

# FIVE ESTUARIES OFFSHORE WIND FARM

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# **DEFINITION OF ACRONYMS**

Term	Definition
ABP	Associated British Ports
AiL	Abnormal Indivisible Load
AIS	Air Insulated Switchgear
ALC	Agricultural Land Classification
AMS	Archaeological Mitigation Strategy
AOE	Alde-Ore Estuary
AONB	Area of Outstanding National Beauty
BMV	Best and Most Versatile
BNG	Biodiversity Net Gain
CBRA	Cable Burial Risk Assessment
CEA	Cumulative Effects Assessment
CFWG	Commercial Fisheries Working Group
CMS	Construction Method Statement
CNP	Critical National Priority
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CRWA	Countryside and Rights of Way Act
CSIP	Cable Specification and Installation Plan
СТМР	Construction Traffic Management Plan
dDCO	Draft Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
dML	Deemed Marine License
EA	Environment Agency
EACN	East Anglia Connection Node
ECC	Export Cable Corridor
EDR	Effective Deterrent Radius
EEAST	East of England Ambulance Service Trust
EIA	Environmental Impact Assessment
EPSL	European Protected Species License
ES	Environmental Statement
ESC	East Suffolk Council



Term	Definition
EWT	Essex Wildlife Trust
FID	Final Investment Decision
FLCP	Fisheries Liaison and Coexistence Plan
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
FSA	Formal Safety Assessment
GBS	Gravity Base Structure
GI	Green Infrastructure
GIS	Gas Insulated Switchgear
GVA	Gross Value Added
GW	Gigawatts
HDD	Horizontal Directional Drilling
HFFA	Harwich Harbour Fishermen's Association
HRA	Habitat Regulations Assessment
IROPI	Imperative Reasons of Overriding Public Interest
ISH	Issue Specific Hearing
JNCC	Joint Nature Conservation Committee
LAT	Lowest Astronomical Tide
LBBG	Lesser Black Backed Gull
LEMP	Landscape and Ecological Management Plan
LGPL	London Gateway Port Ltd.
LGV	Light Goods Vehicle
LIMP	LBBG Implementation and Monitoring Plan
LIR	Local Impact Report
LPA	Local Planning Authority
LSE	Likely Significant Effect
LURA	Levelling-up and Regeneration Act
LVIA	Landscape and Visual Impact Assessment
MCA	Maritime and Coastguard Agency
MCAA	Marine and Coastal Access Act
MDS	Maximum Design Scenario
MGN	Marine Guidance Note



Term	Definition
MHCLG	Ministry of Housing, Communities and Local Government
MHWS	Mean High Water Spring
MLS	Margate and Long Sands
MMO	Marine Management Organisation
MoD	Ministry of Defence
MPA	Marine Protected Area
MRF	Marine Recovery Fund
MWSQ	Marine Water and Sediment Quality
NABU	Naturschutzbund Deutschland
NAS	Noise Abatement System
NE	Natural England
NESO	National Energy System Operator
NETS	National Electricity Transmission System
NFFO	National Federation of Fishermen's Organisations
NGESO	National Grid Electricity System Operator
NGET	National Grid Electricity Transmission
NIP	Navigation and Installation Plan
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NRA	Navigational Risk Assessment
NSIP	Nationally Significant Infrastructure Project
ocss	Offshore Coordination Support Scheme
OLEMP	Outline Landscape and Ecological Management Plan
OHPL	Overhead Power Line
OSES	Outline Skills and Employment Strategy
OTE	Outer Thames Estuary
OTNR	Offshore Transmission Network Review
OWF	Offshore Wind Farm
OWSI	Outline Written Scheme of Investigation
PAMP	Public Access Management Plan
PCS	Proposed Compensation Site
PEIR	Preliminary Environmental Information Report



Term	Definition
PINS	Planning Inspectorate
PLA	Port of London Authority
RIAA	Report to Inform Appropriate Assessment
RIES	Report on the Implications for European Sites
RLB	Red Line Boundary
RSPB	The Royal Society for the Protection of Birds
RTD	Red Throated Diver
SAC	Special Area of Conservation
SCC	Suffolk County Council
SCHAONB	Suffolk Coasts and Heaths Area of Outstanding Natural Beauty
SES	Skills and Employment Strategy
SHC	Suffolk Heritage Coast
SIP	Site Integrity Plan
SLVIA	Seascape, Landscape and Visual Impact Assessment
SNCB	Statutory Nature Conservation Body
SNS	Southern North Sea
SNSOWF	Southern North Sea Offshore Wind Farm developer group
SPA	Special Protection Area
SSC	Suffolk County Council
SSSI	Site of Special Scientific Interest
TDC	Tendring District Council
TSS	Traffic Separation Scheme
UXO	Unexploded Ordnance
VEOWF	Five Estuaries Offshore Wind Farm
VTS	Vessel Traffic Service
WMS	Written Ministerial Statement
WSI	Written Scheme of Investigation
WTG	Wind Turbine Generator
WTP	Workforce Travel Plan
ZTV	Zone of Theoretical Visibility



## 1. INTRODUCTION

#### 1.1 PURPOSE OF THIS DOCUMENT

1.1.1 This document is designed to assist the Examining Authority (ExA) and the Secretary of State (SoS) with their final evaluation of the Development Consent Order (DCO) application for the Five Estuaries Offshore Wind Farm Project (VE). It presents the Applicant's up to date position on the Principal Issues identified by the ExA, as well as other concerns raised throughout the Examination process. The document summarises the Applicant's case, as thoroughly detailed in the application documents, hearings, and Statements of Common Ground (SoCGs), without introducing any new information. Additionally, it provides the Applicant's position on unresolved matters with Interested Parties (IPs) and underscores the needs, benefits, and overarching justification for the project.

# 1.2 PROJECT OVERVIEW

- 1.2.1 Key elements of the project design at the conclusion of the Examination period are briefly discussed here. The Order Limits of the DCO Application are presented in Figure 1.1. A summary of the Site Selection and Project Design process is provided in Section 2, with the key project parameters presented in Table 2.1. Further details can be found in the Offshore Project Description [APP-069] and the Onshore Project Description [AS-041].
  - > VE will include up to 79 Wind Turbine Generators (WTG);
  - > WTGs will be contained within two Array Areas; a Northern Array Area and Southern Array Area, located at a minimum distance of 37 km from shore;
  - Up to two Offshore Substation Platforms (OSP) are included to regulate power and increase voltage supplied by the WTGs for onward transmission through the Export Cable Circuits;
  - > Export Cable Circuits will be installed within the Offshore and Onshore Export Cable Corridors (ECC) to transmit power from the OSP(s) to the Onshore Substation (OnSS) and Grid Connection Point.
  - > The Offshore ECC includes the seabed area identified for offshore cable construction, extending seaward of Mean High Water Springs (MHWS) from the Landfall location to the OSP(s);
  - Landfall is the point at which the offshore Export Cable Circuits will come ashore for connection to the onshore Export Cable Circuits. The location of the Landfall is Sandy Point between Frinton-on-Sea and Holland-on-Sea.
  - > The Onshore ECC includes the area of land identified for onshore cable construction, situated landward of MHWS from the Landfall location.
  - The OnSS is the proposed onshore electricity substation for VE, located west of Little Bromley and close to the Grid Connection Point. It will receive incoming power from the Export Cable Circuits and adjust it to meet the requirements of the Grid Connection Point. VE maintains optionality at the substation for either Air Insulated Switchgear (AIS) or Gas Insulated Switchgear (GIS).
  - > The Grid Connection Point is the National Grid Norwich to Tilbury East Anglia Green (EACN) substation.





#### 1.3 STATUTORY AND POLICY FRAMEWORK

1.3.1 The following provides an overview of the relevant statutory and policy framework governing VE. For further information on the statutory framework and other relevant legislation, please refer to Section 4 of the Planning Statement [APP-231].

# **PLANNING ACT 2008**

- 1.3.2 VE qualifies as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 due to its capacity exceeding 100 Megawatts (MW). This designation requires a DCO from the SoS for Energy Security and Net Zero.
- 1.3.3 The VE application must be determined in accordance with Section 104 of the Planning Act 2008, which involves consideration of relevant National Policy Statements (NPS), specifically NPS EN-1 and NPS EN-3 for offshore wind farms, and NPS EN-5 for onshore grid connection infrastructure. The SoS must also consider marine policy documents, local impact reports, prescribed matters related to the development, and any other important and relevant issues.
- 1.3.4 Relevant marine policy documents include the Marine Policy Statement, the South East Inshore Marine Plan, the East Inshore Marine Plan, and the East Offshore Marine Plan. Additionally, the National Planning Policy Framework and the adopted Development Plan may also be of relevance.

#### **NATIONAL POLICY STATEMENT EN-1**

1.3.5 The overarching NPS for Energy (NPS EN-1) outlines the government's policies for new energy NSIPs. It emphasises the urgent need for renewable energy infrastructure, such as VE, to ensure energy security and achieve net zero emissions. NPS EN-1 establishes the policy context for projects of Critical National Priority (CNP), highlighting the government's commitment to fully decarbonise national energy systems by 2035 and enhance energy independence, resilience, and security.

#### **NATIONAL POLICY STATEMENT EN-3**

1.3.6 The NPS for Renewable Energy Infrastructure (NPS EN-3) outlines policies specific to offshore wind technology. It emphasises offshore wind's vital role in meeting energy demands and decarbonising the national energy system, with a government target of up to 50 GW of offshore wind capacity by 2030. NPS EN-3 guides assessments, mitigation, compensatory measures, and decision-making for offshore wind farm applications. It acknowledges the complexity of offshore wind farm development, allowing for flexibility in applications when details are unknown, and stresses the importance of assessing potential impacts through the 'Rochdale Envelope' approach.

# **NATIONAL POLICY STATEMENT EN-5**

1.3.7 The NPS for Electricity Networks Infrastructure (NPS EN-5) covers technology-specific issues related to new electricity network infrastructure. For VE, it is relevant to the onshore Export Cable Corridor (ECC), Onshore Substation (OnSS), and connection to the National Grid Norwich to Tilbury Reinforcement Project East Anglia Connection Node (EACN). NPS EN-5 guides assessments, mitigation, and decision-making by the SoS for these components of VE.



#### **POLICY COMPLIANCE**

- 1.3.8 The Applicant has assessed policy compliance in various documents, including the Planning Statement [APP-231], Marine Policy Document [REP6-035], and Planning Statement Clean Power Addendum [REP8-040]. VE aligns with the relevant NPS and applicable marine policies.
- 1.3.9 Due to the urgent need for offshore wind development, the SoS is understood to presume in favour of granting consent for new energy NSIPs unless specific policies indicate otherwise. Table 6.1 of the Planning Statement [APP-231] summarises relevant information, which should aid the SoS to evaluate the impacts and benefits of VE.

#### 1.4 NEEDS CASE

1.4.1 This section outlines the benefits and critical need for VE. For further detail, refer to Section 5 of the Planning Statement [APP-231].

# CRITICAL NATIONAL PRIORITY INFRASTRUCTURE

1.4.2 The government has identified an urgent need for new energy NSIPs, including offshore wind and supporting onshore and offshore electricity network infrastructure, such as VE, comprising CNP infrastructure. This is supported by a presumption in favour of new energy NSIPs and low carbon infrastructure, including all non-fossil fuel offshore generation.

# **EFFICIENCY AND RISK**

1.4.3 Extending existing wind farms has proven to be an effective and low-risk method of increasing offshore generating capacity. Successful project examples, that are similar to VE, include the Burbo Bank, Kentish Flats, and Walney Extensions, which leverage technological advancements to support the government's ambitious climate change targets.

#### **CONSERVATION OBJECTIVES OF EUROPEAN SITES**

- 1.4.4 The construction, operation, maintenance, and decommissioning of VE will not impede the conservation objectives of nearby Marine Conservation Zones (MCZs), as detailed in the Marine Conservation Zone Assessment [APP-058]. The Habitats Regulations Assessment (HRA) Report to Inform Appropriate Assessment (RIAA) [REP8-004], concludes that VE, in combination with other plans and projects, would have no Adverse Effect on Integrity (AEoI) on any designated European site, except for the Alde-Ore Estuary Special Protection Area (SPA) and Alde-Ore Estuary Ramsar site, where there is a risk to lesser black-backed gull during the operational phase.
- 1.4.5 Although the SoS has concluded AEoI for impacts to kittiwake on other recent offshore wind projects at Flamborough and Filey Coast SPA, the actual impact to populations from VE is minimal, with negligible increases in baseline mortality rates. Similarly, the impacts to guillemot and razorbill from VE are also minimal. Therefore, a conclusion of no AEoI has been reached by VE alone and in combination with other projects.



- 1.4.6 There is a compelling case for derogation under the Habitats Regulations for lesser black-backed gull, at the Alde-Ore Estuary SPA and Alde-Ore Estuary Ramsar site, which is included in the Habitats Regulations Derogations Case [AS-003]. And, despite the Applicant's conclusions for kittiwake, guillemot, and razorbill at the Flamborough and Filey Coast SPA, these species are also included in the Derogation Case [AS-003] on a without prejudice basis.
- 1.4.7 The final offshore ECC route through the Margate and Long Sands Special Area of Conservation (SAC) intersects with a small portion of this site, with minimal impact expected. Although the RIAA [REP8-004] concludes no AEoI, this is not fully agreed by Natural England (NE), and so the Margate and Long Sands SAC is also included in the Derogation Case [AS-003] on a without prejudice basis.

#### **NEW ENERGY NSIPS AND OFFSHORE WIND PROJECTS**

- 1.4.8 Section 5.2 of the Planning Statement [APP-231] outlines the urgent need for new energy NSIPs and offshore wind projects. Key considerations include:
  - > Climate Change Impacts: The direct and indirect effects of climate change are already being felt, threatening global climate stability;
  - Sovernment Obligations: Under the Paris Agreement and the Climate Change Act, the UK must reduce greenhouse gas emissions to net zero by 2050, necessitating a significant increase in low-carbon and renewable energy sources;
  - > **British Energy Security Strategy**: The UK government aims to install 50GW of offshore wind capacity by 2030, a fivefold increase in the next decade;
  - > **Importance of Offshore Wind**: Offshore wind is crucial for low-carbon generation and maintaining electricity supply security;
  - Energy Market Stability: The war in Ukraine has highlighted the UK's reliance on energy imports, emphasising the need for secure, affordable, and reliable UKgenerated energy; and
  - VE's Contribution: With a generating capacity of approximately 1 Gigawatt, VE will significantly contribute to the UK's decarbonisation goals (see document 10.64.1 Response to East Anglia Two's Deadline 7 submissions and the ExA's Rule 17 Request to the Applicant [REP8-037]).

## **CLEAN POWER 2030**

# ADVICE ON ACHIEVING CLEAN POWER FOR GREAT BRITAIN BY 2030

- 1.4.9 On 5 November 2024, the National Energy System Operator (NESO) published its advice to the SoS for Energy Security and Net Zero, emphasising the necessity for mass deployment of offshore wind, onshore wind, and solar to achieve clean power by 2030. The report highlights that sustained rollout of offshore wind is required at more than double the highest rate ever achieved in Great Britain.
- 1.4.10 These expansions are essential to displace gas, meet growing demand, and replace retiring plants.



#### CLEAN POWER 2030 ACTION PLAN: A NEW ERA OF CLEAN ELECTRICITY

1.4.11 Published on 13 December 2024, the government's Action Plan details the pathway to achieving a clean power system by 2030. The plan aims for clean sources to produce at least 95% of Great Britain's electricity, with unabated gas supply used only when essential. It sets a clear target of 43-50 GW of offshore wind capacity as part of the rapid deployment of new clean energy across the UK.

Table 1.1 Extract from Table 1 of the Clean Power 2030 Action Plan

Technology	Current installed capacity (GW)	NESO 'further flex and renewables scenario' (GW)	NESO 'new dispatch scenario' (GW)	DESNZ 'clean power capacity range' (GW)
Offshore wind	14.8	51	43	43 – 50

## 1.5 COORDINATION WITH NORTH FALLS

- 1.5.1 The Applicant has proactively collaborated with the North Falls Offshore Windfarm Project (North Falls) from an early stage, in line with stakeholder consultation and feedback, as well as the relevant NPSs. For detailed information, please refer to the Coordination Document [REP8-029]
- 1.5.2 NPS-EN3 calls for collaboration and co-existence regarding, monitoring, cumulative impact mitigation, disturbance of subtidal habitats and holistic planning. Similarly, NPS-EN5, calls for consideration of coordinated offshore transmission, strategic network design, local coordination opportunities and coordination of onshore infrastructure including co-located substations. The NPSs emphasise the importance of collaboration among developers to minimise environmental and community impacts and enhance efficiency.

#### **COORDINATION IN DESIGN**

- 1.5.3 The Applicant and North Falls have worked closely to optimise their designs:
  - VE and North Falls share the same connection point to the national electricity transmission network and have considered similar landfall locations for their export cables;
  - > Both projects identified infrastructure options to support either project independently or in co-location; and
  - Consultation feedback and a coordinated approach with North Falls has led to the development of a shared ECC, landfall location, and single site for onshore substations. This has enabled a reduction in the number of export circuits within the shared ECC and reduced land take among other efficiencies and reductions in environmental and community impacts.

# **COORDINATION IN CONSTRUCTION**

- 1.5.4 The Applicant and North Falls are actively planning and coordinating construction as much as possible to improve efficiency and sustainability:
  - > VE and North Falls have developed coordination opportunities to minimise community and environmental impacts, reduce construction time and cost;



Coordination benefits depend on both projects receiving consent and securing funding mechanisms, as the timing of Financial Investment Decisions (FID) influences the feasibility of coordinated construction activities.

#### **DELIVERY SCENARIOS**

- 1.5.5 Three onshore construction scenarios have been developed:
  - Scenario 1: VE proceeds to construction and undertakes additional works for North Falls as part of a single programme;
  - Scenario 2: Both projects proceed to construction on overlapping timescales, with the second project utilising haul roads, construction compounds and enabling infrastructure installed by the first project; and
  - > **Scenario 3**: North Falls does not proceed, or both projects proceed on significantly different programmes.

# **BUILD OPTIONS**

- 1.5.6 Two build options cover the delivery scenarios:
  - > **Build Option 1**: Applies to Scenario 1, allowing for a single civils contractor and reduced construction impacts; and
  - > **Build Option 2**: Applies to Scenarios 2 and 3, with each project delivering its own ducts and cable works.
- 1.5.7 VE will continue to work with North Falls to identify coordination opportunities during construction to minimise overall impacts.

