1° 43' 15.796" E
988	51° 47' 10.642" N	1° 43' 15.231" E
989	51° 47' 11.143" N	1° 43' 14.696" E
990	51° 47' 19.248" N	1° 43' 6.385" E
991	51° 47' 19.785" N	1° 43' 5.858" E
992	51° 47' 20.334" N	1° 43' 5.365" E
993	51° 47' 20.894" N	1° 43' 4.907" E
994	51° 47' 21.465" N	1° 43' 4.484" E
995	51° 47' 22.046" N	1° 43' 4.097" E
996	51° 47' 22.636" N	1° 43' 3.747" E
997	51° 47' 23.233" N	1° 43' 3.434" E
998	51° 47' 23.838" N	1° 43' 3.159" E
999	51° 47' 24.449" N	1° 43' 2.921" E
1000	51° 47' 25.065" N	1° 43' 2.722" E

1001	51° 55' 9.316" N	2° 6' 37.670" E
1002	51° 55' 9.433" N	2° 6' 36.665" E
1003	51° 55' 9.459" N	2° 6' 36.439" E
1004	51° 54' 47.970" N	2° 5' 21.542" E
1005	51° 54' 47.970" N	2° 5' 21.543" E
1006	51° 54' 47.971" N	2° 5' 21.543" E
1007	51° 54' 49.412" N	2° 5' 22.194" E
1008	51° 54' 49.412" N	2° 5' 22.195" E
1009	51° 55' 5.880" N	2° 5' 29.641" E
1010	51° 57' 15.660" N	2° 6' 16.679" E
1011	51° 59' 17.250" N	2° 6' 11.506" E
1012	51° 59' 17.251" N	2° 6' 11.506" E
1013	52° 0' 1.310" N	2° 9' 30.624" E
1014	52° 0' 1.310" N	2° 9' 30.625" E
1015	52° 0' 1.310" N	2° 9' 30.626" E
1016	52° 0' 1.310" N	2° 9' 30.627" E
1017	52° 0' 1.310" N	2° 9' 30.628" E
1018	52° 0' 0.938" N	2° 9' 32.595" E
1019	51° 58' 25.043" N	2° 17' 59.266" E
1020	51° 58' 8.256" N	2° 17' 0.002" E
1021	51° 56' 37.354" N	2° 11' 42.892" E
1022	51° 56' 37.331" N	2° 11' 42.811" E
1023	51° 56' 37.331" N	2° 11' 42.810" E
1024	51° 56' 33.924" N	2° 11' 41.629" E
1025	51° 56' 6.546" N	2° 11' 32.142" E
1026	51° 55' 51.465" N	2° 11' 26.917" E
1027	51° 54' 32.426" N	2° 9' 48.834" E
1028	51° 52' 22.921" N	2° 8' 34.705" E
1029	51° 51' 35.830" N	2° 8' 7.781" E
1030	51° 50' 48.737" N	2° 7' 40.873" E
1031	51° 51' 5.834" N	2° 8' 55.087" E
1032	51° 51' 6.315" N	2° 8' 57.176" E
1033	51° 51' 8.472" N	2° 9' 6.545" E
1034	51° 51' 8.645" N	2° 9' 7.269" E
1035	51° 51' 15.516" N	2° 9' 37.145" E
1036	51° 51' 0.346" N	2° 9' 46.248" E
1037	51° 51' 9.825" N	2° 10' 27.448" E
1038	51° 51' 10.085" N	2° 10' 28.577" E
1039	51° 51' 10.334" N	2° 10' 29.488" E
1040	51° 51' 10.561" N	2° 10' 30.415" E
1041	51° 51' 10.764" N	2° 10' 31.357" E
1042	51° 51' 10.943" N	2° 10' 32.310" E
1043	51° 51' 11.100" N	2° 10' 33.285" E
1044	51° 51' 11.232" N	2° 10' 34.270" E
1045	51° 51' 11.339" N	2° 10' 35.262" E
1046	51° 51' 11.421" N	2° 10' 36.261" E
1047	51° 51' 11.478" N	2° 10' 37.264" E
1048	51° 51' 11.509" N	2° 10' 38.271" E

1049	51° 51' 11.514" N	2° 10' 39.278" E
1050	51° 51' 11.494" N	2° 10' 40.285" E
1051	51° 51' 11.449" N	2° 10' 41.290" E
1052	51° 51' 11.378" N	2° 10' 42.291" E
1053	51° 51' 11.282" N	2° 10' 43.286" E
1054	51° 51' 11.161" N	2° 10' 44.274" E
1055	51° 51' 11.015" N	2° 10' 45.254" E
1056	51° 51' 10.844" N	2° 10' 46.223" E
1057	51° 51' 10.649" N	2° 10' 47.180" E
1058	51° 51' 10.429" N	2° 10' 48.123" E
1059	51° 51' 10.186" N	2° 10' 49.051" E
1060	51° 51' 9.920" N	2° 10' 49.962" E
1061	51° 51' 9.631" N	2° 10' 50.855" E
1062	51° 51' 9.320" N	2° 10' 51.728" E
1063	51° 51' 8.986" N	2° 10' 52.579" E
1064	51° 51' 8.632" N	2° 10' 53.408" E
1065	51° 51' 8.256" N	2° 10' 54.213" E
1066	51° 51' 7.861" N	2° 10' 54.992" E
1067	51° 51' 7.446" N	2° 10' 55.745" E
1068	51° 51' 7.013" N	2° 10' 56.470" E
1069	51° 51' 6.561" N	2° 10' 57.165" E
1070	51° 51' 6.093" N	2° 10' 57.830" E
1071	51° 51' 5.608" N	2° 10' 58.464" E
1072	51° 51' 5.107" N	2° 10' 59.065" E
1073	51° 51' 4.591" N	2° 10' 59.632" E
1074	51° 51' 4.062" N	2° 11' 0.165" E
1075	51° 51' 3.520" N	2° 11' 0.662" E
1076	51° 51' 2.965" N	2° 11' 1.124" E
1077	51° 51' 2.884" N	2° 11' 1.184" E
1078	51° 51' 2.399" N	2° 11' 1.548" E
1079	51° 51' 1.823" N	2° 11' 1.935" E
1080	51° 51' 1.237" N	2° 11' 2.283" E
1081	51° 51' 0.645" N	2° 11' 2.591" E
1082	51° 51' 2.081" N	2° 11' 8.837" E
1083	51° 47' 17.653" N	2° 10' 35.576" E
1084	51° 45' 50.900" N	2° 4' 20.399" E
1085	51° 45' 15.142" N	2° 3' 48.280" E
1086	51° 44' 57.718" N	2° 2' 53.135" E
1087	51° 44' 55.357" N	2° 2' 47.506" E
1088	51° 47' 6.900" N	2° 3' 12.481" E
1089	51° 49' 25.968" N	2° 3' 25.319" E
1090	51° 49' 27.952" N	2° 3' 25.557" E
1091	51° 49' 30.530" N	2° 3' 25.867" E
1092	51° 49' 30.217" N	2° 3' 24.600" E
1093	51° 49' 30.365" N	2° 3' 24.538" E
1094	51° 49' 34.213" N	2° 3' 21.387" E
1095	51° 49' 34.687" N	2° 3' 20.998" E
1096	51° 49' 35.161" N	2° 3' 20.610" E