# 1.6 COORDINATION WITH NATIONAL GRID ELECTRICITY TRANSMISSION

- 1.6.1 VE and North Falls have the same connection point, the proposed East Anglia Connection Node (EACN) which is part of National Grid's Norwich to Tilbury reinforcement project. The need to coordinate with nearby construction projects is addressed in the Code of Construction Practice (CoCP) [REP7-050] which will seek to minimise impacts. This includes completion of a pre-consent soil survey and preparation of a Soil Management Plan; delivery of best practice measures to limit construction noise; appointment of an Agricultural Liaison Officer for the benefit of owners, their agents and occupiers of land; delivery of construction drainage mitigation measures.
- 1.6.2 Further detail of coordination between VE, North Falls and NGET is described in the Tripartite Position Statement which is attached as an annex to the VE 9.30 Coordination Document, Revision B [REP8-029]. It sets out the interactions around the onshore project substation areas, where there is potential for co-ordination or overlapping interests. It will be updated as required.

# 1.7 OFFSHORE TRANSMISSION NETWORK REVIEW

1.7.1 Throughout the pre-application process, VE actively participated in the Offshore Transmission Network Review (OTNR) to evaluate the implementation of a coordinated offshore transmission regime for Great Britain. In particular, VE was involved in the 'Early Opportunities' workstream, which explored options to enable inflight projects to pursue greater coordination within the existing regulatory framework.



- 1.7.2 As detailed in the Introduction to the Environmental Statement [APP-061] and the Offshore Connection Scenario [APP-262] document, VE, in collaboration with North Falls and Sea Link (National Grid Electricity Transmission (NGET)), explored the feasibility of coordination options between the two offshore wind farms and an offshore reinforcement (either a multi-purpose interconnector, or a two-ended HVDC link between Suffolk and Kent) to the national grid.
- 1.7.3 Subsequently, VE, along with North Falls and the SeaLink offshore reinforcement project, applied as a consortium for grant funding under the Offshore Coordination Support Scheme (OCSS). The consortium submitted a high-level feasibility study on 28 March 2024. This independent study was produced by ARUP and assessed the capital costs, construction and commissioning methodologies and overall programme associated with a coordination solution.
- 1.7.4 The feasibility study identified that while coordination was technically feasible, it would require an increase in capital costs of up to £890m, constraint costs increases of over £500m (due to SeaLink outages) and a programme delay for North Falls and VE of up to five years.
- 1.7.5 As outlined in the Applicant's Responses to Relevant Representations [REP1-049], the Secretary of State decided not to grant funding to the consortium in September 2024. This decision was confirmed by letter from the Department of Energy Security and Net Zero [AS-011]. Consequently, an offshore connection has not been pursued as there is no viable offshore connection available and this is not an alterative the project has to consider further as it is not realistic or deliverable.



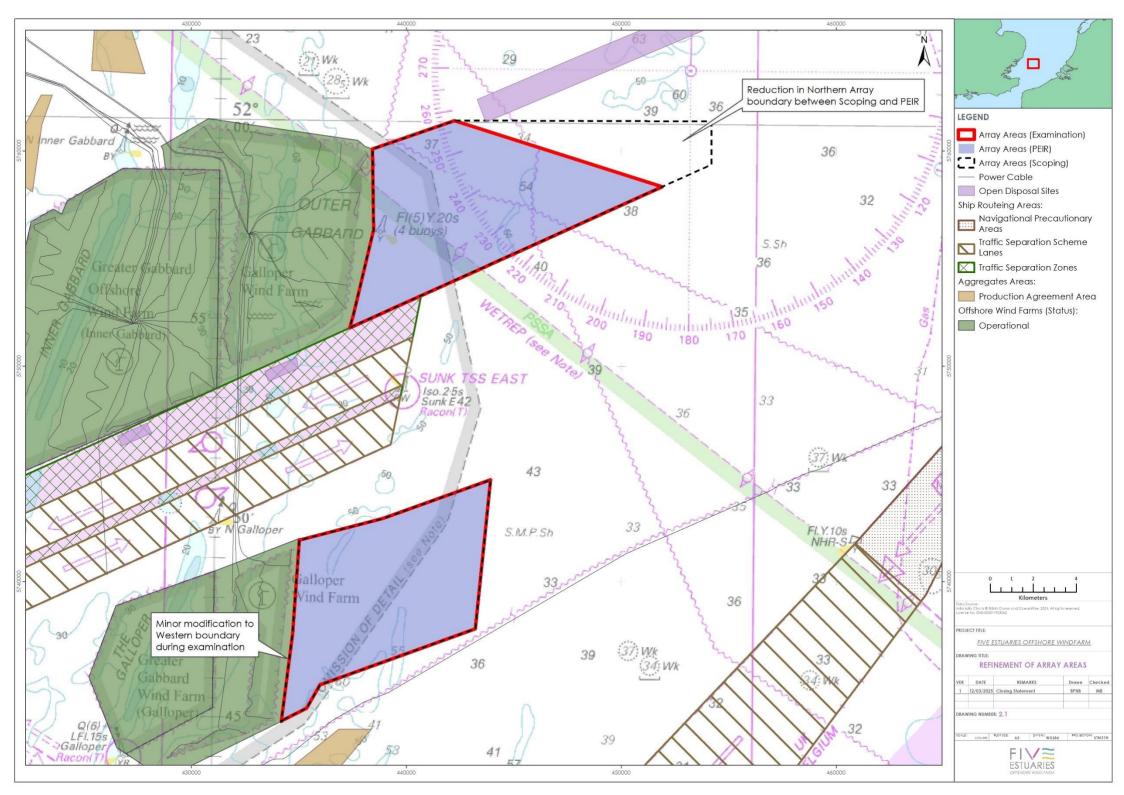
# 2. SITE SELECTION AND PROJECT DESIGN

- 2.1.1 The Applicant has evaluated various options for infrastructure siting, technology selection, construction methods, Operations and Maintenance (O&M), and decommissioning. These options have been assessed for community and environmental impacts, as well as engineering constraints.
- 2.1.2 The iterative site selection process, detailed in Site Selection and Alternatives [APP-066] was discussed at Issue Specific Hearing (ISH) 1 as noted in the Applicant's Summaries of Oral Submissions [REP1-059].
- 2.1.3 Options relating to technology selection, methods of construction, maintenance and decommissioning are contained in the latest versions of the Offshore Project Description [APP-069] and the Onshore Project Description [AS-041].

# 2.2 OFFSHORE SITE SELECTION AND PROJECT DESIGN

#### **OFFSHORE ARRAY AREAS**

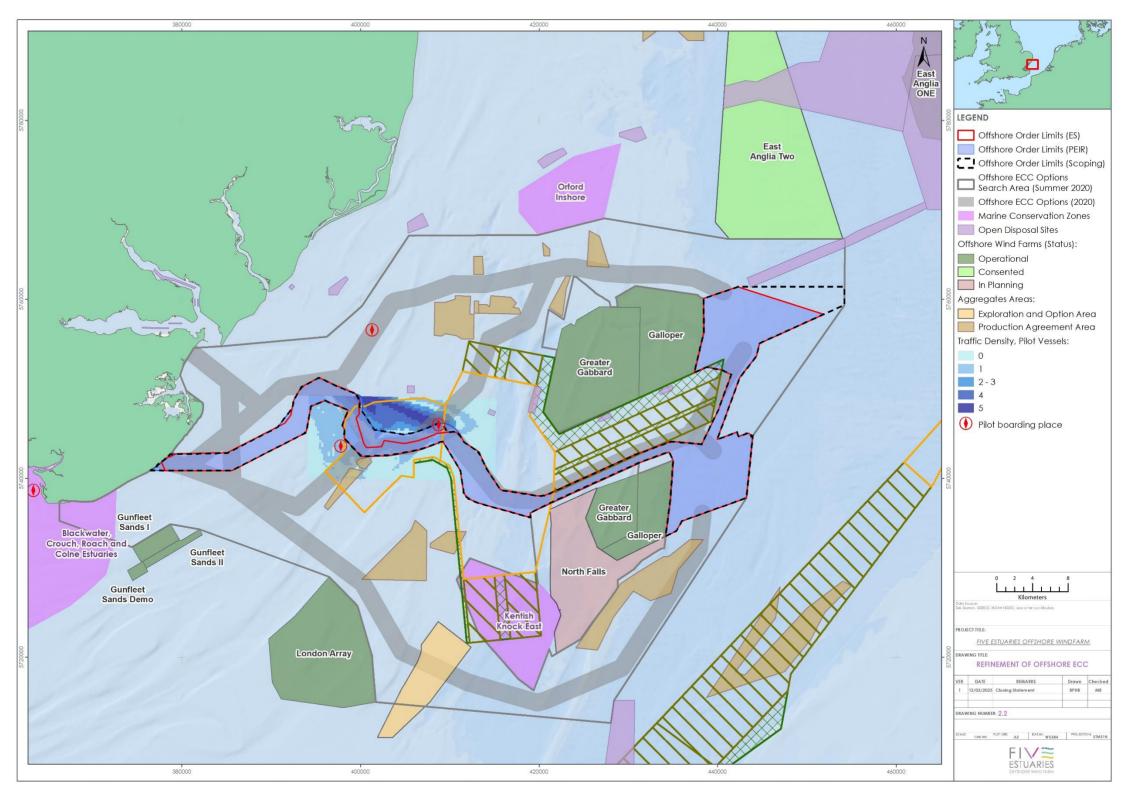
- 2.2.1 As an extension project to the existing Galloper Offshore Wind Farm (Galloper), the siting of the Array Areas was constrained by the need to be adjacent to the Galloper boundary, with additional limitations from the Greater Gabbard offshore wind farm to the west and the Traffic Separation Scheme (TSS) separating the arrays. The Array Areas Order Limits, including refinements made throughout the consenting phases are presented in Figure 2.1.
- 2.2.2 Key points from the Array Areas site selection and refinement process include:
  - > Identification of two array areas east of Galloper after considering environmental constraints such as ecology, shipping, and other infrastructure;
  - > Further analysis and stakeholder engagement on key issues such as shipping routes and conservation areas.
  - > Realignment of the northern array boundary to address shipping and navigation stakeholder concerns;
  - Adjustment of the northern array boundary also benefited the Seascape, Landscape, and Visual Impact Assessment (SLVIA) by reducing the lateral spread of turbines and increasing the visual gap between East Anglia 2 and VE;
- 2.2.3 During examination the Applicant made two further amendments; reducing the maximum tip height to 370m LAT which reduced visual impact and impact on radar, and removal of GBS as a foundation option, significantly reducing potential impacts from seabed preparation and habitat loss.





#### OFFSHORE EXPORT CABLE CORRIDOR

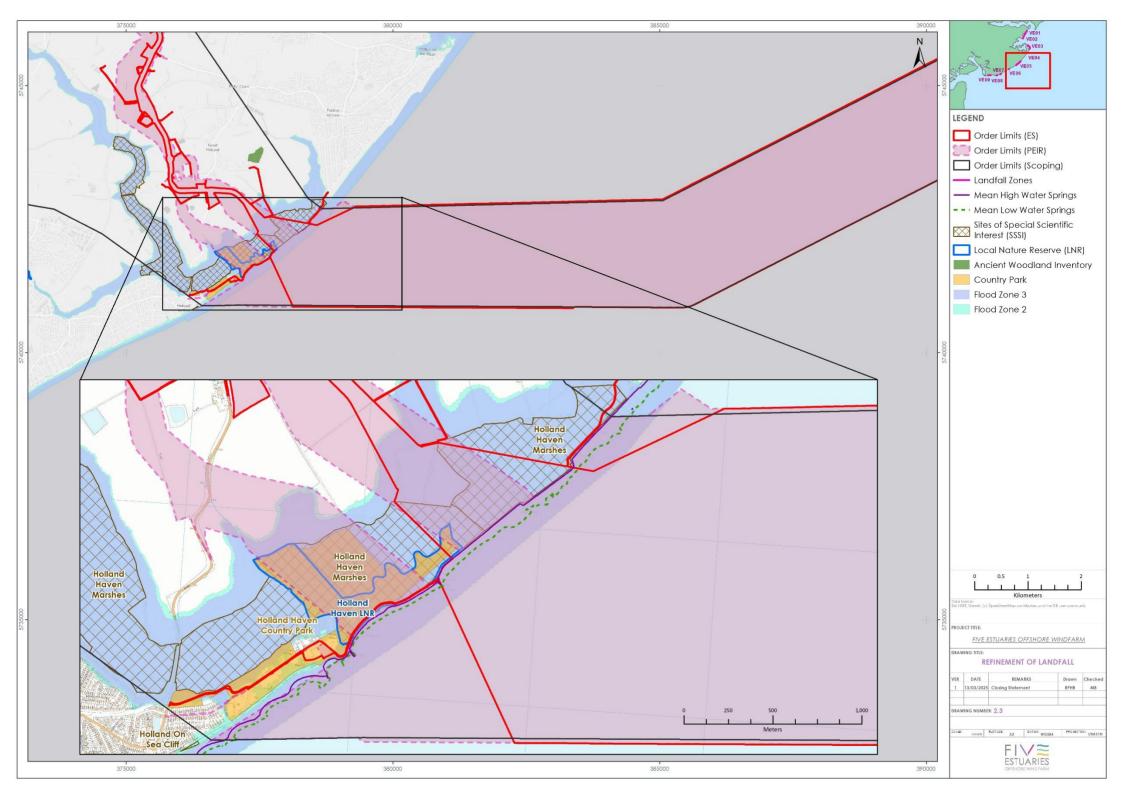
- 2.2.4 To facilitate power export to the national electricity grid, the project design includes an offshore ECC to shore from the Array Areas. The offshore ECC Order Limits, including refinements made throughout the consenting phases are presented in Figure 2.2.
- 2.2.5 Key points from the offshore ECC site selection and design refinement process include:
  - > Identification of an ECC area of search based on initial constraints mapping, following the identification of the onshore connection location and Landfall Zones;
  - Identification of several ECC options within the ECC area of search, considering design parameters, The Crown Estate's Cable Route Protocol, and early stakeholder engagement;
  - > Detailed analysis, considering factors such as cable crossings, water depth, and shipping constraints;
  - Extensive consultation up to submission led to refining the offshore ECC route to maintain maximum distance from the Sunk pilot boarding station and ensure minimal interaction with Deep Water Routes (DWRs) to minimise vessel risk;
  - To avoid interference with the Sunk pilot boarding station, the offshore ECC was moved south to intersect the M&LS SAC, as moving north was not feasible due to shipping and navigation stakeholder concerns about safety associated with pilot boarding activities and complex shipping routing;
  - To ensure minimised impacts on DWRs, the ECC was refined to target deep water areas and crossing angles were defined to minimise cable route length across the ECC; and
  - > The offshore ECC width was defined to allow for micro-siting around obstacles and coordination with North Falls.
- 2.2.6 During examination the Applicant made further commitments in terms of cable installation within the DWRs to ensure the future operation of those routes for larger vessels and mitigation for cable installation within the Margate and Long Sands SAC.
- 2.2.7 Further details are available in Section 2.3 of the Applicant's Summaries of Oral Submissions [REP1-059] and the Offshore Project Description [APP-069].





#### LANDFALL

- 2.2.8 The identification of the Landfall location for the ECC was driven by the location of the Offshore Arrays and the onshore grid connection point, which determined the relevant stretch of coastline for Landfall. The Landfall Order Limits, including refinements made throughout the consenting phases are presented in Figure 2.3.
- 2.2.9 Key points from the landfall site selection and design refinement process include:
  - Identification of Landfall Zones based on initial constraints mapping avoiding significant ecological designations, coastal cliffs, coastal erosion, coastal settlements, and other developments as well as ensuring space for construction compounds;
  - > Trenchless technologies like Horizontal Directional Drilling (HDD) were considered for crossing the land/sea divide, including areas up to 1 km inland;
  - > Holland Haven was determined to be the only feasible Landfall Zone;
  - Consultation, engineering studies and coordination with North Falls led to refinement and selection of a joint landfall location at Sandy Point between Frinton-on-Sea and Holland-on-Sea:
  - > Landfall Construction Compound and Transition Joint Bays will be northwest of Frinton golf course, reducing impacts on bird habitats and noise-sensitive areas;
  - > Commitment to trenchless techniques such as HDD will avoid significant impacts on Holland Haven Marshes SSSI and residential areas.