1097	51° 49' 45.500" N	2° 3' 12.143" E
1098	51° 50' 0.191" N	2° 3' 0.109" E
1099	51° 50' 0.089" N	2° 2' 59.669" E
1100	51° 49' 57.712" N	2° 2' 49.406" E
1101	51° 49' 38.510" N	2° 1' 26.557" E
1102	51° 49' 36.448" N	2° 1' 17.662" E
1103	51° 49' 22.670" N	2° 0' 18.278" E
1104	51° 49' 22.604" N	2° 0' 18.004" E
1105	51° 49' 22.534" N	2° 0' 17.732" E
1106	51° 49' 19.356" N	2° 0' 5.841" E
1107	51° 49' 19.147" N	2° 0' 5.161" E
1108	51° 49' 19.073" N	2° 0' 4.917" E
1109	51° 49' 18.923" N	2° 0' 4.420" E
1110	51° 49' 18.786" N	2° 0' 4.021" E
1111	51° 49' 18.764" N	2° 0' 3.956" E
1112	51° 49' 18.647" N	2° 0' 3.608" E
1113	51° 49' 18.372" N	2° 0' 2.774" E
1114	51° 49' 18.182" N	2° 0' 2.180" E
1115	51° 49' 18.173" N	2° 0' 2.151" E
1116	51° 49' 17.995" N	2° 0' 1.561" E
1117	51° 49' 17.487" N	1° 59' 59.816" E
1118	51° 49' 17.267" N	1° 59' 59.027" E
1119	51° 49' 17.257" N	1° 59' 58.988" E
1120	51° 49' 17.053" N	1° 59' 58.188" E
1121	51° 49' 16.718" N	1° 59' 56.808" E
1122	51° 49' 6.121" N	1° 59' 20.291" E
1123	51° 48' 50.765" N	1° 58' 27.398" E
1124	51° 48' 47.492" N	1° 58' 16.131" E
1125	51° 48' 30.091" N	1° 57' 16.241" E
1126	51° 48' 16.973" N	1° 56' 31.123" E
1127	51° 48' 13.362" N	1° 56' 18.707" E
1128	51° 47' 48.067" N	1° 54' 51.783" E
1129	51° 47' 40.980" N	1° 54' 27.445" E
1130	51° 47' 30.948" N	1° 53' 53.008" E
1131	51° 47' 30.494" N	1° 53' 51.448" E
1132	51° 47' 18.924" N	1° 53' 11.745" E
1133	51° 47' 15.945" N	1° 53' 1.527" E
1134	51° 47' 7.160" N	1° 52' 31.398" E
1135	51° 47' 7.137" N	1° 52' 31.321" E
1136	51° 46' 52.976" N	1° 51' 43.249" E
1137	51° 46' 47.835" N	1° 51' 25.804" E
1138	51° 46' 47.631" N	1° 51' 25.112" E
1139	51° 46' 38.597" N	1° 50' 56.670" E
1140	51° 46' 37.209" N	1° 50' 52.300" E
1141	51° 46' 13.109" N	1° 49' 34.270" E
1142	51° 45' 57.292" N	1° 49' 37.441" E
1143	51° 45' 57.275" N	1° 49' 37.217" E
1144	51° 45' 57.247" N	1° 49' 36.754" E

1145	51° 45' 57.219" N	1° 49' 36.212" E
1146	51° 45' 57.201" N	1° 49' 35.747" E
1147	51° 45' 57.187" N	1° 49' 35.203" E
1148	51° 45' 57.180" N	1° 49' 34.738" E
1149	51° 45' 57.180" N	1° 49' 34.191" E
1150	51° 45' 57.183" N	1° 49' 33.729" E
1151	51° 45' 57.196" N	1° 49' 33.178" E
1152	51° 45' 57.211" N	1° 49' 32.722" E
1153	51° 45' 57.238" N	1° 49' 32.164" E
1154	51° 45' 57.262" N	1° 49' 31.717" E
1155	51° 45' 57.304" N	1° 49' 31.147" E
1156	51° 45' 57.337" N	1° 49' 30.716" E
1157	51° 45' 57.396" N	1° 49' 30.122" E
1158	51° 45' 57.437" N	1° 49' 29.721" E
1159	51° 45' 57.518" N	1° 49' 29.066" E
1160	51° 45' 57.560" N	1° 49' 28.733" E
1161	51° 45' 57.706" N	1° 49' 27.754" E
1162	51° 46' 0.800" N	1° 49' 8.743" E
1163	51° 46' 26.142" N	1° 46' 32.786" E
1164	51° 46' 26.789" N	1° 46' 28.801" E
1165	51° 46' 47.984" N	1° 44' 18.049" E
1166	51° 46' 48.141" N	1° 44' 17.144" E
1167	51° 46' 48.319" N	1° 44' 16.248" E
1168	51° 46' 48.516" N	1° 44' 15.364" E
1169	51° 46' 48.733" N	1° 44' 14.491" E
1170	51° 46' 48.970" N	1° 44' 13.632" E
1171	51° 46' 51.902" N	1° 44' 3.472" E
1172	51° 46' 52.500" N	1° 44' 1.398" E
1173	51° 46' 59.984" N	1° 43' 35.460" E
1174	51° 47' 0.260" N	1° 43' 34.549" E
1175	51° 47' 0.558" N	1° 43' 33.655" E
1176	51° 47' 0.877" N	1° 43' 32.782" E
1177	51° 47' 1.218" N	1° 43' 31.929" E
1178	51° 47' 1.578" N	1° 43' 31.097" E
1179	51° 47' 1.958" N	1° 43' 30.290" E
1180	51° 47' 2.358" N	1° 43' 29.506" E
1181	51° 47' 7.527" N	1° 43' 19.758" E
1182	51° 47' 7.926" N	1° 43' 19.034" E
1183	51° 47' 8.341" N	1° 43' 18.334" E
1184	51° 47' 8.772" N	1° 43' 17.659" E
1185	51° 47' 9.218" N	1° 43' 17.010" E
1186	51° 47' 9.679" N	1° 43' 16.389" E
1187	51° 47' 10.154" N	1° 43' 15.796" E
1188	51° 47' 10.642" N	1° 43' 15.231" E
1189	51° 47' 11.143" N	1° 43' 14.696" E
1190	51° 47' 19.248" N	1° 43' 6.385" E
1191	51° 47' 19.785" N	1° 43' 5.858" E
1192	51° 47' 20.334" N	1° 43' 5.365" E