#### SUMMARY OF THE OFFSHORE ENVELOPE

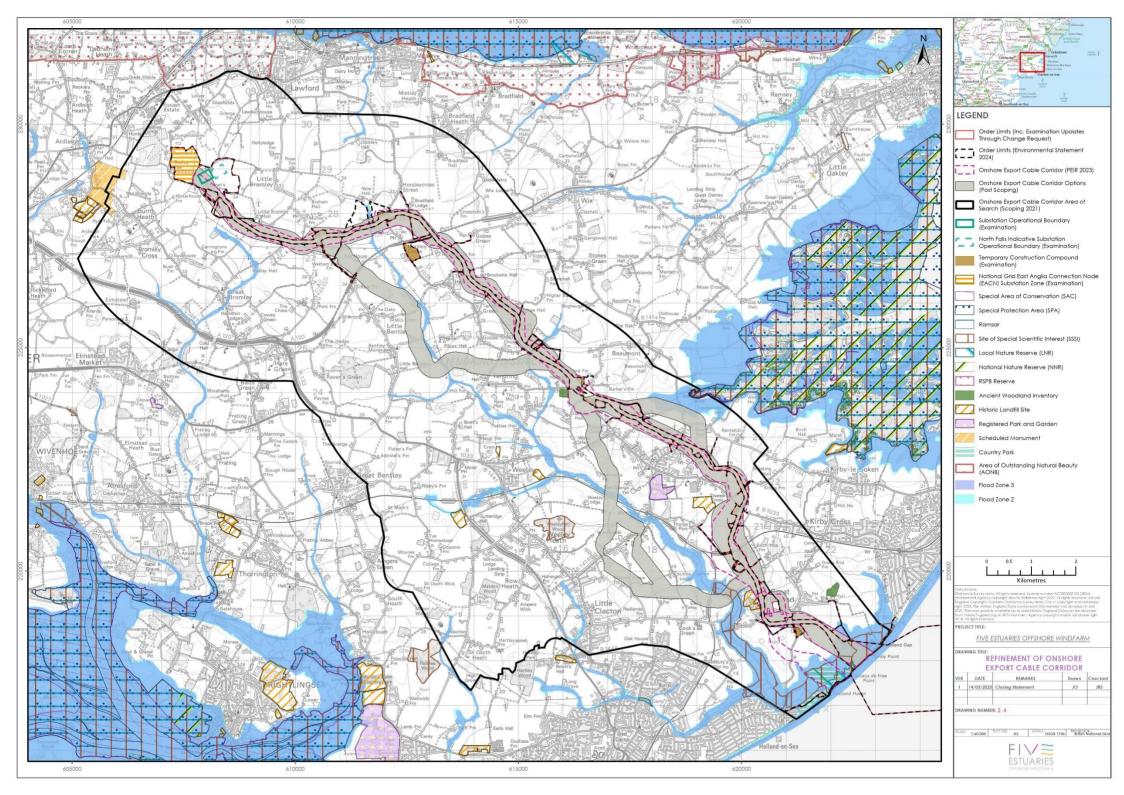
- 2.2.10 The offshore components of VE are detailed in the Offshore Project Description [APP-069] and the Detailed Offshore Project Design Envelope [APP-070]. The Rochdale envelope approach allows flexibility in the exact locations of infrastructure, technologies, and construction methods to accommodate future technological changes. This flexibility is supported by NPS EN-1, NPS EN-3, and PINS Advice Note Nine.
- 2.2.11 Each topic specific assessment considered the worst-case scenario for that topic. For example, the worst case scenario for benthic habitat loss would be Gravity Based Structure (GBS) foundations, whereas the worst case for underwater noise impacts on fish and marine mammals would be from piled foundations.
- 2.2.12 The final position of WTGs will be within the array boundaries and their layout will be in accordance with the parameters secured in Requirement 2 of the dDCO, informed by the Offshore Project Design Principles [APP-233] and subject to agreement with the relevant stakeholders.
- 2.2.13 The maximum height of the VE WTGs was initially reduced from 424 m blade tip height to 399 m blade tip height above LAT (395 m above MHWS), resolving the risk of an objection due to risk of radar interference impacts and further reducing the seascape and visual impacts. During Examination, the Applicant further reduced the maximum height of the WTGs from 399m to 370m above LAT, further reducing the level of any anticipated seascape and landscape visual impact, which East Suffolk Council also agree at a closest distance of approximately 37 km offshore, is not likely to result in significant adverse visual effects on the Suffolk coastline or its designated landscapes.
- 2.2.14 A commitment on cable installation levels was agreed with relevant shipping and navigation stakeholders to ensure the future use of the DWRs by larger, deeper drafted vessels.
- 2.2.15 At submission, optionality remained for piled, caisson, or GBS foundations. However, during Examination, and following engagement with the Marine Management Organisation (MMO) regarding benthic ecology impacts, the proposed use of GBS foundations has been removed from the application.
- 2.2.16 Technical Note: Methodology for Determining Maximum Design Scenario (Offshore) [REP6-037], was updated at Deadline 6 to provide further clarification and justification for the approach taken, and to address questions from the ExA regarding the relatively short section of ECC route through the Margate and Long Sands Special Area of Conservation avoiding the Sunk pilot boarding station.
- 2.2.17 The Applicant's approach to design and site selection is in line with the requirements of NPS EN-1 and EN-3.



#### 2.3 ONSHORE SITE SELECTION AND PROJECT DESIGN

#### **ONSHORE EXPORT CABLE CORRIDOR**

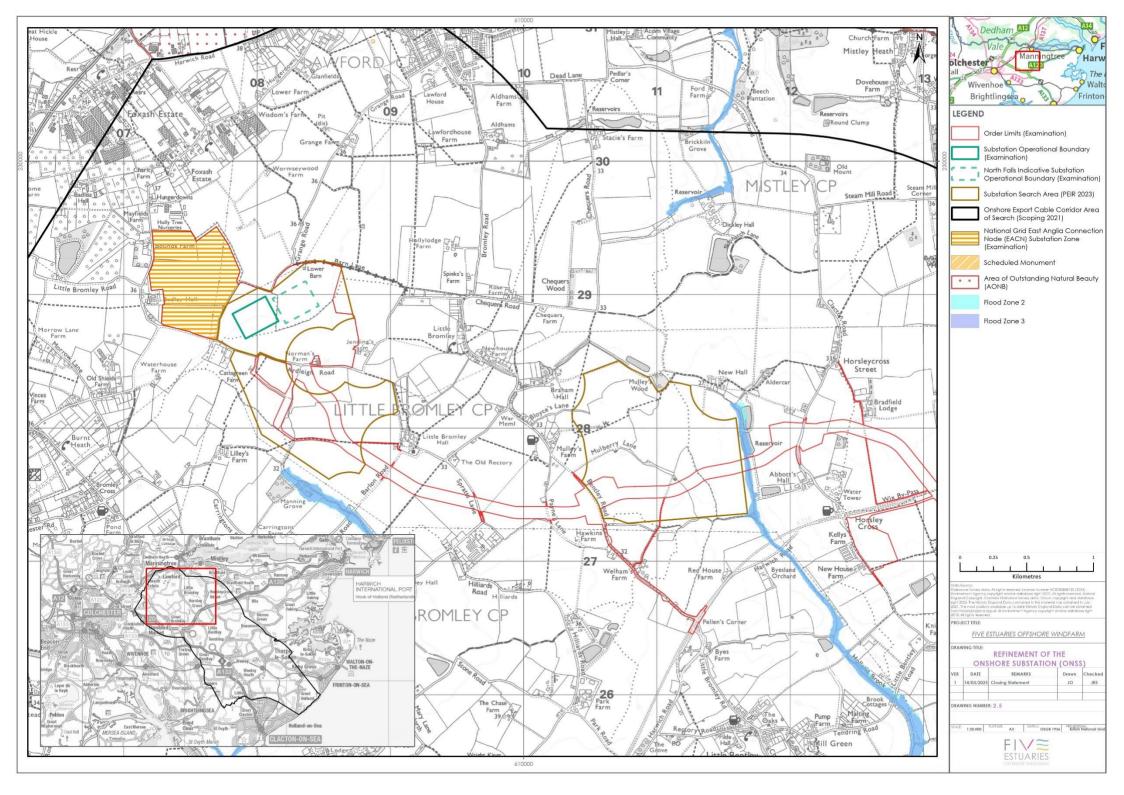
- 2.3.1 The route and width of the onshore Export Cable Corridor (ECC) has been primarily influenced by National Grid's preferred grid connection point for VE and the selected Landfall location. The Onshore ECC Order Limits, including refinements made throughout the consenting phases are presented in Figure 2.4.
- 2.3.2 Key points from the onshore ECC site selection and design refinement process include:
  - Constraints mapping was undertaken to avoid significant ecological, landscape, and archaeological designations, as well as coastal settlements and development;
  - An Onshore Infrastructure Area of Search was used, which was refined once National Grid identified its search area near the existing Lawford substation;
  - > This led to the identification of viable Substation Search Areas that would allow for coordination with North Falls;
  - > The onshore ECC route was refined post-PEIR, narrowing the cable corridor width and committing to a number of trenchless crossings to reduce impacts;
  - The onshore ECC will be approximately 60 m wide for open trenching and up to 90 m wide for trenchless techniques, with wider widths required at complex crossings; and
  - > Hedgerow crossings will minimise removal, with expected widths of approximately 30 m for open trench crossings and 10 m for trenchless crossings.
- 2.3.3 Further details are available in Section 2.4 of the Applicant's Summaries of Oral Submissions [REP1-059] and the Onshore Project Description [AS-041].





#### **ONSHORE SUBSTATION**

- 2.3.4 The location and orientation of the OnSS has been influenced by the need to be close to the EACN Grid Connection Point and coordination with North Falls leading to a colocated substation zone for the two offshore windfarm projects. The OnSS Order Limits, including refinements made throughout the consenting phases are presented in Figure 2.5.
- 2.3.5 Key points from the site selection process to identify the Onshore Substation (OnSS) location include:
  - Acceptance of a Connection Offer for an East Anglia Coastal 400 kV substation, now referred to as the National Grid Norwich to Tilbury Reinforcement Project East Anglia Connection Node (EACN);
  - > Identification of viable Substation Search Areas within approximately 3 km (maximum 5 km) from the EACN grid connection point;
  - Public consultation leading to the selection of a single substation location north of Ardleigh Road, adjacent to the proposed EACN;
  - Coordination between the Applicant and North Falls to reduce overall land take and impact on the surrounding area;
  - Substation type is either Air Insulated Switchgear (AIS) or Gas Insulated Switchgear (GIS). The Applicant was asked by the ExA at ExQ2 about the use of SF6 gas in GIS substations, and provided a response in 10.28 Applicant's Responses to ExQ2 [REP4-039] CC.2.01, noting the transition to SF6 free Gas Insulated Switchgear (GIS) substations is in progress and the Project is actively engaging with the market and tracking the technological developments with the various suppliers; and
  - > Refinement of the OnSS landscape screening design in coordination with North Falls and in consultation with Interested Parties (described further in Section 3.13).



#### SUMMARY OF THE ONSHORE ENVELOPE

- 2.3.6 The Rochdale envelope approach allows flexibility in the exact locations of infrastructure, technologies, and construction methods to accommodate future technological changes. This flexibility is supported by NPS EN-1, NPS EN-3, and PINS Advice Note Nine. The onshore components of VE are detailed in the Onshore Project Description [AS-041].
- 2.3.7 Scenario 1, which considers the construction of VE and additional sets of ducts for North Falls (see Sections 1.5 and 2.5 for further details), is considered to be the overall Maximum Design Scenario for the project. This includes a shared onshore ECC from Landfall to a co-located OnSS site for both projects. This included assessing a 60 m working width for trenched sections to accommodate four sets of ducts within a 90 m corridor. This would allow for micro-siting around constraints, such as trees and buried archaeology during detailed design.
- 2.3.8 Further information on the assessment approach, including the approach to Cumulative Effects Assessment is included within ES Chapter on EIA Methodology [APP-063]. Each ES Chapter identifies the worst-case scenario for that specific topic.
- 2.3.9 The final design of the OnSS is not confirmed as flexibility is required for detailed design, including a decision on substation type either AIS or GIS. However, the final design will be within the maximum parameters assessed. These were the larger footprint of an AIS design and the greater building height of a GIS design for the Maximum Design Scenario and has been used in all assessments where relevant. The choice of AIS or GIS will be part of the detailed design process, and a decision will be made post-consent, prior to commencement of construction.
- 2.3.10 For the purposes of the Landscape and Visual Impact Assessment (LVIA) and in accordance with National Grid's Guidelines on Substation Siting and Design ('The Horlock Rules'), the OnSS location is sited away from built up areas, helping to minimise impacts on visual and noise receptors, avoidance of landscape designations including the Dedham Vale Area of Outstanding National Beauty (AONB), ensures the majority of the existing landscape features such as trees and hedgerows are protected and takes advantage of screening provided by existing trees and hedgerows along Grange Road. The layout around the OnSS has included sufficient space for the screening of views through planting (described further in Section 3.13), as required by the Horlock Rules.
- 2.3.11 The project has outlined the Onshore Substation Design Principles [APP-234] which will inform the detailed design process, and will include engagement with key stakeholders on the mitigation planting and species selection, and colour palettes to be applied in respect of specific structural elements..



# 2.4 KEY PROJECT PARAMETERS

 Table 2.1
 Key Project Design Parameters

Project Area	Constituent Part or Element	Design Parameters
	Generating Capacity	Approximately 1 Gigawatt (GW)
Overall	Earliest Start of Main Construction year (estimated)	2027
	Earliest Start of Operation year (estimated)	2030
	Northern Array Area	67 km <sup>2</sup>
	Southern Array Area	61 km <sup>2</sup>
	Closest distance to shore	37 km to the Northern Array boundary
	Number of WTGs	Maximum of 79 (smallest possible WTG)
Array	WTG Blade Tip Height above LAT	Maximum 370 m (largest possible WTG)
Areas	WTG Rotor Diameter	Maximum 360 m (largest possible WTG)
	Number of OSPs	Up to 2 OSPs
	Inter Array Cables Total Length	Maximum 200 km
	Inter Array Cables Depth of Burial	Between a minimum of 0 m (with cable protection) and a maximum of 3.5 m depth below sea bed surface
Offshore	Number of Export Cable Circuits	2 Export Cable Circuits
ECC	Offshore ECC Total Length	196 km
	Number of Cable Circuits	2 Export Cable Circuits
Landfall	Number of Cable Ducts/ Horizontal Directional Drilling (HDD) bores	3 (one per circuit plus one contingency)
	Indicative Subtidal HDD length	1,100 m



Project Area	Constituent Part or Element	Design Parameters
	Indicative Intertidal HDD length	570 m
	Number of Export Cable Circuits	2 Export Cable Circuits (with ducting for additional 2 circuits for North Falls Offshore Wind Farm Project)
Onshore	Onshore ECC Total Length	Up to 24.5 km
ECC	Number of Ducts Per Circuit	Maximum of 7 cable ducts per circuit
	Width of Open Trenched Sections	Up to 60 m, including 10 m haul road swathe
	Width of complex trenchless crossings	Up to 140 m (90 m for less complex crossings)
OnSS	Substation Type	Air Insulated Switchgear (AIS) or Gas Insulated Switchgear (GIS)
	Maximum Building Height	15 m above existing ground level
	Lightening Rod Height (highest point overall)	18 m above existing ground level
	Maximum OnSS Footprint	58,800 m <sup>2</sup> (substation switchgear only)
	National Grid EACN Connection	2 underground circuits between VE OnSS and National Grid EACN



#### 2.5 SUBSTATIONS DESIGN COORDINATION WITH NORTH FALLS

- 2.5.1 Scenario 1, which considers the construction of VE and North Falls in parallel (see Section 1.5 and Onshore Project Description [AS-041] for further details), is considered to be the overall MDS for the project. Further information on the assessment approach, including the approach to Cumulative Effects Assessment is included within ES Chapter on EIA Methodology [APP-063]. Each ES Chapter identifies the worst-case scenario for that topic.
- 2.5.2 The onshore ECC and substation arrangement have been designed in co-ordination with the adjacent North Falls project, and the onshore cable routes of the two projects will run immediately adjacent. Moreover, the substations have been co-located to the west of Little Bromley. Due to electrical requirements, separate cables and transformers are required for each project. Therefore, while the projects have considered physical sharing of assets it is not considered to yield significant benefits. However, the chosen approach does allow for opportunities to minimise environmental and community disruption through a coordinated delivery. Section 1.5 of this Closing Statement outlines how VE has coordinated development with North Falls, and how the dDCOs for each project allow for different build options.

#### 2.6 CHANGE REQUEST

- 2.6.1 The DCO Application for VE was accepted on 22 April 2024. Subsequent to this, the Applicant continued to engage with Interested Parties to address concerns before the examination began. This engagement led to the Applicant seeking minor changes at Pre-Examination Deadline D [PD4-009], which did not materially alter the project, but did aim to improve project coordination, minimise environmental impacts, and address landowner concerns.
- 2.6.2 The proposed changes have been assessed for environmental impacts, and the conclusions of the ES remain unchanged, though minor document amendments were required, including to the dDCO.
- 2.6.3 A summary of the changes proposed and accepted by the ExA:
  - > Reduction in Offshore Array Boundary: Minor changes to remove overlap with the Galloper Offshore Wind Farm, reducing the Order Limits by 0.16%;
  - Updates by the Ordnance Survey Mean High Water Springs (MHWS) mapping changed the extent of certain works, requiring update to areas subject to compulsory acquisition;
  - Removal of small land areas erroneously included in the Order Limits due to drawing errors;
  - Widening and lengthening of off-route haul roads to provide flexibility and minimise impacts on farming and potential future developments, requiring update to areas subject to compulsory acquisition;
  - > Minor additions and removals of land at Bentley Road to align with Ordnance Survey mapping, requiring update to areas subject to compulsory acquisition;
  - New construction access for operational drainage connection construction, requiring revisions to traffic and transport documents and update to areas subject to compulsory acquisition;



- Extension of Bentley Road temporary speed restriction, including 40 mph speed limits on Golden Lane, Thorpe Road, and Clacton Road, requiring update to traffic and transport documents:
- Addition of powers to impact trees with TPOs to the dDCO, requiring update to the schedule to list affected trees;
- Amending the extent of the LBBG Compensation Area to include only necessary land, refining the area to approximately 6 ha, requiring update to areas subject to compulsory acquisition;
- Amending operational accesses connecting to public highways due to removing and replacing certain access routes based on landowner discussions and to ensure access reaches the highway boundary, requiring update to areas subject to compulsory acquisition; and
- Limiting the Project Parameters / Maximum Design Scenarios to reduce potential impacts on receptors: Reducing the maximum height of WTGs from 399m to 370m above LAT and removing Gravity Base Structures as a foundation option.
- 2.6.4 The Applicant, following feedback from Interested Parties, also made significant changes during the examination to its control documents which are discussed under the various topics headings in section 3. In particular, the landscape proposals and associated commitments around the OnSS were revised to take on board comments, details of these changes are set out in sections 3.13 and 3.14. The revised landscape proposals, and associated commitments are set out in the Outline Landscape and Ecological Management Plan (OLEMP) [latest Revision F submitted at Deadline 8a]

# 2.7 LESSER BLACK BACKED GULL COMPENSATORY AREA

- 2.7.1 The Applicant's Report to Inform Appropriate Assessment (RIAA) evaluates potential effects on European and Ramsar sites, concluding no Adverse Effect on Integrity (AEoI) during VE's construction, operation, and decommissioning, except for collision risks at Alde-Ore Estuary SPA and Ramsar sites during the O&M phase. Projects with AEoI can proceed if justified by imperative reasons of overriding public interest (IROPI), which the Applicant argues based on VE's social and economic benefits aligning with UK government policy.
- 2.7.2 NE is supportive of proposed compensation measures for potential harm to LBBG, which include predator control and habitat restoration at Orford Ness within the Alde-Ore Estuary SPA and predator control and habitat management at Outer Trial Bank in The Wash. The Orford Ness site is included within the DCO Order Limits, ensuring delivery security through proactive initiative, an approach that is supported by stakeholders. Negotiations to secure the land area required though voluntary agreement are at an advanced stage. The Outer Trial Bank measure would be managed through agreements with The Crown Estate, who are supportive of the use of Outer Trial Bank for this compensation measure.
- 2.7.3 An LBBG Compensation Area EIA [REP4-013] has been produced for proposed predator exclusion fencing at Orford Ness and considers cumulative impacts with other developments. It is supported by various documents submitted as part of the DCO Application, covering flood risk, landscape and visual impact, ecological impact, habitats regulation, implementation and monitoring plans, site selection and suitability, offshore ornithology, and specific surveys at Orford Ness.



- 2.7.4 Following site surveys in December 2023 and consultations with landowners and stakeholders, site selection at Orford Ness was narrowed down from four potential sites to a prime 6-hectare site. The LBBG Compensatory Area Order Limits, including refinements made throughout the consenting phases, are presented in Figure 2.4. The final site was chosen for its accessibility, suitable habitat, and connectivity to roof-nesting LBBG and the existing Norfolk Projects compensation site. The selected area meets the following criteria:
  - > Connectivity to existing LBBG colonies at Orford Ness and Havergate Island;
  - > Suitable habitats requiring minimal to moderate management; and
  - Sites with known predation or disturbance issues that would benefit from mitigation measures.
- 2.7.5 Detailed information on the consultation process and site selection is provided in the LBBG Compensation Evidence, Site Selection and Roadmap [REP5-015].
- 2.7.6 Subsequent site surveys have been undertaken within the Examination period at Orford Ness and future pre-construction surveys will be conducted to close remaining gaps. Post-consent, the Applicant will produce a final LBBG Implementation and Monitoring Plan (LIMP) based on the Outline LIMP [REP5-021] submitted with the DCO application.





# 3. KEY ISSUE SPECIFIC TOPICS

#### 3.1 OVERVIEW

3.1.1 This section provides a summary of the Applicant's position at the conclusion of Examination concerning the ExA's Initial Assessment of Principal Issues (the 'Principal Issues'), as outlined in the ExA's Rule 6 letter dated 20 August 2024 [PD-007], along with other key topics explored throughout the Examination period. The following subsections detail the position taken in the application documents, any developments during the Examination, and, where applicable, highlight agreements reached with relevant statutory bodies and Interested Parties, as well as matters where residual disagreements remain.

## 3.2 OFFSHORE ORNITHOLOGY

#### **SUMMARY**

- 3.2.0 The ES Chapter on Offshore Ornithology [APP-073] concludes no significant effect on offshore ornithology due to the project alone or cumulatively. The Applicant is confident that the assessment set out in the ES is a realistic worst case and that the conclusions are accordingly robust and suitably precautionary.
- 3.2.1 All relevant policy and guidance has been complied with, including NPS EN-1 and EN-3, as evidenced in the policy and legislation section of the ES Chapter Offshore Ornithology [APP-073].

## **RESIDUAL MATTERS**

# **ROYAL SOCIETY FOR THE PROTECTION OF BIRDS**

3.2.2 The Applicant is aware that the RSPB has submitted comments objecting to some methodological approaches but these mainly relating to compensation. The Applicant however notes that these are industry wide issues where the RSPB has routinely made substantively similar objections to offshore wind applications. The Applicant remains satisfied that the methodology used is reliable and appropriate and is supported in this by the NE RR [RR-081].

# **APPLICANT'S POSITION**

3.2.3 Natural England and the Applicant have full agreement with all assessment methodologies and results relating to the EIA. All alone impacts are not significant however there are some disagreements with the conclusions of the cumulative assessment. There is broad agreement with the mitigation measures set out in the Working in Proximity to Wildlife in the Marine Environment [APP-250] to ensure there is no AEoI for red-throated diver from disturbance at the OTE SPA during cable laying activities in the ECC. In summary, the Applicant has demonstrated that VE has been designed to avoid significant impact on ornithological interests in compliance with NPS EN-1 and NPS EN-3 limiting the impacts on ornithological features to an acceptable level.



# 3.3 MIGRATORY BATS

#### **SUMMARY**

- 3.3.1 A Relevant Representation [RR-035] was provided by Naturschutzbund Deutschland (NABU) [RR-035] in relation to migratory bats. NABU advised that the area within which VE is situated is used by species such as *Pipistrellus nathusii*, *Pipistrellus pipistrellus*, *Nyctalus noctula*, *Nyctalus leisleri* and *Vespertilio murinus*. In their RR NABU also advised that there is a high collision risk of bats at offshore wind turbines, and that curtailment is the only solution to mitigate the impacts on bats.
- 3.3.2 The Applicant's Responses to Relevant Representations [REP1-049] acknowledges that there may be migratory bats present but highlights that the lack of data for offshore bat ecology in the North Sea is limited, and that the data cited in NABU's response does not support the conclusion that the area of VE is within a high concentration area for migratory bats. One such area identified for *Nathusius pipistrelle* lies to the north of the proposed development, and the area in which VE is sited is identified as a much lower area of probability of presence of bat species.
- 3.3.3 The Applicant was advised by NE at the PEIR stage to undertake surveys for bats; these were undertaken for the onshore activities and were submitted to support the ES (see [APP-138], [APP-139], [APP-140] and [APP-141]).
- 3.3.4 The Applicant and NE are in agreement that the significance of the route for migratory bats cannot be determined at this time. NE also acknowledged in the Appendix M4 Response to ExQ2 [REP4-063] that whilst curtailment may reduce bat collision fatalities, curtailment of blade rotation is not a feasible mitigation option as the presence of the existing OWFs at Greater Gabbard and Galloper means it is unlikely to be effective.
- 3.3.5 The ExA issued a Rule 17 letter [PD-016] on 16 December 2024 requesting further information from NE on effectiveness of curtailment and the Applicant on potential survey work for migratory bats. The Applicant's Comments on NE's Deadline 4 Submissions [REP5-074] confirm that there is not considered to be a likely significant effect on migratory bats from the project. In addition, the level of active offshore wind farms currently operating within the Southern North Sea and the immediate area adjacent to VE would likely render mitigation, such as curtailment, ineffective.

# **RESIDUAL MATTERS**

# **NATURAL ENGLAND**

3.3.6 The Applicant's position on this matter is set out in the Applicant's Comments on NE's Deadline 4 Submissions [REP5-074]. The presence and close proximity of the other OWFs at Galloper and Greater Gabbard, and the lack of current population and baseline data, means that determining project level effects (i.e. attributable to VE or any single project) would be extremely difficult, irrespective of any site-specific monitoring being carried out.



- 3.3.7 Nevertheless, the Applicant recognises that there is currently a lack of baseline data associated with migratory bats, therefore, to aid future decision making and to increase the evidence base only, the Applicant is willing to carry out appropriate monitoring which provides useful and relevant additional data to inform the baseline understanding. This could involve deploying acoustic detectors, either offshore and onshore, during the known migration periods for bats species. Alternatively, the Applicant could support any ongoing or new research projects into migratory bats and their interaction with offshore wind farms. The Applicant is engaging with NE to seek to agree the approach to monitoring and anticipates that this engagement will continue post-Examination. Overall, the Applicant believes that contributing to increasing the limited evidence base is the best course of action, considering the very limited scale of any potential effect, and also the likely ineffectiveness of proposed mitigation (curtailment) in this context.
- 3.3.8 The Applicant has updated the Offshore In-Principle Monitoring Plan (IPMP) [REP7-060] and the Deemed Marine Licence to secure the monitoring, and NE has welcomed this commitment from the Applicant in Appendix N8 [REP8-054]. The Applicant has updated the Offshore In-Principle Monitoring Plan (IPMP) [REP7-060] and the Deemed Marine Licence to secure the monitoring, and NE has welcomed this commitment from the Applicant in Appendix N8 [REP8-054]. However, NE highlight that not all potential monitoring options are included within the Offshore IPMP and suggest that existing/ proposed wind farms in the area should be considered in the monitoring proposal.

# SUFFOLK COUNTY COUNCIL

3.3.9 The Applicant and Suffolk County Council remain in disagreement regarding the potential impacts on migratory bats. The Applicant's position is that the SoS will need to demonstrate that any decision made is compliant with the UK's treaty obligations in regard to both Eurobats and the Aarhus convention on migratory species. This is a matter on which NE will need to advise the ExA and SoS, not a matter for Suffolk County Council. Suffolk County Council have indicated that they accept NE guidance on this matter.

# **APPLICANT'S POSITION**

3.3.10 The Applicant has engaged with NE regarding migratory bats following concerns raised by NABU. While acknowledging their presence, the Applicant and NE highlights limited offshore bat ecology data and the Applicant disputes claims that the site is a high-density area for migratory bats. Given the existing offshore wind farms, the Applicant and NE agree curtailment would be ineffective. However, to enhance the evidence base, the Applicant commits to monitoring efforts, including acoustic detectors and research support. Ongoing discussions with NE on the effort required and updates to the Offshore In-Principle Monitoring Plan to secure this commitment. While the engagement will continue post-Examination, the Applicant is confident an agreement will be made. In summary the Applicant has demonstrated that mitigation is necessary, or feasible, for the development and that further monitoring will aid future decision making.



#### 3.4 MARINE MAMMALS

- 3.4.1 The ES Chapter on Marine Mammal Ecology [APP-076] assesses the potential effects of construction, O&M and decommissioning associated with VE on marine mammal ecology. All relevant policy and guidance has been complied with, including NPS EN-1 and EN-3, as evidenced in the policy and legislation section of the ES Chapter on Marine Mammal Ecology.
- 3.4.2 The ES concludes that there will be no significant effects on marine mammals. Additionally, the non-significant effects are lowered by the application of mitigation measures, primarily the plans secured through the conditions of the dMLs. The aerial site-specific survey methodology followed the industry-standard and processing methods were agreed with NE during pre-application consultation.
- 3.4.3 During Examination, NE requested use of the interim Population Consequence of Disturbance (iPCoD) modelling, which was not requested during the Project's consultations and has only recently been requested by NE for the first time on the Rampion 2 Offshore Wind Farm, the Examination for which has recently closed. The Applicant has carried out the requested modelling for the Project alone and is satisfied that the outputs support the conclusions for the disturbance from piling assessment reached in the ES. The iPCoD modelling outputs were submitted at Deadline 1 and this matter is resolved. The Applicant submitted iPCoD modelling for the project alone at Deadline 1, NE confirmed it did not have any objections to this approach at Deadline 4 [REP4-062]. This matter was reopened by NE at Deadline 7. leaving the Applicant with only two weeks to respond before the close of Examination. This timeframe was insufficient for the Applicant to complete the cumulative iPCoD modelling (and the Applicant at Deadline 1 concluded that it was not possible to run a cumulative model). The Applicant does not consider the cumulative iPCoD modelling to be necessary as they have responded to NE's concerns on the lack of variability of the outputs in the Applicant's response to NE's Deadline 7 comments [REP8-036].
- 3.4.4 NE [REP6-066] and the MMO [REP7-097] highlighted that the Defra Marine Noise Package was published in January 2025 which included a policy paper on reducing marine noise (Defra, 2025) and unexploded ordnance (UXO) Joint Position Statement (UK Government, 2025). The Applicant has updated the Outline Marine Mammal Mitigation Protocol Piling and Outline Marine Mammal Mitigation Protocol UXO at Deadline 7 to reflect changes in policy and a commitment to demonstrating best endeavours to deliver noise reductions for pile driving activity.
- 3.4.5 The MMO also raised a number of points in relation to the underwater noise modelling for VE associated with marine mammals, which the Applicant sought to address in the Applicant's Responses to Relevant Representations [REP1-049]. The Applicant also submitted an updated Underwater Noise Technical Report [REP2-018] at Deadline 2 to address the MMO's comments. The MMO have confirmed they are in agreement with regard to these matters.



# **NATURAL ENGLAND**

# SOUTHERN NORTH SEA SAC – HARBOUR PORPOISE UNDERWATER NOISE IMPACTS

- 3.4.6 The Applicant and NE remain in disagreement regarding underwater noise impacts and the feasibility of mitigation secured in the Outline Southern North Sea (SNS) SAC Site Integrity Plan [REP6-022]. NE has sought that the Applicant commit to noise abatement measures to be secured in the DCO rather than later through post-consent approvals, on the basis that a number of projects are coming forward in the North Sea.
- 3.4.7 The Applicant objects to this as prematurely prejudging, not just the need for abatement, but prematurely seeking mitigation in the form of noise abatement systems (NAS). The Applicant notes that securing noise abatement solutions at the application stage is inconsistent with the mitigation hierarchy as it does not allow for avoidance and reduction of impacts before seeking to apply mitigation. It also notes that not every measure is effective on every site, and measures should be developed having regard to the final design, foundation type, and installation method technology available at the time, not prejudged as a 'standard' approach at this stage.
- 3.4.8 The Applicant would like to highlight that the Outline SIP [REP6-022] complies with current Defra policy and JNCC guidance, and that the Applicant is doing everything a developer can do at this stage based on that guidance. In the final SIP at the postconsent stage the Applicant will demonstrate that they have utilised best endeavours to deliver noise reduction for piling. Additionally, the Project is located within the winter area of the SNS SAC so the spatial and temporal restrictions on the SAC only apply during the winter season (October – March) and as such the Project is able to undertake noisy activities unrestricted throughout the summer season (April -September). The maximum contribution to the spatial 20% threshold in the winter season for the Project undertaking a single unmitigated piling event with a 26 km Effective Deterrent Radius (EDR) is 16.7%, therefore there is available headroom for additional activities to take place on the same day. The maximum contribution to the temporal 10% threshold for unmitigated piling is 7.4%, therefore there is available headroom for additional activities to take place in the same season. Therefore, the Project alone impact will not exceed the thresholds and the Applicant maintains the conclusion of no AEoI.
- 3.4.9 The issues that NE are highlighting stem from the in-combination impacts when the Project is considered alongside other projects undertaking noisy activities in the same winter season. This is an ongoing industry issue affecting multiple projects that are located within the SNS SAC. The Applicant is a member of the Southern North Sea Offshore Wind Farm (SNSOWF) developer group that involves offshore wind farm developers working together and sharing information so the post-consent documentation for SNS SAC that the MMO receives contains all the same information across the projects. The Applicant notes that the SNSOWF group actively works together to share live information to avoid exceedance of spatial or temporal thresholds, with this coordination of activities being sufficient to manage activities in recent years, without the need for additional mitigation.



3.4.10 The Applicant has secured broad agreement on the assessments of impacts to marine mammals. The ES and HRA concluded that, with appropriate mitigation, the impacts to marine mammals from the project would be not significant (in EIA terms) and no AEoI was concluded. The Applicant has committed to mitigation that is in line with the latest policy developments on piling and UXO clearance (Defra, 2025; UK Government, 2025), and has secured mitigation through industry-standard approaches of an Outline SIP and Outline MMMPs. Residual matters relate to the mitigation of underwater noise impacts to the SNS SAC, but in the Applicant's view these do not affect the conclusion of no AEoI which can be maintained without further mitigation commitments due to the established SIP process. In summary, the Applicant has demonstrated compliance with NPS EN-1 and EN-3, with regards to impact assessment content, adherence to policy and guidance, and implementation of suitable noise mitigation measures.

# 3.5 FISH AND SHELLFISH ECOLOGY

- 3.5.1 Volume 6, Part 2, Chapter 6: Fish and Shellfish Ecology [APP-075] assesses the potential effects of VE construction, O&M and decommissioning on fish and shellfish receptors. All relevant policy and guidance has been complied with, including NPS EN-1 and EN-3, as evidenced in the policy and legislation section of the ES Chapter Fish and Shellfish Ecology. This Chapter sets out that no significant adverse residual effects are expected following the application of mitigation. The Applicant is confident that the assessment set out in the ES is a realistic worst case and that the conclusions are accordingly robust and suitably precautionary. The baseline (as detailed in the ES in the Fish and Shellfish Ecology Technical Baseline Report [APP-121]) was deemed sufficient for the purpose of the EIA by the MMO, NE and Cefas.
- 3.5.2 The assessment of fish and shellfish receptors identified two potential significant effects on spawning Downs stock herring, for which mitigation has been proposed. These are the potential for significant effects from underwater noise and sediment deposition during construction. The Applicant has therefore proposed a seasonal piling restriction during the peak herring spawning period (25<sup>th</sup> November to 3<sup>rd</sup> January) to mitigate 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 [REP6-013] which was updated at Deadline 6 to address queries from the MMO.
- 3.5.3 To mitigate against the loss of suitable herring spawning habitat characteristics from sediment deposition, the Applicant has proposed a sediment disposal restriction whereby dredge material from the northern array area will not be disposed of within the southern array area where suitable substrates for herring spawning are located. This is secured in the dML within the dDCO.



#### MARINE MANAGEMENT ORGANISATION

- 3.5.4 The Applicant and the MMO remain in disagreement regarding the appropriateness of mitigation measures for seasonal piling and sediment disposal restrictions. The MMO agree with the measures proposed but disagree with the dates proposed (25<sup>th</sup> November to 3<sup>rd</sup> January) for the piling restriction, and so the Herring Seasonal Restriction Note [REP6-013] considers two scenarios. The Applicant has committed to a seasonal restriction of 39 days from 25<sup>th</sup> November to 3<sup>rd</sup> January, which corresponds to the earliest start date and latest end date from the spawning scenarios identified in Table 2-6 of the Herring Seasonal Restriction Note [REP6-013].
- 3.5.5 The MMO has provided a set of alternative parameters (Table 2-7 of the Herring Seasonal Restriction Note [REP6-013]) which identify a seasonal piling restriction period of 2<sup>nd</sup> November to 17<sup>th</sup> December. The Applicant's position is that the MMO's approach is overly cautious and not supported by literature, as spawning of the Downs stock in the southern North Sea occurs later in the season due to migration from the English Channel.
- 3.5.6 The MMO was also of the view that the sediment disposal restriction alone is not sufficient in isolation to reduce other impacts to herring associated with increased SSC and subsequently requested a temporal restriction on bed preparation and cable laying works in the southern array area. The Applicant's position is that the proposed sediment disposal restriction of returning sediment collected during cable installation and bed preparation works to broadly the same location from where it originated is sufficient mitigation, due to the significantly lower densities of herring larvae present in the Array Areas, as evidenced by 10 full years of IHLS data (low densities of herring are shown relative to the Proposed Development in Figures 2-1 to 2-4 of the Herring Seasonal Restriction Note [REP6-013]). Further to this, the Applicant has removed the use of GBS foundations from the MDS, which significantly reduces the area of seabed preparation required.

# NATIONAL FEDERATION OF FISHERMEN'S ORGANISATION (NFFO)

3.5.7 The Applicant and the NFFO remain in disagreement regarding the sufficiency of data collected to characterise the fish and shellfish ecological baseline, and subsequently the conclusions of the assessment for fish and shellfish ecology. The Applicant notes that the fish and shellfish baseline has been deemed sufficient for the purpose of EIA by the MMO, NE and Cefas.



3.5.8 The Applicant has secured broad agreement on the assessments of impacts to fish and shellfish receptors. The EIA concluded, that with appropriate mitigation, the impacts to fish and shellfish from the project would be not significant (in EIA terms). The Applicant has committed to several mitigation measures, including a seasonal piling restriction during the peak herring spawning period to mitigate against potential impacts from underwater noise, and a sediment disposal restriction to mitigate against the loss of suitable herring spawning habitat characteristics. Residual matters relate to the definition of the peak herring spawning period, within which mitigation measures for spawning herring will be applied. In summary, the Applicant has demonstrated compliance with all relevant policy and guidance, including NPS EN-1 and EN-3, regarding impact assessment content, adherence to policy and guidance, and implementation of suitable mitigation measures.