1193	51° 47' 20.894" N	1° 43' 4.907" E
1194	51° 47' 21.465" N	1° 43' 4.484" E
1195	51° 47' 22.046" N	1° 43' 4.097" E
1196	51° 47' 22.636" N	1° 43' 3.747" E
1197	51° 47' 23.233" N	1° 43' 3.434" E
1198	51° 47' 23.838" N	1° 43' 3.159" E
1199	51° 47' 24.449" N	1° 43' 2.921" E
1200	51° 47' 25.065" N	1° 43' 2.722" E
1201	51° 55' 9.316" N	2° 6' 37.670" E
1202	51° 55' 9.433" N	2° 6' 36.665" E
1203	51° 55' 9.459" N	2° 6' 36.439" E
1204	51° 54' 47.970" N	2° 5' 21.542" E
1205	51° 54' 47.970" N	2° 5' 21.543" E
1206	51° 54' 47.971" N	2° 5' 21.543" E
1207	51° 54' 49.412" N	2° 5' 22.194" E
1208	51° 54' 49.412" N	2° 5' 22.195" E
1209	51° 55' 5.880" N	2° 5' 29.641" E
1210	51° 57' 15.660" N	2° 6' 16.679" E
1211	51° 59' 17.250" N	2° 6' 11.506" E
1212	51° 59' 17.251" N	2° 6' 11.506" E
1213	52° 0' 1.310" N	2° 9' 30.624" E
1214	52° 0' 1.310" N	2° 9' 30.625" E
1215	52° 0' 1.310" N	2° 9' 30.626" E
1216	52° 0' 1.310" N	2° 9' 30.627" E
1217	52° 0' 1.310" N	2° 9' 30.628" E
1218	52° 0' 0.938" N	2° 9' 32.595" E
1219	51° 58' 25.043" N	2° 17' 59.266" E
1220	51° 58' 8.256" N	2° 17' 0.002" E
1221	51° 56' 37.354" N	2° 11' 42.892" E
1222	51° 56' 37.331" N	2° 11' 42.811" E
1223	51° 56' 37.331" N	2° 11' 42.810" E
1224	51° 56' 33.924" N	2° 11' 41.629" E
1225	51° 56' 6.546" N	2° 11' 32.142" E
1226	51° 55' 51.465" N	2° 11' 26.917" E
1227	51° 54' 32.426" N	2° 9' 48.834" E
1228	51° 52' 22.921" N	2° 8' 34.705" E
1229	51° 51' 35.830" N	2° 8' 7.781" E
1230	51° 50' 48.737" N	2° 7' 40.873" E
1231	51° 51' 5.834" N	2° 8' 55.087" E
1232	51° 51' 6.315" N	2° 8' 57.176" E
1233	51° 51' 8.472" N	2° 9' 6.545" E
1234	51° 51' 8.645" N	2° 9' 7.269" E
1235	51° 51' 15.516" N	2° 9' 37.145" E
1236	51° 51' 0.346" N	2° 9' 46.248" E
1237	51° 51' 9.825" N	2° 10' 27.448" E
1238	51° 51' 10.085" N	2° 10' 28.577" E
1239	51° 51' 10.334" N	2° 10' 29.488" E
1240	51° 51' 10.561" N	2° 10' 30.415" E

1241	51° 51' 10.764" N	2° 10' 31.357" E
1242	51° 51' 10.943" N	2° 10' 32.310" E
1243	51° 51' 11.100" N	2° 10' 33.285" E
1244	51° 51' 11.232" N	2° 10' 34.270" E
1245	51° 51' 11.339" N	2° 10' 35.262" E
1246	51° 51' 11.421" N	2° 10' 36.261" E
1247	51° 51' 11.478" N	2° 10' 37.264" E
1248	51° 51' 11.509" N	2° 10' 38.271" E
1249	51° 51' 11.514" N	2° 10' 39.278" E
1250	51° 51' 11.494" N	2° 10' 40.285" E
1251	51° 51' 11.449" N	2° 10' 41.290" E
1252	51° 51' 11.378" N	2° 10' 42.291" E
1253	51° 51' 11.282" N	2° 10' 43.286" E
1254	51° 51' 11.161" N	2° 10' 44.274" E
1255	51° 51' 11.015" N	2° 10' 45.254" E
1256	51° 51' 10.844" N	2° 10' 46.223" E
1257	51° 51' 10.649" N	2° 10' 47.180" E
1258	51° 51' 10.429" N	2° 10' 48.123" E
1259	51° 51' 10.186" N	2° 10' 49.051" E
1260	51° 51' 9.920" N	2° 10' 49.962" E
1261	51° 51' 9.631" N	2° 10' 50.855" E
1262	51° 51' 9.320" N	2° 10' 51.728" E
1263	51° 51' 8.986" N	2° 10' 52.579" E
1264	51° 51' 8.632" N	2° 10' 53.408" E
1265	51° 51' 8.256" N	2° 10' 54.213" E
1266	51° 51' 7.861" N	2° 10' 54.992" E
1267	51° 51' 7.446" N	2° 10' 55.745" E
1268	51° 51' 7.013" N	2° 10' 56.470" E
1269	51° 51' 6.561" N	2° 10' 57.165" E
1270	51° 51' 6.093" N	2° 10' 57.830" E
1271	51° 51' 5.608" N	2° 10' 58.464" E
1272	51° 51' 5.107" N	2° 10' 59.065" E
1273	51° 51' 4.591" N	2° 10' 59.632" E
1274	51° 51' 4.062" N	2° 11' 0.165" E
1275	51° 51' 3.520" N	2° 11' 0.662" E
1276	51° 51' 2.965" N	2° 11' 1.124" E
1277	51° 51' 2.884" N	2° 11' 1.184" E
1278	51° 51' 2.399" N	2° 11' 1.548" E
1279	51° 51' 1.823" N	2° 11' 1.935" E
1280	51° 51' 1.237" N	2° 11' 2.283" E
1281	51° 51' 0.645" N	2° 11' 2.591" E
1282	51° 51' 2.081" N	2° 11' 8.837" E
1283	51° 47' 17.653" N	2° 10' 35.576" E
1284	51° 45' 50.900" N	2° 4' 20.399" E
1285	51° 45' 15.142" N	2° 3' 48.280" E
1286	51° 44' 57.718" N	2° 2' 53.135" E
1287	51° 44' 55.357" N	2° 2' 47.506" E
1288	51° 47' 6.900" N	2° 3' 12.481" E

1289	51° 49' 25.968" N	2° 3' 25.319" E
1290	51° 49' 27.952" N	2° 3' 25.557" E
1291	51° 49' 30.530" N	2° 3' 25.867" E
1292	51° 49' 30.217" N	2° 3' 24.600" E
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1310	51° 49' 18.786" N	2° 0' 4.021" E
1311	51° 49' 18.764" N	2° 0' 3.956" E
1312	51° 49' 18.647" N	2° 0' 3.608" E
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1317	51° 49' 17.487" N	1° 59' 59.816" E
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1388	51° 47' 10.642" N	1° 43' 15.231" E
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1395	51° 47' 22.046" N	1° 43' 4.097" E
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1405	51° 54' 47.970" N	2° 5' 21.543" E
1406	51° 54' 47.971" N	2° 5' 21.543" E
1407	51° 54' 49.412" N	2° 5' 22.194" E
1408	51° 54' 49.412" N	2° 5' 22.195" E
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1417	52° 0' 1.310" N	2° 9' 30.628" E
1418	52° 0' 0.938" N	2° 9' 32.595" E
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1420	51° 58' 8.256" N	2° 17' 0.002" E
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1422	51° 56' 37.331" N	2° 11' 42.811" E
1423	51° 56' 37.331" N	2° 11' 42.810" E
1424	51° 56' 33.924" N	2° 11' 41.629" E
1425	51° 56' 6.546" N	2° 11' 32.142" E
1426	51° 55' 51.465" N	2° 11' 26.917" E
1427	51° 54' 32.426" N	2° 9' 48.834" E
1428	51° 52' 22.921" N	2° 8' 34.705" E
1429	51° 51' 35.830" N	2° 8' 7.781" E
1430	51° 50' 48.737" N	2° 7' 40.873" E
1431	51° 51' 5.834" N	2° 8' 55.087" E
1432	51° 51' 6.315" N	2° 8' 57.176" E

1433	51° 51' 8.472" N	2° 9' 6.545" E
1434	51° 51' 8.645" N	2° 9' 7.269" E
1435	51° 51' 15.516" N	2° 9' 37.145" E
1436	51° 51' 0.346" N	2° 9' 46.248" E
1437	51° 51' 9.825" N	2° 10' 27.448" E
1438	51° 51' 10.085" N	2° 10' 28.577" E
1439	51° 51' 10.334" N	2° 10' 29.488" E
1440	51° 51' 10.561" N	2° 10' 30.415" E
1441	51° 51' 10.764" N	2° 10' 31.357" E
1442	51° 51' 10.943" N	2° 10' 32.310" E
1443	51° 51' 11.100" N	2° 10' 33.285" E
1444	51° 51' 11.232" N	2° 10' 34.270" E
1445	51° 51' 11.339" N	2° 10' 35.262" E
1446	51° 51' 11.421" N	2° 10' 36.261" E
1447	51° 51' 11.478" N	2° 10' 37.264" E
1448	51° 51' 11.509" N	2° 10' 38.271" E
1449	51° 51' 11.514" N	2° 10' 39.278" E
1450	51° 51' 11.494" N	2° 10' 40.285" E
1451	51° 51' 11.449" N	2° 10' 41.290" E
1452	51° 51' 11.378" N	2° 10' 42.291" E
1453	51° 51' 11.282" N	2° 10' 43.286" E
1454	51° 51' 11.161" N	2° 10' 44.274" E
1455	51° 51' 11.015" N	2° 10' 45.254" E
1456	51° 51' 10.844" N	2° 10' 46.223" E
1457	51° 51' 10.649" N	2° 10' 47.180" E
1458	51° 51' 10.429" N	2° 10' 48.123" E
1459	51° 51' 10.186" N	2° 10' 49.051" E
1460	51° 51' 9.920" N	2° 10' 49.962" E
1461	51° 51' 9.631" N	2° 10' 50.855" E
1462	51° 51' 9.320" N	2° 10' 51.728" E
1463	51° 51' 8.986" N	2° 10' 52.579" E
1464	51° 51' 8.632" N	2° 10' 53.408" E
1465	51° 51' 8.256" N	2° 10' 54.213" E
1466	51° 51' 7.861" N	2° 10' 54.992" E
1467	51° 51' 7.446" N	2° 10' 55.745" E
1468	51° 51' 7.013" N	2° 10' 56.470" E
1469	51° 51' 6.561" N	2° 10' 57.165" E
1470	51° 51' 6.093" N	2° 10' 57.830" E
1471	51° 51' 5.608" N	2° 10' 58.464" E
1472	51° 51' 5.107" N	2° 10' 59.065" E
1473	51° 51' 4.591" N	2° 10' 59.632" E
1474	51° 51' 4.062" N	2° 11' 0.165" E
1475	51° 51' 3.520" N	2° 11' 0.662" E
1476	51° 51' 2.965" N	2° 11' 1.124" E
1477	51° 51' 2.884" N	2° 11' 1.184" E
1478	51° 51' 2.399" N	2° 11' 1.548" E
1479	51° 51' 1.823" N	2° 11' 1.935" E
1480	51° 51' 1.237" N	2° 11' 2.283" E