# 3.6 BENTHIC ECOLOGY

- 3.6.1 The ES Chapter on Benthic and Intertidal Ecology [APP-074] concludes that VE will not result in any significant adverse residual effects on benthic and intertidal ecology following the application of mitigation in the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [REP5-027].
- 3.6.2 All relevant policy and guidance has been complied with, including NPS EN-1 and EN-3, as evidenced in the policy and legislation section of the ES Chapter on Benthic and Intertidal Ecology [APP-074].
- 3.6.3 The MMO queried the inclusion of GBS foundations as the engineering solution in the assessments, rather than the piled foundations used at Galloper. The Applicant acknowledged this and removed GBS options from the dDCO.
- 3.6.4 The Applicant also sought to agree an acceptable cable depth with the MMO as stated within Table 1.23 of the ES Chapter on the Offshore Project Description [APP-069] the minimum burial depth is stated as 0 m. However, the cables will be buried below the seabed wherever possible, but where burial cannot be applied, or where the minimum cable burial depth cannot be achieved, it may be necessary to employ alternative methods such as rock placement or concrete mattresses. Should cable protection ultimately be required within the M&LS SAC, the Applicant has committed to not using rock placement and will instead use a removable mattress or another form of protection that is equivalent or less in terms of footprint or impact, that will be removed at the end of the project as noted in the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [REP5-027].
- 3.6.5 As part of the engagement between NE and the Applicant, NE requested some additional numerical sediment plume modelling to supplement the existing analysis. The Applicant undertook further discussion with NE on that work and understood that the modelling methodology fully addressed NE's query regarding Suspended Sediment Concentrations (SSC) and resulting deposition of sediments, and submitted this additional modelling at Deadline 1 (see Marine Geology, Oceanography and Physical Processes Sediment Plume Modelling [REP1-057]). The Applicant is therefore of the position that the assumptions underpinning the assessment of impacts on the ES with regard to SSC and deposition are correct and have provided further justification to NE to confirm this.



# **SECTION 41 NERC ACT HABITATS**

- 3.6.6 NE also advise in RR Appendix E Benthic and Intertidal Ecology [PD2-007] that mitigation measures fail to consider the potential presence of Section 41 of Natural Environment and Rural Communities (NERC) Act 2006 Habitats. The Main Array and Export Cable Route Environmental Features Report [APP-102] and the Export Cable Route and Intertidal Benthic Ecology Monitoring Report [APP-120] identify the biotope 'A4.231 Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay', which is a priority habitat under Section 41 of the NERC Act 2006. Although Sabellaria spinulosa is present in a number of grab samples, no areas of *S. spinulosa* reef (also a Section 41 habitat) have been identified in any of the pre-consent surveys.
- 3.6.7 NE advised that the Benthic Mitigation and Offshore In-Principle Monitoring Plan would benefit from considering the importance and rarity of peat and clay exposures and other Section 41 habitats where they may be present. The Applicant has confirmed that should any pre-construction surveys identify that *S. spinulosa* has developed since the baseline surveys, that these areas would be avoided through micro-siting wherever possible. This also includes if additional areas of peat and clay exposures are identified.
- 3.6.8 Where peat and clay exposures have already been identified from the baseline surveys, within one section of the Offshore ECC, the Applicant has committed to not dispose of any dredge material within this area, as referenced in the Outline Sediment Disposal Management Plan [REP6-042].

# **RESIDUAL MATTERS**

# MARINE MANAGEMENT ORGANISATION

3.6.9 The Applicant remains in disagreement with the MMO regarding their request for the monitoring of paint flakes as part of pre and post-construction monitoring. The Applicant understands the validity of this request as a general area of interest, but as set out in the Statement of Common Ground with the MMO, is of the view that the scale of any materials being released from VE will be extremely small and is unlikely to show any clear project-specific trend of any impacts associated with the release of paint flakes compared to background levels that can be associated with the Proposed Development, particularly given the adjacent wind farm developments already in existence. Such research would best be undertaken at an industry level and it is not justified to require an individual project with no identified significant effects to undertake this monitoring.

# **NATURAL ENGLAND**

3.6.10 The Applicant remains in disagreement with NE regarding the AEoI for Margate and Long Sands SAC. However, should compensation ultimately be required, the Applicant has provided a number of compensation options, the preferred of which (by both the Applicant and NE) is the strategic compensation option [APP-047].



- 3.6.11 The Applicant identified through pre-application surveys limited evidence of protected benthic habitats, and concluded that there would be no significant impacts in EIA terms. Commitments have been made to avoid where possible NERC Section 41 habitats that may be identified during pre-construction surveys, and to avoid the deposition of dredge material in such areas, including an identified area of Piddocks in the ECC.
- 3.6.12 A number of mitigation measures to reduce impacts on the M&LS SAC have been made, both in terms of construction methodology and the efforts to avoid or minimise cable protection. Where cable protection is required within the SAC removal protection will be used and fully removed upon decommissioning. The Applicant's position is that the given these mitigation measures and the very limited area of potential cable protection in the SAC, it is possible to conclude no AEoI. Nonetheless there is agreement that should compensation be required, the strategic measure of SAC extension is both suitable and preferred.
- 3.6.13 As such the ExA and SoS can have comfort that benthic habitats have been appropriately assessed and suitable mitigation secured to ensure no significant effects. The Applicant is compliant with NPS EN-3 in these consideration of these habitats.

# 3.7 MARINE PHYSICAL PROCESSES

#### **SUMMARY**

- 3.7.1 Impacts of VE on Physical Processes are assessed in 6.2.2 Marine Geology, Oceanography and Physical Processes [REP-071]. The Applicant reported no significant adverse residual effects throughout the assessment.
- 3.7.2 As described in 6.2.2 Marine Geology, Oceanography and Physical Processes [REP-071], predictions of change to physical processes (including all of those listed in Paragraph 2.8.111 in NPS EN-3) which could arise from construction, O&M and decommissioning of VE are presented in the ES assessment.
- 3.7.3 Queries during the Examination arose from NE in relation to concern that the installation of cable protection measures and/ or sandwave levelling could interrupt sediment transport to the bank systems within the M&LS SAC, causing morphological impact [PD2-004].

# **RESIDUAL MATTERS**

# MARINE MANAGEMENT ORGANISATION

3.7.4 In relation to potential disruption of sediment transport processes at MLS SAC due to the placement of cable protection - NE consider there to be insufficient information to assess the magnitude and significance of potential impacts to sediment transport processes within MLS SAC. NE requested further evidence is needed to support the conclusion that only very minor changes are expected to the sediment transport regime due to the presence of cable protection measures across MLS SAC.



- 3.7.5 The Applicant confirmed its conclusion that only very minor changes to the sediment transport regime are expected, and only in a very localised area, due to the presence of MDS cable protection measures at the northern tip of MLS SAC. The Applicant concludes that no measurable change will occur to the magnitude or pattern of natural processes and bedforms that are active within the MLS SAC. On this basis, The Applicants position is that it is not necessary (nor practicable) to assess the effect of an immeasurably small change on an energetic natural sediment transport regime, at more distant locations.
- 3.7.6 In relation to potential Construction and Operation and Maintenance Impacts to SPA/SAC supporting habitats, and priority habitats NE considers there to be incomplete consideration of potential impacts to seabed morphology and magnitude and significance of their effect. NE advise that uncertainty remains regarding the factors that influence the rate of sandwave/sandbank mobility and, in turn, cable burial success and scour at WTG foundations. This [uncertainty] includes the assessment of long-term morphological change of the seabed and larger sandbank features, assessment of static vs mobile seabed areas, identification of erosional and accretional areas, assessment of the impact of normal and extreme wave conditions on seabed level, and thickness of the mobile sediment layer. NE suggest that updated assessments will be needed pre-construction to inform detailed engineering and design and validate ES predictions and conclusions regarding impacts to seabed morphology, which should be carried out following completion of further geophysical and geotechnical surveys.
- 3.7.7 The Applicant confirmed that to inform the Environmental Impact Assessments, it has considered the presence and mobility of seabed sediments and bedforms over a range of sizes, e.g. ripples, sandwaves and sandbanks, and the processes controlling the historic, present day and future evolution of these features. The Applicant has already conducted geophysical surveys of mobile sediment thickness (presented in the Environmental Statement). The natural rate and timescale for migration or evolution of larger features is noted to be typically very slow, relative to the lifetime of the wind farm. The expected magnitude and extent of any effects from the MDS infrastructure is typically very small, relative to the scale of the natural processes controlling the behaviour of the natural environment at wider local to regional scale. As such, the processes and features present in the natural system are simply expected to continue to occur and evolve, not measurably affected by the construction or presence of the wind farm. Additional studies will be used to inform the final engineering design of the wind farm infrastructure, in conjunction with any relevant survey data. The assessments already consider the MDS and so any update based on a lesser design would result in a smaller potential impact conclusion.

3.7.8 The assessment of the impacts of VE on marine geology, oceanography, and physical processes concluded that there are no significant adverse residual effects. The Applicant's predictions indicate that changes to physical processes due to construction, operation, and decommissioning are minimal. The MMO raised concerns about potential disruptions to sediment transport, but the Applicant provided evidence that any changes would be very minor and localised. The natural processes and features of the seabed are expected to continue evolving without measurable impact from the project. Additional studies will be conducted post consent to inform the final design, ensuring minimal impact on the environment.



# 3.8 MARINE WATER AND SEDIMENT QUALITY

#### **SUMMARY**

- 3.8.1 Potential impacts of VE on Marine Water and Sediment Quality (MWSQ) are assessed in Section 3.9 of Volume 6, Part 2, Chapter 3: Marine Water and Sediment Quality [APP-072]. The Applicant reported no significant adverse residual effects throughout the assessment.
- 3.8.2 Queries during the Examination arose from the MMO in relation to dredge and disposal. The MMO considered the cable corridor to be inconsistently and insufficiently characterised [REP-070]. The MMO considered that further detail on the location of sediment samples within the intertidal area and conformation of why only three samples were tested for contaminants was required [REP-070]. Further detail on the survey strategy was provided by the Applicant in [PD4-006] and both the MMO and the Applicant agree these gaps have been filled.
- 3.8.3 The MMO requested for the Applicant to provide the raw data for sediment quality in an extractable format such as the MMO excel template as in the PDF format, the MMO is unable to fully interrogate the data without manually transcribing the data into the excel template [REP3-029]. The Applicant has since provided the MMO with the raw data in the MMO excel template.

#### **APPLICANT'S POSITION**

3.8.4 No significant issues have been raised in respect of marine water quality, and in line with the conclusion of the ES the Applicant has demonstrated compliance with the NPS EN-3 through the assessment of impacts and securing appropriate mitigation including provision of a Project Environment Management Plan and pre-construction site investigation.

# 3.9 COMMERCIAL FISHERIES

- 3.9.1 Potential impacts of VE on commercial fishing are assessed in Section 8.10 of Volume 6, Part 2, Chapter 8: Commercial Fisheries [APP-077]. All relevant policy and guidance has been complied with, including NPS EN-1 and EN-3, as evidenced in the policy and legislation section of the ES Chapter on Commercial Fisheries. The Applicant reported significant residual impacts for the UK potting, fixed and drift net, and hooked gear fleets during the construction phase.
- 3.9.2 Paragraph 8.10.3 of this chapter notes that during the construction of VE, commercial fisheries will be prevented from fishing where construction activities are taking place (i.e. where construction vessels and partially installed infrastructure are present, and within the footprint of Safety Zones of 500m diameter, which will be sought around significant infrastructure under construction). This is the case both within the array area and ECC. Outside of these areas, fishing will be able to continue. The commercial fisheries impact assessment reflects this assumption. The assessment does not identify significant residual impacts for any other fleets during the construction phase. These assumptions are considered to equally apply to the decommissioning phase.



- 3.9.3 Potential impacts of VE on commercial fishing during the operational phase are assessed in Section 8.11 of Volume 6, Part 2, Chapter 8: Commercial Fisheries [APP-077]. The assessment does not identify significant residual impacts for any fleets during the operational phase.
- 3.9.4 The National Federation of Fishermen's Organisation (NFFO) have agreed that sufficient data was collated to undertake the EIA for commercial fisheries, and they are content with the MDS used in the assessment. The NFFO are also in agreement regarding the embedded mitigation outlined in Section 8.9 of Volume 6, Part 2, Chapter 8: Commercial Fisheries [APP-077].
- 3.9.5 Mitigation for residual impacts during the construction phase of VE is secured through the Outline Fisheries Liaison and Co-Existence Plan (FLCP) [REP6-024], which has been updated during Examination to respond to engagement from parties including NFFO and Harwich Harbour Fishermen's Association (HHFA). This mitigation involves application of cooperation agreements and associated disruption payments for significantly impacted fleets.

# HARWICH HARBOUR FISHERMEN'S ASSOCIATION/ COMMERCIAL FISHERIES WORKING GROUP

- 3.9.6 The Applicant has engaged with the Commercial Fisheries Working Group (CFWG) of which Harwich Harbour Fishermen's Association (HFFA) is a member, throughout the course of Examination. HHFA to date has been the member of the CFWG that has formally engaged with the Examination process through submission of a Relevant Representation [RR-042] and by attendance at hearings. Whilst other CFWG members have not formally engaged, the Applicant has continued to meet and engage with all members of the CFWG. The key issues discussed with the CFWG through Examination are set out in the Statement of Common Ground submitted at Deadline 7.
- 3.9.7 Disagreement remains between the Applicant and the CFWG regarding impacts on mobile gear (i.e. inshore trawling) fishing fleets resulting from export cable installation. The Applicant notes that significant residual impacts are assessed for the UK potting, fixed and drift net, and hooked gear fishing fleets during the construction phase. Significant residual impacts are not assessed for any other fishing fleets. Disagreement relates to the anticipated extent and duration of fisheries closures during export cable installation, with the CWFG/HFFA disagreeing that the VE MDS realistically captured these.
- 3.9.8 The CWFG has also highlighted other concerns. These include the potential scale of cumulative loss of access to fishing groups resulting from VE and other projects being underestimated. The CFWG has also expressed concerns about potential impacts on fishing activity either as a result of seabed debris associated with cable installation or subsequent cable exposure. In this regard, the CFWG has indicated a desire to see pre- and post-construction monitoring undertaken to understand fishing activity and the ability to resume fishing safely in the offshore ECC.
- 3.9.9 These concerns are expressed by HFFA through their Relevant Representation (RR) [RR-042] and have been raised verbally by CFWG members during meetings with the Applicant.



- 3.9.10 The Applicant has prepared an Outline Fisheries Liaison and Co-existence Plan (FLCP) [REP6-024] which outlines the mitigation commitments and how the Applicant intends to achieve co-existence with commercial fisheries through liaison and engagement with the local fishing industry. This was updated during Examination to clarify that any affected fishing fleet subject to residual significant impacts during the construction phase may seek to engage with the Applicant to enter into an evidence-based cooperation agreement, in line with established FLOWW (Fishing Liaison with Offshore Wind and Wet Renewables Group) (2014) and FLOWW (2015) fisheries liaison guidance and redrafting efforts.
- 3.9.11 The Applicant stands by the assumptions in the MDS, but should any assumption alter as installation plans are developed and any significant impacts arise beyond those identified in the ES, these impacts will be managed by the commitments in the Outline FLCP [REP6-024]. The Applicant is also committed to continued exploration of further measures with fisheries stakeholders, which could include support to fisheries monitoring projects or to a fisheries community adaptation scheme, which could be relevant to all fleets active across the commercial fisheries study area.
- 3.9.12 The Outline FLCP was also updated during Examination [REP6-024] to confirm that whilst no commercial fisheries-specific monitoring is proposed by VE, vessel traffic monitoring by Automatic Identification System and post-construction monitoring of cable burial findings will be shared with the CFWG.
- 3.9.13 The Applicant notes that pre-construction plans and documents, including the detailed FLCP, will be developed post-consent. Further engagement with the CFWG is expected to inform the detailed FLCP. These updated plans and documents are to be submitted to the MMO for approval prior to commencement of construction activities under Condition 13 of the dML included within the dDCO. The FLCP will remain a live document once approved and will be updated by the Applicant as required.

# NATIONAL FEDERATION OF FISHERMEN'S ORGANISATION (NFFO)

- 3.9.14 Disagreement remains between the Applicant and the NFFO regarding sufficient consideration of socio-economic and cultural impacts on the fishing industry in Sections 8.4 and 8.5 of Volume 6, Part 2, Chapter 8: Commercial Fisheries [APP-077]. The Applicant's position on this matter is that the potential impacts identified in Section 8.4 of this Chapter and the assessment methodology presented in Section 8.5 provide an appropriate approach for the assessment of impacts of VE. This matter is not considered by either party to have a material impact on the assessment conclusions of the chapter, and the final position between the parties is not agreed.
- 3.9.15 Disagreement also remains in relation to the data presented in the fish and shellfish ecology assessments, where the NFFO felt the lack of site-specific survey contemporary data meant that the baseline environment was not sufficiently categorised. This matter is not considered by either party to have a material impact on the assessment conclusions of the chapter, and the final position between the parties is not agreed.



- 3.9.16 The presence of disagreement regarding the above means that residual disagreement also remains with the NFFO regarding the assessment of cumulative impacts. The cumulative impact assessment presented in Section 8.13 of Volume 6. Part 2, Chapter 8: Commercial Fisheries [APP-077] considers the potential interaction of VE with other planned developments and activities within a Cumulative Effects Assessment (CEA) study area encompassing the southern North Sea and eastern English Channel for mobile gear fleets, and the commercial fisheries study area for the potting, netting and hooked gear fleets, to provide appropriate coverage of relevant fishing grounds. The contribution of VE to cumulative loss of access to fishing grounds and associated displacement, and to cumulative displacement or disruption of commercially important fish and shellfish resources, is not considered to be significant for any fishing fleet. This assessment outcome reflects the operating ranges of the fishing fleets, availability of fishing grounds, and the planned application of VE-specific mitigation. This position remains in disagreement at the end of Examination but is not considered to have a material impact on the assessment conclusions on the chapter.
- 3.9.17 Disagreement also remains regarding the request for the Applicant to produce a mitigation and monitoring plan to monitor the status of commercially-targeted fish and shellfish activity. The Applicant's position remains that measures identified within the Outline FLCP [REP6-024] are appropriate for liaison and consultation with the fishing industry throughout the lifetime of the Project. This matter is not considered by either party to have a material impact on the assessment conclusions of the chapter, and the final position between the parties is not agreed. The final matter of disagreement between the Applicant and the NFFO relates to the Cable Burial Risk Assessment (CBRA) [APP-239], in relation to the level of detail, reliability of modelling and chances of cable exposure over the lifetime of the project. The NFFO requested a commitment to remediation to cables should exposure occur. The Applicant has committed to monitoring cables throughout the lifetime of the project and will inform stakeholders through the relevant notification channels as secured in the dML (Notice to Mariners, Kingfisher Bulletin etc).
- 3.9.18 The Applicant prepared an Outline Cable Specification Installation Plan (CSIP) [REP6-020] as part of the application which sets out measures for cable burial. Condition 13 of the dML included within the Draft Development Consent Order secures that the Applicant will provide a detailed CSIP to set out appropriate cable burial depth in accordance with industry good practice, minimising the risk of cable exposure. The CSIP will also ensure that cable crossings are appropriately designed to mitigate environmental effects, these crossings will be agreed with relevant parties in advance of CSIP submission. The Applicant notes that a full CBRA will be produced to inform the final CSIP during the preconstruction phase and is subject to approval by the MMO under the dML.