1481	51° 51' 0.645" N	2° 11' 2.591" E
1482	51° 51' 2.081" N	2° 11' 8.837" E
1483	51° 47' 17.653" N	2° 10' 35.576" E
1484	51° 45' 50.900" N	2° 4' 20.399" E
1485	51° 45' 15.142" N	2° 3' 48.280" E
1486	51° 44' 57.718" N	2° 2' 53.135" E
1487	51° 44' 55.357" N	2° 2' 47.506" E
1488	51° 47' 6.900" N	2° 3' 12.481" E
1489	51° 49' 25.968" N	2° 3' 25.319" E
1490	51° 49' 27.952" N	2° 3' 25.557" E
1491	51° 49' 30.530" N	2° 3' 25.867" E
1492	51° 49' 30.217" N	2° 3' 24.600" E
1493	51° 49' 30.365" N	2° 3' 24.538" E
1494	51° 49' 34.213" N	2° 3' 21.387" E
1495	51° 49' 34.687" N	2° 3' 20.998" E
1496	51° 49' 35.161" N	2° 3' 20.610" E
1497	51° 49' 45.500" N	2° 3' 12.143" E
1498	51° 50' 0.191" N	2° 3' 0.109" E
1499	51° 50' 0.089" N	2° 2' 59.669" E
1500	51° 49' 57.712" N	2° 2' 49.406" E
1501	51° 49' 38.510" N	2° 1' 26.557" E
1502	51° 49' 36.448" N	2° 1' 17.662" E
1503	51° 49' 22.670" N	2° 0' 18.278" E
1504	51° 49' 22.604" N	2° 0' 18.004" E
1505	51° 49' 22.534" N	2° 0' 17.732" E
1506	51° 49' 19.356" N	2° 0' 5.841" E
1507	51° 49' 19.147" N	2° 0' 5.161" E
1508	51° 49' 19.073" N	2° 0' 4.917" E
1509	51° 49' 18.923" N	2° 0' 4.420" E
1510	51° 49' 18.786" N	2° 0' 4.021" E
1511	51° 49' 18.764" N	2° 0' 3.956" E
1512	51° 49' 18.647" N	2° 0' 3.608" E
1513	51° 49' 18.372" N	2° 0' 2.774" E
1514	51° 49' 18.182" N	2° 0' 2.180" E
1515	51° 49' 18.173" N	2° 0' 2.151" E
1516	51° 49' 17.995" N	2° 0' 1.561" E
1517	51° 49' 17.487" N	1° 59' 59.816" E
1518	51° 49' 17.267" N	1° 59' 59.027" E
1519	51° 49' 17.257" N	1° 59' 58.988" E
1520	51° 49' 17.053" N	1° 59' 58.188" E
1521	51° 49' 16.718" N	1° 59' 56.808" E
1522	51° 49' 6.121" N	1° 59' 20.291" E
1523	51° 48' 50.765" N	1° 58' 27.398" E
1524	51° 48' 47.492" N	1° 58' 16.131" E
1525	51° 48' 30.091" N	1° 57' 16.241" E
1526	51° 48' 16.973" N	1° 56' 31.123" E
1527	51° 48' 13.362" N	1° 56' 18.707" E
1528	51° 47' 48.067" N	1° 54' 51.783" E

1529	51° 47' 40.980" N	1° 54' 27.445" E
1530	51° 47' 30.948" N	1° 53' 53.008" E
1531	51° 47' 30.494" N	1° 53' 51.448" E
1532	51° 47' 18.924" N	1° 53' 11.745" E
1533	51° 47' 15.945" N	1° 53' 1.527" E
1534	51° 47' 7.160" N	1° 52' 31.398" E
1535	51° 47' 7.137" N	1° 52' 31.321" E
1536	51° 46' 52.976" N	1° 51' 43.249" E
1537	51° 46' 47.835" N	1° 51' 25.804" E
1538	51° 46' 47.631" N	1° 51' 25.112" E
1539	51° 46' 38.597" N	1° 50' 56.670" E
1540	51° 46' 37.209" N	1° 50' 52.300" E
1541	51° 46' 13.109" N	1° 49' 34.270" E
1542	51° 45' 57.292" N	1° 49' 37.441" E
1543	51° 45' 57.275" N	1° 49' 37.217" E
1544	51° 45' 57.247" N	1° 49' 36.754" E
1545	51° 45' 57.219" N	1° 49' 36.212" E
1546	51° 45' 57.201" N	1° 49' 35.747" E
1547	51° 45' 57.187" N	1° 49' 35.203" E
1548	51° 45' 57.180" N	1° 49' 34.738" E
1549	51° 45' 57.180" N	1° 49' 34.191" E
1550	51° 45' 57.183" N	1° 49' 33.729" E
1551	51° 45' 57.196" N	1° 49' 33.178" E
1552	51° 45' 57.211" N	1° 49' 32.722" E
1553	51° 45' 57.238" N	1° 49' 32.164" E
1554	51° 45' 57.262" N	1° 49' 31.717" E
1555	51° 45' 57.304" N	1° 49' 31.147" E
1556	51° 45' 57.337" N	1° 49' 30.716" E
1557	51° 45' 57.396" N	1° 49' 30.122" E
1558	51° 45' 57.437" N	1° 49' 29.721" E
1559	51° 45' 57.518" N	1° 49' 29.066" E
1560	51° 45' 57.560" N	1° 49' 28.733" E
1561	51° 45' 57.706" N	1° 49' 27.754" E
1562	51° 46' 0.800" N	1° 49' 8.743" E
1563	51° 46' 26.142" N	1° 46' 32.786" E
1564	51° 46' 26.789" N	1° 46' 28.801" E
1565	51° 46' 47.984" N	1° 44' 18.049" E
1566	51° 46' 48.141" N	1° 44' 17.144" E
1567	51° 46' 48.319" N	1° 44' 16.248" E
1568	51° 46' 48.516" N	1° 44' 15.364" E
1569	51° 46' 48.733" N	1° 44' 14.491" E
1570	51° 46' 48.970" N	1° 44' 13.632" E
1571	51° 46' 51.902" N	1° 44' 3.472" E
1572	51° 46' 52.500" N	1° 44' 1.398" E
1573	51° 46' 59.984" N	1° 43' 35.460" E
1574	51° 47' 0.260" N	1° 43' 34.549" E
1575	51° 47' 0.558" N	1° 43' 33.655" E
1576	51° 47' 0.877" N	1° 43' 32.782" E

1577	51° 47' 1.218" N	1° 43' 31.929" E
1578	51° 47' 1.578" N	1° 43' 31.097" E
1579	51° 47' 1.958" N	1° 43' 30.290" E
1580	51° 47' 2.358" N	1° 43' 29.506" E
1581	51° 47' 7.527" N	1° 43' 19.758" E
1582	51° 47' 7.926" N	1° 43' 19.034" E
1583	51° 47' 8.341" N	1° 43' 18.334" E
1584	51° 47' 8.772" N	1° 43' 17.659" E
1585	51° 47' 9.218" N	1° 43' 17.010" E
1586	51° 47' 9.679" N	1° 43' 16.389" E
1587	51° 47' 10.154" N	1° 43' 15.796" E
1588	51° 47' 10.642" N	1° 43' 15.231" E
1589	51° 47' 11.143" N	1° 43' 14.696" E
1590	51° 47' 19.248" N	1° 43' 6.385" E
1591	51° 47' 19.785" N	1° 43' 5.858" E
1592	51° 47' 20.334" N	1° 43' 5.365" E
1593	51° 47' 20.894" N	1° 43' 4.907" E
1594	51° 47' 21.465" N	1° 43' 4.484" E
1595	51° 47' 22.046" N	1° 43' 4.097" E
1596	51° 47' 22.636" N	1° 43' 3.747" E
1597	51° 47' 23.233" N	1° 43' 3.434" E
1598	51° 47' 23.838" N	1° 43' 3.159" E
1599	51° 47' 24.449" N	1° 43' 2.921" E
1600	51° 47' 25.065" N	1° 43' 2.722" E
1601	51° 55' 9.316" N	2° 6' 37.670" E
1602	51° 55' 9.433" N	2° 6' 36.665" E
1603	51° 55' 9.459" N	2° 6' 36.439" E
1604	51° 54' 47.970" N	2° 5' 21.542" E
1605	51° 54' 47.970" N	2° 5' 21.543" E
1606	51° 54' 47.971" N	2° 5' 21.543" E
1607	51° 54' 49.412" N	2° 5' 22.194" E
1608	51° 54' 49.412" N	2° 5' 22.195" E
1609	51° 55' 5.880" N	2° 5' 29.641" E
1610	51° 57' 15.660" N	2° 6' 16.679" E
1611	51° 59' 17.250" N	2° 6' 11.506" E
1612	51° 59' 17.251" N	2° 6' 11.506" E
1613	52° 0' 1.310" N	2° 9' 30.624" E
1614	52° 0' 1.310" N	2° 9' 30.625" E
1615	52° 0' 1.310" N	2° 9' 30.626" E
1616	52° 0' 1.310" N	2° 9' 30.627" E
1617	52° 0' 1.310" N	2° 9' 30.628" E
1618	52° 0' 0.938" N	2° 9' 32.595" E
1619	51° 58' 25.043" N	2° 17' 59.266" E
1620	51° 58' 8.256" N	2° 17' 0.002" E
1621	51° 56' 37.354" N	2° 11' 42.892" E
1622	51° 56' 37.331" N	2° 11' 42.811" E
1623	51° 56' 37.331" N	2° 11' 42.810" E
1624	51° 56' 33.924" N	2° 11' 41.629" E

1625	51° 56' 6.546" N	2° 11' 32.142" E
1626	51° 55' 51.465" N	2° 11' 26.917" E
1627	51° 54' 32.426" N	2° 9' 48.834" E
1628	51° 52' 22.921" N	2° 8' 34.705" E
1629	51° 51' 35.830" N	2° 8' 7.781" E
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1639	51° 51' 10.334" N	2° 10' 29.488" E
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1641	51° 51' 10.764" N	2° 10' 31.357" E
1642	51° 51' 10.943" N	2° 10' 32.310" E
1643	51° 51' 11.100" N	2° 10' 33.285" E
1644	51° 51' 11.232" N	2° 10' 34.270" E
1645	51° 51' 11.339" N	2° 10' 35.262" E
1646	51° 51' 11.421" N	2° 10' 36.261" E
1647	51° 51' 11.478" N	2° 10' 37.264" E
1648	51° 51' 11.509" N	2° 10' 38.271" E
1649	51° 51' 11.514" N	2° 10' 39.278" E
1650	51° 51' 11.494" N	2° 10' 40.285" E
1651	51° 51' 11.449" N	2° 10' 41.290" E
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1661	51° 51' 9.631" N	2° 10' 50.855" E
1662	51° 51' 9.320" N	2° 10' 51.728" E
1663	51° 51' 8.986" N	2° 10' 52.579" E
1664	51° 51' 8.632" N	2° 10' 53.408" E
1665	51° 51' 8.256" N	2° 10' 54.213" E
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1667	51° 51' 7.446" N	2° 10' 55.745" E
1668	51° 51' 7.013" N	2° 10' 56.470" E
1669	51° 51' 6.561" N	2° 10' 57.165" E
1670	51° 51' 6.093" N	2° 10' 57.830" E
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1691	51° 49' 30.530" N	2° 3' 25.867" E
1692	51° 49' 30.217" N	2° 3' 24.600" E
1693	51° 49' 30.365" N	2° 3' 24.538" E
1694	51° 49' 34.213" N	2° 3' 21.387" E
1695	51° 49' 34.687" N	2° 3' 20.998" E
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1706	51° 49' 19.356" N	2° 0' 5.841" E
1707	51° 49' 19.147" N	2° 0' 5.161" E
1708	51° 49' 19.073" N	2° 0' 4.917" E
1709	51° 49' 18.923" N	2° 0' 4.420" E
1710	51° 49' 18.786" N	2° 0' 4.021" E
1711	51° 49' 18.764" N	2° 0' 3.956" E
1712	51° 49' 18.647" N	2° 0' 3.608" E
1713	51° 49' 18.372" N	2° 0' 2.774" E
1714	51° 49' 18.182" N	2° 0' 2.180" E
1715	51° 49' 18.173" N	2° 0' 2.151" E
1716	51° 49' 17.995" N	2° 0' 1.561" E
1717	51° 49' 17.487" N	1° 59' 59.816" E
1718	51° 49' 17.267" N	1° 59' 59.027" E
1719	51° 49' 17.257" N	1° 59' 58.988" E
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1725	51° 48' 30.091" N	1° 57' 16.241" E
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1731	51° 47' 30.494" N	1° 53' 51.448" E
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1733	51° 47' 15.945" N	1° 53' 1.527" E
1734	51° 47' 7.160" N	1° 52' 31.398" E
1735	51° 47' 7.137" N	1° 52' 31.321" E
1736	51° 46' 52.976" N	1° 51' 43.249" E
1737	51° 46' 47.835" N	1° 51' 25.804" E
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1739	51° 46' 38.597" N	1° 50' 56.670" E
1740	51° 46' 37.209" N	1° 50' 52.300" E
1741	51° 46' 13.109" N	1° 49' 34.270" E
1742	51° 45' 57.292" N	1° 49' 37.441" E
1743	51° 45' 57.275" N	1° 49' 37.217" E
1744	51° 45' 57.247" N	1° 49' 36.754" E
1745	51° 45' 57.219" N	1° 49' 36.212" E
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1747	51° 45' 57.187" N	1° 49' 35.203" E
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1752	51° 45' 57.211" N	1° 49' 32.722" E
1753	51° 45' 57.238" N	1° 49' 32.164" E
1754	51° 45' 57.262" N	1° 49' 31.717" E
1755	51° 45' 57.304" N	1° 49' 31.147" E
1756	51° 45' 57.337" N	1° 49' 30.716" E
1757	51° 45' 57.396" N	1° 49' 30.122" E
1758	51° 45' 57.437" N	1° 49' 29.721" E
1759	51° 45' 57.518" N	1° 49' 29.066" E
1760	51° 45' 57.560" N	1° 49' 28.733" E
1761	51° 45' 57.706" N	1° 49' 27.754" E
1762	51° 46' 0.800" N	1° 49' 8.743" E
1763	51° 46' 26.142" N	1° 46' 32.786" E
1764	51° 46' 26.789" N	1° 46' 28.801" E
1765	51° 46' 47.984" N	1° 44' 18.049" E
1766	51° 46' 48.141" N	1° 44' 17.144" E
1767	51° 46' 48.319" N	1° 44' 16.248" E
1768	51° 46' 48.516" N	1° 44' 15.364" E