3.9.19 The Applicant has engaged extensively with the Commercial Fisheries Working Group (CFWG) and also with the National Federation of Fishermen's Organisation (NFFO). Statements of Common Ground have been developed with both the CFWG and NFFO which highlight remaining areas of disagreement, which primarily relate to perceived underestimation of potential impacts of reduced access to fishing grounds on mobile gear fishing fleets, and of potential cumulative effects on fishing activity of VE alongside other projects in the marine environment.



- 3.9.20 The CFWG and NFFO also remain concerned about the effect on fishing activity of potential cable exposures based on their experience of other projects in the region and are keen to see pre- and post-construction fisheries surveys undertaken, though the intended scope of these surveys is unclear to the Applicant.
- 3.9.21 The Applicant has however secured broad agreement on mitigation measures, which are set out in the Outline Fisheries Liaison and Co-existence Plan (FLCP). The Outline FLCP has been updated through the Examination process to respond to and address CFWG concerns. Alongside embedded mitigation measures the Outline FLCP includes additional mitigation measures to address significant impacts; these include cooperation agreements and evidence-based disruption payments to affected fishers, in line with best practice guidance. The Applicant has been clear that they remain willing to explore alternative approaches to mitigation if desired.
- 3.9.22 It is expected that the residual concerns of the CFWG and NFFO can be addressed during finalisation of the FLCP post-consent, in liaison with the CFWG and NFFO, when a more detailed and final understanding of VE construction approaches will be available.
- 3.9.23 In summary the Applicant has demonstrated compliance with NPS EN-3 in terms of engaging with affected stakeholders throughout the process of gathering robust baseline data, assessing potential impacts on commercial fisheries, and developing approaches to mitigation that are deemed acceptable to the fishing industry.

# 3.10 SHIPPING AND NAVIGATION

- 3.10.1 The ES Chapter on Shipping and Navigation [APP-078] assesses the potential effects of VE with respect to shipping and navigation during the construction, O&M and decommissioning phases. All relevant policy and guidance has been complied with, including NPS EN-1 and EN-3, as evidenced in the policy and legislation section of the ES Chapter Shipping and Navigation.
- 3.10.2 This Chapter concludes that all residual effects will be broadly acceptable or tolerable with mitigation, as described in accordance with MGN654 and the Revised Guidelines for Formal Safety Assessment (FSA) for Use in the IMO Rule-Making Process (IMO, 2018)<sup>1</sup>.
- 3.10.3 Table 9.10 of Volume 6, Part 2, Chapter 9: Shipping and Navigation [APP-078] outlines the mitigation proposed in relation to shipping and navigation both generally and for each phase of VE. Embedded mitigation includes relevant dML conditions at Schedules 10 and 11, Part 2 Pre-construction plans and documentation, which also require further consultation and agreement post consent on the specific layout within the RLB. This consultation undertaken with the MCA and Trinity House will ensure that the final agreed turbine positions suitably consider both surface navigation and search and rescue access.

<sup>&</sup>lt;sup>1</sup> Revised Guidelines for Formal Safety Assessment (FSA) for Use in the RuleMaking Process. MSC-MEPCC.2/Circ.12'Rev.2.



- 3.10.4 Given the location of VE at the outer edges of the Thames Estuary, shipping and navigation was identified as a key topic from the outset and since January 2021 numerous and extensive forms of consultation have been undertaken including consideration of scoping responses and PEIR responses as well as dedicated meetings, regular operator outreach, workshops and attendance at meetings of the Sunk Vessel Traffic Service (VTS) User Group. As set out in paragraph 4.3.13 of this Closing Statement, the Applicant also undertook a full MGN 654 compliant Navigational Risk Assessment (NRA) alongside the PEIR.
- 3.10.5 Engagement during Examination related to the Outline Navigation Installation Plan (NIP) [REP5-031] which was updated at Deadline 5 to respond to consultee comments. The Applicant engaged with IPs regarding cable burial level, recognising the importance of routes for deep draught vessels transiting to and from the London ports. Noting the acceptance that the cable routes need to cross the DWRs, the Applicant engaged with the IPs agree the level of burial for both base and future case environments. This agreement is reflected in the Outline Cable Specification Installation Plan (CSIP) [REP6-020] which was updated at Deadline 4, 6 and 7 to reflect comments from IPs. The dDCO was updated at Deadline 6 to add a new offshore parameter (requirement 2(3)), securing the cable level in the Deep Water Routes on the face of the Order [REP6-007].
- 3.10.6 With regards to the concerns raised by IPs over a lack of controls over a disposal of inert materials within the ECC due to dredging activities that will occur in the corridor, the Applicant prepared an Outline Sediment Disposal Plan [REP6-041] which is secured in the dML in order to capture the restrictions around sediment disposal within the ECC.

# PORT OF LONDON AUTHORITY

- 3.10.7 The Applicant and the Port of London Authority (PLA) remain in disagreement over the PLA's desire to have approval of plans secured under the DML which they consider could have impacts on shipping, including survey works (being the CSIP and NIP). It is noted that this disagreement does not apply to the NRA and the principles of shipping safety, which is agreed.
- 3.10.8 The Applicant's position (as outlined in the Applicant's Summaries of Oral Submissions ISH5, ISH6, CAH3 and ISH7 [REP6-045] that as these surveys routinely happen through appropriate engagement and notices to mariners, requiring them to be controlled by the CSIP and NIP is unnecessarily restrictive. It is proposed that suitable notification and consultation with the PLA for pre-construction surveys could be secured via protective provisions. The Applicant has committed to consult and seek agreement with interested parties for the approval of the CSIP and NIP, but ultimately the regulator is the MMO and the plan will therefore be submitted to them for approval.



#### HARWICH HAVEN AUTHORITY

# PROTECTIVE PROVISIONS

3.10.9 The Applicant and HHA remain in disagreement regarding HHA's request for protective provisions, for which the ExA sought clarity in their Rule 17 letter dated 13 December 2024 [PD-017]. The Applicant met with HHA to discuss the SoCG and their response to the Rule 17 request. The request for protective provisions from HHA was reflected in the SoCG as being related to their statutory powers and functions where the ECC overlaps with their harbour limits. The Applicant's position is that any works within harbour limits would require a works licence to be issued by HHA and therefore the interests of the harbour are already suitably protected and no detriment to the Port can arise from the powers sought in the dDCO.

#### **LONDON GATEWAY PORT LIMITED**

# **PROTECTIVE PROVISIONS**

- 3.10.10 The dDCO does not (and does not seek or purport to) disapply any existing control of the harbour empowerment order in place for the port. The inclusion of any such provision would require the consent of LGP under section 145 of the Planning Act 2008. No such provision is included.
- 3.10.11 The principle of protective provisions is agreed however and a draft has been the dDCO for some considerable time. The Applicant and the London Gateway Port Limited (LGPL) remain in disagreement regarding the precise wording of protective provisions following the submission of LGPL's drafting at Deadline 6 [REP6-080]. The Applicant does not agree that the changes sought are necessary or appropriate and maintains its position as set out in the Deadline 7 submission [REP7-090].

# **APPLICANT'S POSITION**

- 3.10.12 The Applicant has secured broad agreement on the mitigation measures and the conclusion of the 9.10 Navigational Risk Assessment (NRA) [APP-240]. The NRA concluded that, with appropriate mitigation including a Navigation and Installation Plan (NIP), the risks of the project during construction, operation and decommissioning were reduced to ALARP (as low as reasonably practicable) and this has been agreed with parties including the MCA, PLA and HHA.
- 3.10.13 The content of the outline mitigation plans, specifically the NIP [REP7-048] and Cable Specification and Installation Plan [REP7-040] has been agreed with IPs. The Applicant has committed, in agreement with the relevant IPs, to install cables in the existing Deep Water Routes serving the Port of London at a depth that allows for future dredging up to 22m which thereby secures the long-term commercial viability of the port.
- 3.10.14 Residual matters relate to the approval of final mitigation plans and details of protective provisions but these do not impact the security or deliverability of key mitigations and commitments. In summary the Applicant has demonstrated compliance with NPS EN-3 in terms of both reducing navigational risk to ALARP and limiting the impacts to commercial shipping to an acceptable level.



# 3.11 OFFSHORE HISTORIC ENVIRONMENT

#### **SUMMARY**

- 3.11.1 Volume 6, Part 2, Chapter 11: Offshore Archaeology and Cultural Heritage [APP-080] assesses the potential effects of construction, O&M and decommissioning associated with VE on the marine archaeological environment. All relevant policy and guidance has been complied with including NPS EN-1 and EN-3, as evidenced in the statutory, legislation and policy section of the ES Chapter on Offshore Archaeology and Cultural Heritage.
- 3.11.2 The pre-application geophysical and hydrographic surveys followed the industry-standard parameters to ensure data quality was sufficient for assessment and that receptors of archaeological interest and/or potential are considered when applying mitigation measures. The results of the archaeological assessment of these data, along with the baseline environment is detail in Volume 6, Part 5, Annex 11.1: Offshore Archaeology and Cultural Heritage Technical Report [APP-128].
- 3.11.3 The ES concludes that there will be no significant effects on the marine archaeological environment. Additionally, the risk of effects is reduced through the application of mitigation measures, primarily the plans secured through the dMLs. These mitigation measures are detailed in Volume 9, Report 19: Outline Marine Written Schemes of Investigation [REP4-025]] which forms an umbrella document for further surveys, investigations and assessments required throughout the life of the project and sets out archaeological actions and mitigation.

# **RESIDUAL MATTERS**

#### HISTORIC ENGLAND

- 3.11.4 An ongoing discussion point between Historic England (HE) and the Applicant remains in relation to the embedded mitigation in the ES. HE raised the concern that the impact assessment in the ES relies on embedded mitigation to avoid significant impacts, but that assumptions made about the effectiveness of avoidance to remove significant impact effects are however predicated on the adequacy of all subsequent survey investigations. The Applicant considers that the combined mitigation measures set out in the Outline Marine Written Scheme of Investigation [REP4-025] are proportionate and achievable. This is based on a phased investigation (post-determination and preconstruction as appropriate), combined with the ability to be flexible in micro-siting of infrastructure within the order limits, especially with regard to the cable works.
- 3.11.5 The Applicant remains in disagreement with HE regarding the wording of Schedule 11, Part 2, Condition 13(2) of the dDCO in relation to the dML for transmission assets. HE seek the approval of the marine written scheme of archaeological investigation to be in consultation with the statutory historic body and local authority.
- 3.11.6 HE raised concerns regarding the level of impacts on sediments and geoarchaeological potential and the level of investigation in relation to geoarchaeological cores in their Written Representations [REP2-053], stating their view of there being insufficient evaluation on preserved paleochannels and deposits with high geoarchaeological potential.



- 3.11.7 The Applicant outlined their position on this matter in the Applicant's Summaries of Oral Submissions ISH5, ISH6, CAH3 and ISH7 [REP6-045], clarifying that the nine indicative positions for geoarchaeological coring, as illustrated in drawing 11.2.9 [REP4-025] were based on the assessment of sub-bottom data and will be reviewed ahead of any geotechnical campaigns able to collect cores for geoarchaeological purposes. This will be detailed in a method statement and agreed with Historic England ahead of works.
- 3.11.8 The OWSI [REP4-025] secures that pre-construction surveys will be undertaken to provide detail on sediments and geoarchaeological potential. The pre-construction surveys will most likely be undertaken at all turbine locations and other locations along the ECC and are secured by the dML. Mitigation measures set out in the OWSI ensures that early archaeological input will be sought ahead of the planned geotechnical campaign and all works will be undertaken in accordance with an archaeological method statement agreed with HE.

3.11.9 No significant issues have been raised in respect of offshore historic environment, and in line with the conclusion of the ES the Applicant has demonstrated compliance with the NPS EN-3 through the assessment of impacts and securing appropriate mitigation including provision of a OWSI [REP4-025].

# 3.12 OFFSHORE SEASCAPE, LANDSCAPE AND VISUAL IMPACT

- 3.12.1 The ES chapter 6.2.10 Seascape, Landscape and Visual (SLVIA) [APP-079] assesses the seascape, landscape and visual impacts of the offshore VE array. The SLVIA assesses the effects of the 41 turbine 'large' WTG layout (399m above Lowest Astronomical Tide (LAT)) and 79 smaller turbines as the maximum design scenarios, in accordance with the Rochdale Envelope approach of assessing the effects of a likely worst-case scenario.
- 3.12.2 The approach taken is to consider the worst-case due to the larger apparent scale of the 'larger' WTGs, their scale comparisons with operational WTGs; their visibility and wider extent of ZTV compared to 'smaller' WTGs (Figures 10.7 and 10.8 [APP-200]). The 'range of configurations' or differences in effects resulting from the two extremes of the project design does not need to be assessed as the worst-case scenario has been assessed under the Rochdale Envelope approach. There is agreement with IPs that the assessment methodology is appropriate, robust and in accordance with professional guidance.
- 3.12.3 Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual (SLVIA) [APP-079] concludes that there will not be significant adverse impacts across all phases relate to the impacts (daytime) of seascape character, perceived landscape character, visual impacts on array areas and the qualities of designated landscapes. This includes residual impacts on the special qualities of the Suffolk Coasts and Heaths AONB (SCHAONB). Section 5.10 of NPS EN-1 recognises that energy projects can have varying landscape and visual effects, and that virtually all significant energy infrastructure projects will have adverse impacts in this regard.



- 3.12.4 The Applicant's assessment is that the VE array areas will not have significant adverse impacts on the natural beauty and special qualities of the SCHAONB and that the statutory purposes for designation of the SCHAONB will not be compromised. East Suffolk Council and Sussex County Council agreed with these conclusions in earlier submissions. East Suffolk Council note in their Statement of Common Ground that impacts are likely to be moderate/ minor at worst in LVIA terms.
- 3.12.5 As noted in the Applicant's Comments on Deadline 4 Submissions [REP5-074] in response to Suffolk County Council, it was the conclusion of the Examining Authority and Secretary of State that harms resulting from significant effects of East Anglia TWO, Awel y Môr and Sheringham Shoal and Dudgeon on the special qualities of National Landscapes would not compromise the purposes of the relevant designations affected. These are a useful benchmark to informing the approach to concluding on the impact upon special qualities and whether the statutory purposes of the designation are compromised.
- 3.12.6 During Examination the Applicant reduced the maximum height of the WTGs from 399m to 370m above LAT, further reducing the level of any anticipated seascape and landscape visual impact, which East Suffolk Council and Suffolk County Council agree at a closest distance of approximately 37km offshore, is not likely to result in significant adverse visual effects on the Suffolk coastline or its designated landscapes.

# **NATURAL ENGLAND**

# SUFFOLK AND ESSEX COAST & HEATHS NATIONAL LANDSCAPE AND SUFFOLK HERITAGE COAST (SHC) – SEASCAPE IMPACTS

- 3.12.7 The Applicant and NE remain in disagreement regarding the significance of impacts on the natural beauty and special qualities of the SCHAONB. Where East Suffolk Council and Suffolk County Council agree that there will not be significant adverse impacts, NE disagree and rely on an overly mathematical (quantitative) approach in their Relevant Representation [PD2-011] based on the vertical field of view (apparent height) of the closest WTG to arrive at significance, which has no basis in guidance or accepted practice. Judgements on significance should properly be based on the assessment material provided in the ES, particularly the photomontages (Figures 10.6 to 10.46 ([APP-204] to [APP-224])).
- 3.12.8 The VE array areas are located 37.3km from the closest point of the SCHAONB. Most of the WTGs will actually be located beyond 40km (Figure 10.1 [APP-199]). A conclusion of significant landscape and visual effects at distances over 37km would be unprecedented for offshore wind farms and would be wholly disproportionate.
- 3.12.9 The assessments undertaken within Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual [APP-079] found that impacts on views and special qualities of the AONB coastline are likely to be Moderate/Minor at worst.
- 3.12.10 The Applicant considers it has already minimised harm to the special qualities of the AONB, providing reasonable mitigation within the project design (in line with NPS EN-1). The Applicant has shown regard to the statutory purpose of the AONB and sought to further its purposes, insofar as is possible around various siting, operational, viability constraints; and to avoid compromising the purposes of designation (to conserve and enhance natural beauty) (in line with NPS-EN-1 5.9.12).



- 3.12.11 The Applicant has sited the array area to the eastern side of the existing Greater Gabbard and Galloper OWFs with a large separation distance of 37.3km from the SCHAONB at its closest point; reducing the spatial extent of the array area, limiting the northward lateral spread of WTGs when viewed from the coast; and reducing the maximum height of the WTGs from 424m to 399m above LAT (395 m above MHWS), leading to a reduction in the Zone of Theoretical Visibility and apparent height of the WTGs. The maximum WTG height was then further reduced to 370m LAT to blade tip, due to Ministry of Defence (MOD) requirements, which will result in a further reduction in seascape and visual effects.
- 3.12.12 As a result, the effect of the VE array areas on the special qualities of the AONB is, as has been assessed, not significant and that the statutory purposes for designation of the SCHAONB will not be compromised.

# **DESIGN PRINCIPLES**

- 3.12.13 The Applicant and NE remain in disagreement regarding the cumulative effects with approved schemes and the subsequent request made by NE to include additional Design Principles. The Applicant and NE also remain in disagreement regarding the degree to which embedded mitigation has reduced or avoided significant effects.
- 3.12.14 NE outline in their RR [PD2-011] that the Applicant should adopt the following Design Principles:
  - > Design Principle 1: Maintain a clear visual gap between VE and the consented EA2 by limiting northward lateral spread of the array.
  - Design Principle 2: Locate as many turbines as possible on the eastern side of the Northern Development Area in order to increase the separation distance and therefore reduce the apparent height of the WTGs when seen from the SCHAONB and SHC.
  - Design Principle 3: Ensure that the layout does not create a new distinct object on the far horizon visible from the SCHAONB and SHC (see Figure 10.29e with respect to the most northerly 8 WTGs).
- 3.12.15 In particular NE also recommended removal of '8 WTGs to the north of the array area', which they consider contribute most to the 'curtaining effect' that NE considers as significant.
- 3.12.16 The Applicant recognises the need for good design as outlined in NPS EN-1, and accordingly developed the Offshore Project Design Principles [APP-233] alongside incorporating design mitigation into Table 10.18 of Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual [APP-079].