1769	51° 46' 48.733" N	1° 44' 14.491" E
1770	51° 46' 48.970" N	1° 44' 13.632" E
1771	51° 46' 51.902" N	1° 44' 3.472" E
1772	51° 46' 52.500" N	1° 44' 1.398" E
1773	51° 46' 59.984" N	1° 43' 35.460" E
1774	51° 47' 0.260" N	1° 43' 34.549" E
1775	51° 47' 0.558" N	1° 43' 33.655" E
1776	51° 47' 0.877" N	1° 43' 32.782" E
1777	51° 47' 1.218" N	1° 43' 31.929" E
1778	51° 47' 1.578" N	1° 43' 31.097" E
1779	51° 47' 1.958" N	1° 43' 30.290" E
1780	51° 47' 2.358" N	1° 43' 29.506" E
1781	51° 47' 7.527" N	1° 43' 19.758" E
1782	51° 47' 7.926" N	1° 43' 19.034" E
1783	51° 47' 8.341" N	1° 43' 18.334" E
1784	51° 47' 8.772" N	1° 43' 17.659" E
1785	51° 47' 9.218" N	1° 43' 17.010" E
1786	51° 47' 9.679" N	1° 43' 16.389" E
1787	51° 47' 10.154" N	1° 43' 15.796" E
1788	51° 47' 10.642" N	1° 43' 15.231" E
1789	51° 47' 11.143" N	1° 43' 14.696" E
1790	51° 47' 19.248" N	1° 43' 6.385" E
1791	51° 47' 19.785" N	1° 43' 5.858" E
1792	51° 47' 20.334" N	1° 43' 5.365" E
1793	51° 47' 20.894" N	1° 43' 4.907" E
1794	51° 47' 21.465" N	1° 43' 4.484" E
1795	51° 47' 22.046" N	1° 43' 4.097" E
1796	51° 47' 22.636" N	1° 43' 3.747" E
1797	51° 47' 23.233" N	1° 43' 3.434" E
1798	51° 47' 23.838" N	1° 43' 3.159" E
1799	51° 47' 24.449" N	1° 43' 2.921" E
1800	51° 47' 25.065" N	1° 43' 2.722" E
1801	51° 55' 9.316" N	2° 6' 37.670" E
1802	51° 55' 9.433" N	2° 6' 36.665" E
1803	51° 55' 9.459" N	2° 6' 36.439" E
1804	51° 54' 47.970" N	2° 5' 21.542" E
1805	51° 54' 47.970" N	2° 5' 21.543" E
1806	51° 54' 47.971" N	2° 5' 21.543" E
1807	51° 54' 49.412" N	2° 5' 22.194" E
1808	51° 54' 49.412" N	2° 5' 22.195" E
1809	51° 55' 5.880" N	2° 5' 29.641" E
1810	51° 57' 15.660" N	2° 6' 16.679" E
1811	51° 59' 17.250" N	2° 6' 11.506" E
1812	51° 59' 17.251" N	2° 6' 11.506" E
1813	52° 0' 1.310" N	2° 9' 30.624" E
1814	52° 0' 1.310" N	2° 9' 30.625" E
1815	52° 0' 1.310" N	2° 9' 30.626" E
1816	52° 0' 1.310" N	2° 9' 30.627" E

1817	52° 0' 1.310" N	2° 9' 30.628" E
1818	52° 0' 0.938" N	2° 9' 32.595" E
1819	51° 58' 25.043" N	2° 17' 59.266" E
1820	51° 58' 8.256" N	2° 17' 0.002" E
1821	51° 56' 37.354" N	2° 11' 42.892" E
1822	51° 56' 37.331" N	2° 11' 42.811" E
1823	51° 56' 37.331" N	2° 11' 42.810" E
1824	51° 56' 33.924" N	2° 11' 41.629" E
1825	51° 56' 6.546" N	2° 11' 32.142" E
1695	51° 55' 51.465" N	2° 11' 26.917" E
1696	51° 54' 32.426" N	2° 9' 48.834" E
1697	51° 52' 22.921" N	2° 8' 34.705" E
1698	51° 51' 35.830" N	2° 8' 7.781" E
1699	51° 50' 48.737" N	2° 7' 40.873" E
1700	51° 51' 5.834" N	2° 8' 55.087" E
1701	51° 51' 6.315" N	2° 8' 57.176" E
1702	51° 51' 8.472" N	2° 9' 6.545" E
1703	51° 51' 8.645" N	2° 9' 7.269" E
1704	51° 51' 15.516" N	2° 9' 37.145" E
1705	51° 51' 0.346" N	2° 9' 46.248" E
1706	51° 51' 9.825" N	2° 10' 27.448" E
1707	51° 51' 10.085" N	2° 10' 28.577" E
1708	51° 51' 10.334" N	2° 10' 29.488" E
1709	51° 51' 10.561" N	2° 10' 30.415" E
1710	51° 51' 10.764" N	2° 10' 31.357" E
1711	51° 51' 10.943" N	2° 10' 32.310" E
1712	51° 51' 11.100" N	2° 10' 33.285" E
1713	51° 51' 11.232" N	2° 10' 34.270" E
1714	51° 51' 11.339" N	2° 10' 35.262" E
1715	51° 51' 11.421" N	2° 10' 36.261" E
1716	51° 51' 11.478" N	2° 10' 37.264" E
1717	51° 51' 11.509" N	2° 10' 38.271" E
1718	51° 51' 11.514" N	2° 10' 39.278" E
1719	51° 51' 11.494" N	2° 10' 40.285" E
1720	51° 51' 11.449" N	2° 10' 41.290" E
1721	51° 51' 11.378" N	2° 10' 42.291" E
1722	51° 51' 11.282" N	2° 10' 43.286" E
1723	51° 51' 11.161" N	2° 10' 44.274" E
1724	51° 51' 11.015" N	2° 10' 45.254" E
1725	51° 51' 10.844" N	2° 10' 46.223" E
1726	51° 51' 10.649" N	2° 10' 47.180" E
1727	51° 51' 10.429" N	2° 10' 48.123" E
1728	51° 51' 10.186" N	2° 10' 49.051" E
1729	51° 51' 9.920" N	2° 10' 49.962" E
1730	51° 51' 9.631" N	2° 10' 50.855" E
1731	51° 51' 9.320" N	2° 10' 51.728" E
1732	51° 51' 8.986" N	2° 10' 52.579" E
1733	51° 51' 8.632" N	2° 10' 53.408" E