- 3.12.17 With regard to Design Principle 2, the VE array areas are located to the eastern side of the Greater Gabbard and Galloper OWFs, with a large separation distance of 38.7 km from the SCHAONB at its closest point, which therefore reduces the apparent height of the WTGs when seen from the SCHAONB. The maximum height of the VE WTGs has been reduced from 424 m blade tip height to 399 m blade tip height above LAT (395 m above MHWS), leading to a reduction in the ZTV and apparent height of the WTGs in views from the SCHAONB. The maximum tip height was then reduced further to 370 m LAT. Requiring the project to condense the northern array to the east would significantly impact potential project capacity and efficiency, reducing its commercial viability. Further it would likely result in an array not in compliance with the search and rescue requirements of MGN654 and finally would have a negligible impact on the visual impact, given the closest turbine is already over 37km offshore.
- 3.12.18 The Applicant considers that NE's recommendation in Design Principle 3 is flawed because it implies that VE should not have visible elements on the horizon, which is not a realistic or reasonable design aim for an offshore wind farm project. The criteria for good design in Section 4.7 of NPS EN-1 recognise the functionality of an object is equally important to its visual appearance. The Applicant has sought to limit the northerly spread of WTGs as far as possible, and has reduced the maximum height of the WTGs, to an extent that the effect of the VE array area on the special qualities of the SCHAONB has been assessed as not significant in the ES and by other Interested Parties (East Suffolk District Council and Sussex County Council). The Applicant is unable to further reduce the northern spatial extent of WTGs in the array area, given the lack of significant effects arising and the ultimate purpose and functionality of the development to maximise renewable energy regeneration in line with NPS EN-1.
- 3.12.19 As outlined in the Applicant's Response to NE's Relevant Representations [REP1-051], the Applicant considers that the 8 WTGs referred to within the northern portion of the VE array area, only fully 'bridges the gap' between Galloper OWF and the consented EA2 array in one viewpoint Viewpoint 1 Southwold [APP-204]. In all other viewpoints there is some visible gap between the VE array and EA2 to the north. The Applicant's position is that on balance the 'curtaining' effect is not significant given the retention of this gap between VE and EA2 in the majority of views; the very long distance of the viewpoints where the gap is narrowest; the relatively narrow additional increase in lateral spread of the VE WTGs; their introduction as elements that are similar to those that are present or consented; and their very long distances from the SCHAONB on the sea skyline, all of which diminishes the potential 'curtaining' effect, and limits the cumulative effect to occurring in only the most optimum, infrequent, visibility conditions.
- 3.12.20 The spatial extent of the VE array area was reduced between Scoping and PEIR, which provided a reduction in the lateral spread of WTGs when viewed from the coast, with a section of the northern array removed to help maintain a clear visual gap between existing wind farms and the consented East Anglia TWO windfarm, as seen from the Suffolk coast. The Applicant considers that the spatial extent of the VE array area has limited the northward lateral spread and had regard to NE's recommendations in Design Principle 1 at the pre-application stage.



#### SUFFOLK COUNTY COUNCIL

# DUTY UNDER \$85(A1) OF THE COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

- 3.12.21 The Applicant and Suffolk County Council remain in disagreement on the duty under S85(A1) of the CRWA 2000 to further the purpose of conserving and enhancing the natural beauty of the SCHAONB. The Applicant fundamentally disagrees that the Applicant has misunderstood the relevant duty as submitted by Suffolk County Council, and confirmed this position at ISH6. The Applicant does not agree that there is residual harm nor that the "duty to seek to further" means that the Applicant has to explore every possible measure to enhance the AoNB when the Applicant does not agree that there is any harm. The Applicant noted that the duty is expressed as applying in the exercise of a function, and the function is the determination of the planning application.
- 3.12.22 The Applicant's Submissions on S85 of the Countryside and Rights of Way Act [REP6-048] sets out that even if harm were to be established (and the Applicant submits that SCC has only <u>asserted</u> harm based on insignificant theoretical visibility of some turbines and has not evidenced such harm to the Examination), it could only ever be indirect give that the elements of the authorised development which are alleged to create an effect are not situated within the AONB.
- 3.12.23 The Applicant does not accept that the planning decision on the proposed development 'affects' the SCHAONB. The relevant elements of the development are located entirely outside the AONB, are located at 37km distant at the closest point and have some limited theoretical visibility from the AONB in ideal weather conditions only. For Viewpoint 9 at 38.2km, the frequency is 20.9% (as the closest viewpoint within Suffolk). The Applicant notes that for 79.1% of the time there would be no visibility, or only very poor visibility of the VE WTGs from the East Suffolk coast (based on Met Office visibility frequency data). The authorised development would also appear in the context of the existing, closer, offshore windfarm development. The SLVIA concludes there is no significant adverse effect on the AONB.
- 3.12.24 The Applicant does not accept that there is direct harm to the setting of the AONB from development at 37km distant. The setting of an AONB cannot extend indefinitely or even as far as theoretical visibility in ideal weather conditions allows. The extent of the AONB was selected for a reason and it is not reasonable or appropriate to curtail land at such a distance outside the protected landscape on the basis of limited theoretical visibility in the context of a long-range view which already contains offshore windfarm development, and which does not therefore materially change that view
- 3.12.25 The Applicant has previously submitted that the term 'harm' is not defined or used within published guidance for the assessment of landscape and visual impacts<sup>2</sup>. In the Applicant's advisors' professional judgement, 'harm' would most likely be associated as occurring where significant effects arise and equally, that it is unlikely that harm would arise where effects have been assessed as not significant in EIA terms.

<sup>&</sup>lt;sup>2</sup> Guidelines for Landscape and Visual Impact Assessment, Landscape Institute, 2013, 3rd Edition



- 3.12.26 It is the Applicant's view that residual, non-significant effects cannot be considered harmful to the purposes of a designation. The fact that significant effects have been avoided does, in the Applicant's view, mean that the proposed development has minimised harm to the landscape.
- 3.12.27 Section 85 imposes no legal duty to improve an AONB, only to seek to further the purposes. The NPS does not require the enhancement of an AONB as a policy outcome, but rather the appropriate mitigation of effects and balancing of any residual impacts in the planning balance, having regard to the considerable weight in favour provided as a starting point for CNP NSIPs.
- 3.12.28 Suffolk County Council's position that non-significant adverse effects are a harm to the SCHAONB for which compensation in the form of funding must be secured causes the Applicant considerable concern. This position appears to have no regard to the NPS or the tests for the imposition of requirements and planning obligations, that any measure so imposed must be necessary, reasonable and proportionate in scale and kind to the impact caused by the development<sup>3</sup>.
- 3.12.29 The Applicant has sought and submitted to the Examination the opinion of a highly experienced, specialist King's Counsel (ranked band 1 for planning in Chambers UK bar guide 2025) [REP6-050]. That opinion states;

"The section 85(A1) duty does not amount to a legal obligation to achieve an improvement to the AONB, or to avoid any and all harm."4

"SCC's reformulation does not reflect the terms in which the duty has been framed in the legislation, nor does it reflect the NPS policy requirements which were formulated in the light of that duty, or the AONB Guidance. If the decision maker adopted SCC's reformulation in determining VE Ltd.'s application, I consider that it would fall into legal error."5

"I regard SCC's suggestion that the application of the duty requires VE Ltd. to 'offset' any residual harm to the AONB through some form of positive 'enhancement' to be misconceived..."6

# SUFFOLK & ESSEX COAST & HEATHS NATIONAL LANDSCAPE PARTNERSHIP

# **COMPLIANCE WITH LURA 2023/SECTION 85 OF THE CRWA 2000**

- 3.12.30 The Applicant and Suffolk & Essex Coast & Heaths National Landscape Partnership remain in disagreement regarding compliance with the Levelling-up and Regeneration Act (LURA 2023) which amended section 85 of the Countryside and Rights of Way Act 2000 (CRWA 2000) and created a new duty on relevant authorities to "seek to further the purpose of conserving and enhancing the natural beauty of the area".
- 3.12.31 As set out in the Applicant's Response to Relevant Representations [REP1-049], the Applicant has had regard to the duty to seek to further the purpose of conserving and enhancing the natural beauty of the SCHAONB under the Levelling-up and Regeneration Act (2023).

<sup>&</sup>lt;sup>3</sup> As set out in Regulation 122 of the Community Infrastructure Levy Regulations 2010

<sup>&</sup>lt;sup>4</sup> Paragraph 107 (a)

<sup>&</sup>lt;sup>5</sup> Paragraph 108

<sup>&</sup>lt;sup>6</sup> Paragraph 14



- 3.12.32 The Applicant considers that it has appropriately sought to further the purposes of the SCHAONB through mitigation embedded in the project design relating to seascape, landscape and visual receptors as set out in Table 10.18 of Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual Assessment [APP-079]. The Applicant considers that it has sought to avoid, reduce or minimise adverse effects where they arise, as far as the scope of the project allows.
- 3.12.33 The Applicant has addressed the duty under S85 of the CRWA 2000 in response to SCC above.

# ADVERSE IMPACTS ON THE SCHAONB

- 3.12.34 The Applicant and Suffolk & Essex Coast & Heaths National Landscape Partnership also remain in disagreement regarding the impact of the offshore proposals on the SCHAONB. The Suffolk & Essex Coast & Heaths National Landscape Partnership consider that although the offshore element of the proposals have not been assessed as a significant impact, there is still an adverse impact from the offshore element. The Suffolk & Essex Coast & Heaths National Landscape Partnership notes in its responses to ExQ1 (REP2-094) that although the offshore infrastructure related to the offshore wind farm is located outside of the SCHAONB this type of infrastructure will have a negative impact on the defined Natural Beauty Indicators. It notes the contribution of offshore wind turbines visible from parts of the coastline creating a cluttered horizon and the large open vistas across heaths and along the coast, out to sea that could be affected.
- 3.12.35 The Applicant considers that the offshore proposals will not have significant adverse impacts on the natural beauty and special qualities of the SCHAONB (as set out in 6.2.10 Seascape, Landscape and Visual Assessment [APP-079] and that the statutory purposes for designation of the SCHAoNB will not be compromised. The assessed effects are at worst, of low magnitude and moderate/minor adverse (not significant), as well as being indirect and reversible.
- 3.12.36 The Applicant has also committed to a reduced maximum WTG height of 370m to blade tip therefore the magnitude of change and adversity of any effects will be less than originally assessed in the ES.
- 3.12.37 The VE turbines do not affect the defined component parts of the natural beauty of the SCHAONB that should be conserved i.e. its flora, its fauna, its geological features, and its physiographical features. The Applicant maintains that the turbines, at 37km distant to the closest point of the SCHAoNB, will only be visible infrequently and to a very small degree, and which have been assessed as having only a non-significant effect cannot be reasonably said to 'affect' the SCHAoNB in a manner which supports the Suffolk & Essex Coast & Heaths National Landscape Partnership position that some further enhancement is required.

# **APPLICANT'S POSITION**

3.12.38 The Applicant considers that the offshore proposals will not have significant adverse impacts on the natural beauty and special qualities of the SCHAONB (as set out in 6.2.10 Seascape, Landscape and Visual Assessment [APP-079]) and that the statutory purposes for designation of the SCHAONB will not be compromised.



- 3.12.39 The Seascape, Landscape and Visual Assessment [APP-079] found that the VE array areas would not give rise to significant adverse effects on views or the perceived character and qualities of the SCHAONB, owing principally to its location at long distance (over 37 km) offshore from the coast of Suffolk, together with the position of the VE arrays subsumed behind operational wind farms and the limited additional lateral spread of the VE WTGs on the sea skyline. The distance and presence of existing and consented wind farms will mean that the magnitude of change arising from the VE array areas is moderated in comparison to there being no existing windfarms. Impacts on coastal views and special qualities of the SCHAONB are likely to be moderate/minor at worst in EIA terms and they are not significantly adverse.
- 3.12.40 The Applicant considers that prevailing meteorological/atmospheric conditions will also reduce the frequency of visibility, such that worst-case effects assessed in the ES will actually be lower, in reality, for much of the year. The reality is that weather conditions will limit actual visibility of the WTGs at the range of distances likely from the SCHAONB (38km at Orford Ness to 49km at Felixstowe) and these weather conditions are a key component in understanding the likely frequency of visibility of the WTGs and impacts that will actually be experienced.
- 3.12.41 The Applicant and Suffolk County Council / Suffolk & Essex Coast & Heaths National Landscape Partnership remain in disagreement regarding compliance with the Levelling-up and Regeneration Act (LURA 2023) which amended section 85 of the Countryside and Rights of Way Act 2000 (CRWA 2000) and created a new duty on relevant authorities to "seek to further the purpose of conserving and enhancing the natural beauty of the area".
- 3.12.42 The Applicant considers that it has appropriately sought to further the purposes of the SCHAONB through mitigation embedded in the project design relating to seascape, landscape and visual receptors as set out in Table 10.18 of Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual Assessment [APP-079]. The Applicant considers that the Proposed Development does not cause harm to the conservation of the SCHAONB, that as much as is practicable has been done to further the purposes of the natural beauty of the SCHAONB and that no further enhancement is required. The Applicant considers that measures are sufficient, appropriate and proportionate to the type and scale of the development (NPS-EN-1 5.10.8) and that the Project has been designed carefully taking account of the potential impact on the landscape (NPS EN-1 5.10.6) and given the various siting, operational and other relevant constraints (NPS EN-1 5.10.8). In so doing, the Project minimises harm to the landscape, providing reasonable mitigation where possible and appropriate (NPS EN-1 5.10.6).

# 3.13 ONSHORE LANDSCAPE AND VISUAL IMPACT

# **SUMMARY**

3.13.1 The ES Chapter on Landscape and Visual Impact Assessment (LVIA) [APP-084] assesses the landscape and visual impacts for the onshore components of VE. The key onshore elements of VE include the proposed OnSS, onshore ECC and the Landfall (where the offshore export cables will meet the onshore export cables).



- 3.13.2 The LVIA considers the effects of the OnSS, onshore ECC and Landfall on landscape and visual receptors during the construction phase and operational phase, taking into account the mitigatory effects of the screen planting around the OnSS during the operational phase. It also considers the cumulative effects of the VE OnSS in conjunction with the North Falls and EACN substations and the onshore ECC with other relevant developments.
- 3.13.3 The LVIA Chapter [APP-084] concludes the following significant effects will arise as a result of the onshore infrastructure;
  - Significant effects and significant cumulative effects on landscape character out to a maximum radius of approximately 1.3 km around the OnSS during the construction phase and reducing to not significant within the first 15 years of the operational phase;
  - Significant effects and significant cumulative effects on visual amenity out to a maximum radius of approximately 1.4 km around the OnSS during the construction phase and reducing to not significant within the first 15 years of the operational phase;
  - Significant effects on physical elements of the landscape in localised spots where the OnSS, onshore ECC or Landfall give rise to removal of notable trees or hedgerows;
  - Significant effects on visual amenity in localised spots where Temporary Construction Compounds are readily visible to nearby visual receptors during the construction phase; and
  - Significant cumulative effects on visual amenity where the onshore ECC will be visible in conjunction with the proposed industrial estate to the south of the A120 during the construction phase.
- 3.13.4 The largest structure within the OnSS will be the OnSS building, with a maximum height of 15 m above existing ground level (assuming a GIS design). All other equipment is designed not to exceed a height of 15 m above existing ground level with the exception of slender lightning masts which would be up to 18 m in height. The maximum height of the GIS buildings and the maximum AIS footprint have been used to form the LVIA Rochdale Envelope and this is used to ensure the maximum parameters of the OnSS are assessed.
- 3.13.5 It should be noted that the components of the AIS and GIS options have different heights and as their locations are not fixed, the maximum height of 15 m has been applied to the full extent of the OnSS. There is limited scope to alter the design of the infrastructure as it has to meet very specific technical and safety standards, but there is some scope regarding the application of colour on specific structural elements, which will be explored post-consent.
- 3.13.6 As recognised in NPS EN-1, it is not practical to completely avoid landscape impacts from NSIP scale energy projects but that this is a matter for the planning balance. It is not expected or required that all adverse impacts can be avoided.
  - "5.10.35 The scale of energy projects means that they will often be visible across a very wide area. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project."



- 3.13.7 During the Examination, the Applicant engaged with Babergh and Mid Suffolk District Councils, where Babergh District Council had commented on potential effects to the Dedham Vale AONB within their LIR [REP2-040]. The Applicant has had discussions and agreed to include a new viewpoint, noting that the significant effects are very localised, extending out to 1.3 km in respect of landscape character and 1.4 km in respect of visual amenity. The closest boundary to Dedham Vale AoNB is at 2 km. The Applicant has an existing viewpoint (viewpoint 9) which illustrates the very limited visual effect, however, it has also submitted a number of additional VPs at Deadline 5 to address this.
- 3.13.8 At ISH3 the Applicant confirmed that the LVIA [APP-084] sets out the cumulative assessment (where it is assumed that VE, North Falls and EACN substations are already constructed). The conclusions of this assessment are similar to the assessment of the VE OnSS alone where there are very localised significant effects.
- 3.13.9 In response to the ExA request for further information regarding the cumulative interaction with the Norwich to Tilbury Overhead Power Line (OHPL) an updated cumulative assessment has been included at Appendix 1 of the Applicant's Comments on Deadline 4 Submissions [REP5-073]. This confirms that while there would be some visibility of the OHPL from the closer range viewpoints, the assessment in terms of magnitude of change and significance of effect would not change from the original assessment. This is largely owing to the closer range, larger scale and more notable influence of the onshore substations, the comparatively smaller scale and greater separation of the Norwich to Tilbury OHPL as seen from the viewpoints, and the baseline presence and influence from the existing OHPL in the same sector of the view. The Applicant concluded that while the OHPL would give rise to an additional effect, the main cumulative effects will relate to the interaction between the VE and North Falls onshore substations owing to their close proximity.
- 3.13.10 The indicative mitigation planting plan for the onshore substation is included in the OLEMP [latest Revision F submitted at Deadline 8a] and presented in Figure 3.1. During examination, the planting plan has been updated in two key areas. Firstly, in response to concerns expressed by landowners of Norman's Farm, the proposed planting has been removed from around the farmhouse boundary and offset to the north, to allow for future expansion of the farm, whilst also ensuring continuity in the screening of the onshore substations from landscape and visual receptors to the south-east. Secondly, in response to concerns expressed by Essex County Council, larger tree planting has been integrated into the proposed orchard on the northern side of the onshore substations, where restrictions relating to existing and proposed underground and overhead cables have allowed. This will bolster the screening effect of the orchard planting, especially along the roadside, and will also bring the VE planting plan closer in alignment with the North Falls planting plan.