1734	51° 51' 8.256" N	2° 10' 54.213" E
1735	51° 51' 7.861" N	2° 10' 54.992" E
1736	51° 51' 7.446" N	2° 10' 55.745" E
1737	51° 51' 7.013" N	2° 10' 56.470" E
1738	51° 51' 6.561" N	2° 10' 57.165" E
1739	51° 51' 6.093" N	2° 10' 57.830" E
1740	51° 51' 5.608" N	2° 10' 58.464" E
1741	51° 51' 5.107" N	2° 10' 59.065" E
1742	51° 51' 4.591" N	2° 10' 59.632" E
1743	51° 51' 4.062" N	2° 11' 0.165" E
1744	51° 51' 3.520" N	2° 11' 0.662" E
1745	51° 51' 2.965" N	2° 11' 1.124" E
1746	51° 51' 2.884" N	2° 11' 1.184" E
1747	51° 51' 2.399" N	2° 11' 1.548" E
1748	51° 51' 1.823" N	2° 11' 1.935" E
1749	51° 51' 1.237" N	2° 11' 2.283" E
1750	51° 51' 0.645" N	2° 11' 2.591" E
1751	51° 51' 2.081" N	2° 11' 8.837" E
1752	51° 47' 17.653" N	2° 10' 35.576" E
1753	51° 45' 50.900" N	2° 4' 20.399" E
1754	51° 45' 15.142" N	2° 3' 48.280" E
1755	51° 44' 57.718" N	2° 2' 53.135" E
1756	51° 44' 55.357" N	2° 2' 47.506" E
1757	51° 47' 6.900" N	2° 3' 12.481" E
1758	51° 49' 25.968" N	2° 3' 25.319" E
1759	51° 49' 27.952" N	2° 3' 25.557" E
1760	51° 49' 30.530" N	2° 3' 25.867" E
1761	51° 49' 30.217" N	2° 3' 24.600" E
1762	51° 49' 30.365" N	2° 3' 24.538" E
1763	51° 49' 34.213" N	2° 3' 21.387" E
1764	51° 49' 34.687" N	2° 3' 20.998" E
1765	51° 49' 35.161" N	2° 3' 20.610" E
1766	51° 49' 45.500" N	2° 3' 12.143" E
1767	51° 50' 0.191" N	2° 3' 0.109" E
1768	51° 50' 0.089" N	2° 2' 59.669" E
1769	51° 49' 57.712" N	2° 2' 49.406" E
1770	51° 49' 38.510" N	2° 1' 26.557" E
1771	51° 49' 36.448" N	2° 1' 17.662" E
1772	51° 49' 22.670" N	2° 0' 18.278" E
1773	51° 49' 22.604" N	2° 0' 18.004" E
1774	51° 49' 22.534" N	2° 0' 17.732" E
1775	51° 49' 19.356" N	2° 0' 5.841" E
1776	51° 49' 19.147" N	2° 0' 5.161" E
1777	51° 49' 19.073" N	2° 0' 4.917" E
1778	51° 49' 18.923" N	2° 0' 4.420" E
1779	51° 49' 18.786" N	2° 0' 4.021" E
1780	51° 49' 18.764" N	2° 0' 3.956" E
1781	51° 49' 18.647" N	2° 0' 3.608" E

1782	51° 49' 18.372" N	2° 0' 2.774" E
1783	51° 49' 18.182" N	2° 0' 2.180" E
1784	51° 49' 18.173" N	2° 0' 2.151" E
1785	51° 49' 17.995" N	2° 0' 1.561" E
1786	51° 49' 17.487" N	1° 59' 59.816" E
1787	51° 49' 17.267" N	1° 59' 59.027" E
1788	51° 49' 17.257" N	1° 59' 58.988" E
1789	51° 49' 17.053" N	1° 59' 58.188" E
1790	51° 49' 16.718" N	1° 59' 56.808" E
1791	51° 49' 6.121" N	1° 59' 20.291" E
1792	51° 48' 50.765" N	1° 58' 27.398" E
1793	51° 48' 47.492" N	1° 58' 16.131" E
1794	51° 48' 30.091" N	1° 57' 16.241" E
1795	51° 48' 16.973" N	1° 56' 31.123" E
1796	51° 48' 13.362" N	1° 56' 18.707" E
1797	51° 47' 48.067" N	1° 54' 51.783" E
1798	51° 47' 40.980" N	1° 54' 27.445" E
1799	51° 47' 30.948" N	1° 53' 53.008" E
1800	51° 47' 30.494" N	1° 53' 51.448" E
1801	51° 47' 18.924" N	1° 53' 11.745" E
1802	51° 47' 15.945" N	1° 53' 1.527" E
1803	51° 47' 7.160" N	1° 52' 31.398" E
1804	51° 47' 7.137" N	1° 52' 31.321" E
1805	51° 46' 52.976" N	1° 51' 43.249" E
1806	51° 46' 47.835" N	1° 51' 25.804" E
1807	51° 46' 47.631" N	1° 51' 25.112" E
1808	51° 46' 38.597" N	1° 50' 56.670" E
1809	51° 46' 37.209" N	1° 50' 52.300" E
1810	51° 46' 13.109" N	1° 49' 34.270" E
1811	51° 45' 57.292" N	1° 49' 37.441" E
1812	51° 45' 57.275" N	1° 49' 37.217" E
1813	51° 45' 57.247" N	1° 49' 36.754" E
1814	51° 45' 57.219" N	1° 49' 36.212" E
1815	51° 45' 57.201" N	1° 49' 35.747" E
1816	51° 45' 57.187" N	1° 49' 35.203" E
1817	51° 45' 57.180" N	1° 49' 34.738" E
1818	51° 45' 57.180" N	1° 49' 34.191" E
1819	51° 45' 57.183" N	1° 49' 33.729" E
1820	51° 45' 57.196" N	1° 49' 33.178" E
1821	51° 45' 57.211" N	1° 49' 32.722" E
1822	51° 45' 57.238" N	1° 49' 32.164" E
1823	51° 45' 57.262" N	1° 49' 31.717" E
1824	51° 45' 57.304" N	1° 49' 31.147" E
1825	51° 45' 57.337" N	1° 49' 30.716" E

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 off the coast of Suffolk, 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.

A copy of the plans and book of reference referred to in this Order and certified in accordance with article 44 (certification of plans, etc.) together with a copy of any guarantee or alternative form of security approved by the Secretary of State pursuant to article 35 (funding), may be inspected free of charge at the offices of RWE at Windmill Hill Business Park, Whitehill Way, Swindon Wiltshire, SN5 6PB.