- 3.13.11 The Statement of Common Ground with Essex County Council and Tendring District Council (TDC) [REP5-054] sets out issues relating to the LVIA and the final agreed position. Essex County Council originally requested that the aftercare period for replacement planting along the onshore ECC should be extended from five to ten years. The agreed position between the Applicant and Essex County Council is that five years is acceptable. The Applicant believes it provides the correct balance between establishing planting and not interfering with landowners' management of their land. The five-year maintenance requirement is outlined in the OLEMP [latest Revision F submitted at Deadline 8a] and pertains specifically to the replacement planting, rather than the landscape and mitigation planting proposed at the onshore substation.
- 3.13.12 The ExA enquired as to whether the Applicant would submit a Design Guide into the Examination. As set out in the Applicant's Summaries of Oral Submissions ISH 5, ISH6, CAH3 and ISH7 [REP6-045], the Applicant confirmed that the Design Guide would be developed following the close of the examination. The Applicant updated the Onshore Substation Design Principles Document [REP6-018], to include further details about the approach to developing a Design Guide, how the Applicant intends to manage the detailed design process including collaboration with North Falls and a commitment to an independent review of the Design Guide, the approach to which has been agreed with Essex County Council.

3.13.13 The Applicant, whilst noting that the design is still in the early stages, does not consider there to be any particular residual ongoing points of discussion in relation to Landscape to raise. It does however, note that some parties remain concerned about the cumulative impact of the three projects on the wider area.

# APPLICANT'S POSITION

3.13.14 The Applicant has secured broad agreement on the assessment of landscape and visual effects relating to the onshore infrastructure, and on associated mitigation measures to reduce these effects. During examination, additional information has been provided to demonstrate that no significant effects or cumulative effects will arise in respect of the Dedham Vale National Landscape, and that the Norwich to Tilbury OHPL will not alter the findings of the original cumulative assessment presented in the LVIA [APP-084]. Residual matters relate to the detailed design of the OnSS post-consent and refinement of final mitigation plans, which will be developed in consultation with Essex County Council. In summary, the Applicant has demonstrated compliance with NPS EN-1 [DESNZ 2023] and Advice on Good Design [Planning Inspectorate 2024] in terms of reducing landscape and visual effects and securing appropriate mitigation including provision of an OLEMP [latest Revision F submitted at Deadline 8a].





#### 3.14 ONSHORE ECOLOGY

- 3.14.1 The ES Chapter on Onshore Biodiversity and Nature Conservation [APP-086] assesses the effects of construction, O&M and decommissioning on onshore biodiversity and nature conservation receptors (including intertidal birds). This Chapter concludes that there are no significant residual effects aside from a locally-significant effect on skylark and a significant effect at a county level on corn bunting. This effect is as a result of direct permanent arable habitat loss and effective habitat loss (as a result of landscape planting which renders adjacent arable land unsuitable for use by ground nesting birds that require open arable habitats) at the OnSS as a result of VE alone, and/ or cumulatively with the adjacent North Falls substation and the EACN. Additional mitigation/ compensation for skylark and corn bunting is not possible within the Order Limits. The Applicant considers the benefits of the project on balance to outweigh the impact to skylark and corn bunting, and notes the proposed habitat creation at the OnSS would benefit a range of other bird species.
- 3.14.2 During Examination Essex County Council raised comments regarding the function and management of the traditional orchard habitat proposed within the wider OnSS landscaping, the purpose of which is to provide screening, alongside recognition of the opportunity to create "Traditional orchard" as a Section 41 habitat of principal importance for the conservation of biodiversity in England. Agreement on the suitability of mitigation and enhancement in relation to habitats to be secured long term at the OnSS was also achieved with the relevant stakeholders, and is set out in the OLEMP [latest Revision F submitted at Deadline 8a].
- 3.14.3 The Applicant engaged pre-application with NE to demonstrate that the use of HDD at the Landfall will avoid impacts on the Holland Haven SSSI, and control measures included in the CoCP [REP7-050]. The Applicant has committed to use trenchless techniques to cross key hedgerows and woodland identified in the Obstacle Crossing Register [REP3-010] for environmental reasons. This commitment also avoids the need for a European Protected Species License (EPSL) for dormice, which NE also agree with.
- 3.14.4 The Applicant also submitted a revised OLEMP at Deadline 6 [latest Revision F submitted at Deadline 8a] to confirm that mitigation proposals were developed in line with Essex County Council's Green Infrastructure Strategy and Green Infrastructure Standards.
- 3.14.5 NPS EN-1 encourages the applicant to consider how proposals can contribute to Biodiversity Net Gain (BNG) in Paragraphs 4.5.4 and 4.5.5, noting in Paragraph 4.5.11 that the scope of potential gains is dependent on the type, scale and location of each project. The Applicant notes that achievement of Biodiversity Net Gain (BNG) is not yet a statutory requirement for NSIPs. The Applicant has sought to achieve significant biodiversity enhancement within the Order Limits, in line with current legislation and policy. The project has in addition committed to delivering 10% BNG; details of the how the proposed enhancements have been and will be measured using the Statutory Metric are set out in the Onshore Biodiversity Net Gain Indicative Design Stage Report [REP6-016]. The dDCO also secures a Requirement to submit a Biodiversity Net Gain Strategy to the local authorities for approval.



#### **DELIVERY OF BNG**

- 3.14.6 The project has committed to provide at least 10% BNG as set out in the Onshore Biodiversity Net Gain Indicative Design Stage Report Revision B [REP6-015].
- 3.14.7 The Applicant notes NE's comments on the projects deviations from adhering strictly to the rules and assumptions of the Statutory Metric in its calculations. However, the Statutory Metric does not apply to NSIPs, and whilst VE sought to follow it as closely as possible, there are instances where it has been justifiably deviated from, particularly for a linear scheme. Details are included in Onshore Biodiversity Net Gain Indicative Design Stage Report Revision B [REP6-015].
- 3.14.8 Essex County Council and TDC are in agreement with the proposed approach to BNG.

# **APPLICANT'S POSITION**

- 3.14.9 In accordance with NPS EN-1 requirements, the Applicant has clearly detailed the impacts of the proposed development on onshore ecological receptors within the ES Chapter and RIAA. The Applicant has secured agreement on the assessment conclusions with key consultees (NE, TDC, Essex County Council, EWT).
- 3.14.10 NPS EN-1 emphasises the importance of considering how proposals can contribute to Biodiversity Net Gain (BNG) in Paragraphs 4.5.4 and 4.5.5, and highlights in Paragraph 4.5.11 that the potential scope of gains varies by project type, scale, and location.
- 3.14.11 While achieving BNG is not yet a statutory requirement for NSIPs, the Applicant is committed to significant biodiversity enhancement within the Order Limits, adhering to current legislation and policy. Furthermore, the project has committed to deliver 10% BNG, which is over and above statutory requirements. Detailed methodologies for measuring these enhancements using the Statutory Metric are outlined in the Onshore Biodiversity Net Gain Indicative Design Stage Report [REP6-015]. The dDCO also secures a requirement to submit a Biodiversity Net Gain Strategy to local authorities for approval.

# 3.15 ONSHORE HISTORIC ENVIRONMENT

- 3.15.1 The ES Chapter on Archaeology and Cultural Heritage [APP-089] assesses onshore impacts on archaeology and cultural heritage.
- 3.15.2 The Applicant has engaged with Essex County Council and Historic England (HE) during the pre-application and Examination stages; commentary regarding onshore archaeology was provided by both parties as part of their Local Impact Report [REP2-043] and Written Representations [REP2-053] respectively.
- 3.15.3 The main area of disagreement with these parties was related to the amount of intrusive surveys undertaken pre-application to inform the assessment but this has been addressed through the production, and agreement, of an Archaeological Mitigation Strategy (AMS) [REP8-033]. This has been developed during Examination, and ensures that all parties are content that necessary mitigation and control measures associated with archaeology and geoarchaeology are now in place and secured through the DCO by Requirement 9.



- 3.15.4 The Applicant has considered effects on onshore cultural heritage in Volume 6, Part 3, Chapter 7: Archaeology and Cultural Heritage [APP-089], which concludes that there will be no residual effects following the application of mitigation. The assessment was supported by a Historic Environment Desk-Based Assessment [APP-160] and Geoarchaeological Design Based Assessment [APP-162], an Onshore Geophysics Report [APP-161], Archaeological and Geoarchaeological Monitoring of Ground Investigation Works [APP-163] and the Onshore ECC [APP-166], an Onshore Cultural Heritage GPA3 Exercise and Technical Note Onshore Project Area [APP-164] and Archaeological and Palaeolithic Evaluation [APP-167] and [APP-168].
- 3.15.5 In addition, the Applicant produced an Outline Onshore Written Scheme of Investigation (OWSI) [REP8-028] as part of the application, which proposes a phased programme of archaeological fieldwork post-consent. Further engagement with Essex County Council (and HE) through Examination has led to the development of an overarching AMS under which the OWSI now sits.
- 3.15.6 The Applicant has detailed a staged approach to establish the significance of archaeological remains; this is first done using desk-based assessment, followed by comprehensive geophysical field surveys and limited, targeted trial trenching. The Applicant believes that the combination of desk-based assessment, geophysical surveys, aerial photographs and the limited trial trench evaluation undertaken to date provides sufficient evidence to inform the assessment and to give confidence that the proposed mitigation (and the process for dealing with archaeology post-consent, as set out in the AMS (with initial post-consent work outlined in the OWSI) represents an appropriate and achievable means of dealing with the archaeology post-consent. The approach adopted by the Applicant is in line with relevant guidance and is similar to that which has been applied and found acceptable for DCO-scale projects elsewhere. The AMS presents an overarching strategy setting out how onshore archaeology will be dealt with, post-consent. It outlines a four-phase approach see Table 3.1 for details.

Table 3.1 Phases of the Archaeological Mitigation Strategy

Phase	Description
1	Works undertaken pre-consent to date (includes desk-based work, intrusive and non-intrusive field surveys).
2	Comprehensive evaluation trenching programme. Programme of geoarchaeological monitoring of Ground Investigation works. Trenching may be applied at differing densities to allow informed decision making.
3	Formal phase of archaeological mitigation work (agreed at conclusion of Phase 2)
4	Post-excavation analysis and final reporting, appropriate dissemination and publication of all results.



- 3.15.7 The AMS identifies the roles and responsibilities of the parties to be involved, including the Statutory Consultees as well as the Applicant's advisors, and how these will be included in the decision-making required at each phase, as well as outlining arrangements for regular liaison meetings, on-site monitoring and so on.
- 3.15.8 Following detailed discussions with Essex County Council and HE, the Applicant revised the wording for Requirement 9 to better reflect the approach to archaeological mitigation, as set out in the AMS.

- 3.15.9 A key point of disagreement between the Applicant and Essex County Council and HE for onshore archaeology was related to the level of intrusive evaluation within the onshore cable construction corridor used to inform the assessment of impacts. This has now largely been addressed within the AMS. The Applicant sought to strike a balance during the pre-application phase of collecting enough survey data to understand the potential archaeological effects without causing undue impact to arable farmland (which is present along the whole route) from extensive trial trenching campaigns. The Applicant therefore focussed investigations on the OnSS area where there is less flexibility to microsite around potential archaeology.
- 3.15.10 Alongside the results of desk-based assessment, the data from the non-intrusive and intrusive surveys were considered by the Applicant sufficient at this stage to allow for assessment of the likely significance of effect resulting from the project and allow confidence that the proposals for dealing with the archaeology post-consent. The Applicant's assessment approach complies with the NPS and professional guidance which provides for a staged approach requiring investigation only in so far as is needed to establish significance, with desk based assessment as the first stage, followed by targeted investigations. NPS EN1 requires a proportionate approach and the provision of "no more" detail "than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset" (paragraph 5.9.10). The hierarchy of only moving to intrusive investigations where desk based assessment is insufficient is clearly set out in paragraph 5.9.11 of NPS EN-1. The Applicant has followed this process with desk based assessment and proportionate investigations. Sufficient detail to allow the Examining Authority and Secretary of State to understand the impact on the significance of heritage asset, as required by the NPS, is therefore before the Examining Authority.
- 3.15.11 HE and Essex County Council disagreed with this position, but with the production of the Archaeological Mitigation Strategy (AMS), they are now comfortable the appropriate controls are in place and secured. An extensive programme of archaeological surveys is planned pre-construction as detailed in the OWSI, which represents Phase 2 of the process outlined in the AMS (see Table 3.1 for more detail on the phases of the AMS).
- 3.15.12 The Applicant is comfortable that the work done to date and the AMS, OWSI, and any subsequent detailed WSIs being prepared for agreement by the relevant consultees under the overarching process set out in the AMS, represent a reasonable and achievable way of securing the archaeological interest in a proportionate manner.
- 3.15.13 The SoCGs for Historic England and the Joint Councils submitted at Deadline 9A provide the latest position with most key issues now agreed.



3.15.14 The Applicant has secured broad agreement with Essex County Council and HE regarding Historic Environment issues. In particular, the development of the Archaeological Mitigation Strategy (and associated outline Onshore Written Scheme of Investigation) has provided comfort that there is a strategy in place for identifying, evaluating, mitigating and reporting any archaeological discoveries. The AMS sets out a phased approach to mitigation, and flexibility has been embedded in the design to allow for amendments, changes in micro-siting, the potential use of Horizontal Directional Drilling (HDD) under historic assets and design solutions to limit effects and preserve assets in situ.

The Applicant's approach to assessment of effects, and the mitigation measures identified in relation to the historic environment ensure compliance with NPS EN-1.

# 3.16 SOCIO-ECONOMICS

- 3.16.1 Volume 6, Part 3, Chapter 3: Socio-economic, Tourism and Recreation [APP-085] considers the impacts of VE on construction employment, supply chain and Gross Value Added (GVA), tourism, and community and recreational facilities during the construction, operational and decommissioning phases.
- 3.16.2 Overall, the Project will support positive socio-economic outputs:
  - > An average of 340-390 FTE jobs onshore, and 105-210 FTE jobs offshore during the construction period, in a range of skill levels accessible to local people;
  - > Associated additional spending in the local economy of up to around £9.4m associated with non-local construction workers;
  - Around £17m in construction-related GVA retained in the local economy during the construction phase;
  - > Up to around 220 FTE jobs associated with the operation of the Project (direct and indirect) for 40 years;
  - A commitment via the Outline Skills and Employment Strategy to facilitate positive and meaningful commitments and activities within the Essex region by the Applicant.
- 3.16.3 No significant residual impacts in relation to socio-economics have been identified and overall, VE will have a net positive impact in relation to socio-economics throughout the delivery and operation of the project. During the construction phase this will be through supporting employment and skills, workforce spending and supply chain effects. Employment will result in temporary, low and short-term but beneficial effects particularly in the context of the provision of the Outline Skills and Employment Strategy (OSES) [APP-260] which will enhance local employment and skills opportunities for residents. Impacts on operational employment and workforce spending are assessed as negligible and not significant in EIA terms.



- 3.16.4 In the short term, there are potential limited-duration adverse effects predicted for local tourism associated with environmental effects during construction phase, which would reduce following the completion of construction. However, this may be partly offset by the potential for positive uptake of off-peak accommodation by non-local construction workers. There are also limited adverse effects identified for community facilities, recreation and public services during the construction phase, but these are considered to be minor adverse and not significant. Operational effects on these receptors are considered to be negligible.
- 3.16.5 An Outline Skills and Employment Strategy (OSES) [APP-260] was submitted as part of the application. It was designed with the ambition to support local employment by delivering and supporting initiatives that educate on careers in offshore wind and the wider renewables industry at all ages and stages in education and informs of the wide range of roles available and the career paths / routes to entry. VE's approach is to address the below themes as uncovered through research and engagement:
  - Recruitment maximise opportunities for the local region to provide employment and address under-employment and employment poverty that is prevalent within Essex, particularly Tendring. It is recognised that Tendring district is amongst the 10% of the most deprived areas in England with employment and skills factoring into this deprivation scale.
  - Transition focussing on supporting the development of a long-term pipeline of talent through the provision or support of education opportunities. ensuring the availability of a suitably skilled workforce for the deployment of offshore wind projects both in the UK and globally.
  - Diversity providing support for over 50s into employment and those with disabilities, recognising that many of the minority communities are more seriously impacted by unemployment, disadvantaged lives, disabilities, etc.
- 3.16.6 The OSES was produced in close collaboration with North Falls, as infrastructure and therefore labour and supply chain are likely to be shared. The OSES represents an opportunity, primarily for Essex County Council and TDC as host authorities of onshore infrastructure and the direct labour market, and also Suffolk County Council, but noting that the Suffolk labour market is less likely to contribute to the Project's workforce, to plan proactively for the wider delivery of clean energy and civils construction skills within their communities for this and other major infrastructure projects in the region.
- 3.16.7 Alongside other key stakeholders from the region, the Applicant has engaged with Essex County Council and TDC on the preparation of the OSES to understand the scale of the labour market, the likely economic footprint of the Project's labour draw, and the local area's pre-existing challenges in terms of access to employment and skills (recognising the significant levels of socio-economic deprivation in Tendring in particular).
- 3.16.8 Since the creation of the OSES the Applicant has continued engagement with the OSES stakeholders and newly identified organisations to continue to build relationships and understanding of the region and local issues, which will in turn inform the development a final Skills and Employment Strategy (SES) which will be secured by requirement in the dDCO.



- 3.16.9 This final strategy and the contained commitments will recognise the region's challenges and opportunities and aim to develop local capabilities to increase the local workforce available to the project. The SES dictates a requirement to remain embedded in the region as a responsible developer, collaborating with ECC and TDC and other projects throughout the pre-construction, construction and operation period.
- 3.16.10 The Applicant has considered the potential for effects on tourism and the tourist economy, in line with EN-1 paragraphs 5.13.4 and 5.13.6, but also with regard to paragraph 5.13.10 which states that "limited weight is to be given to assertions of socio-economic impacts that are not supported by evidence". The Applicant's conclusion identifies that:
- 3.16.11 The Applicant has assessed effects on onshore tourism receptors from various environmental topic areas and not identified a significant effect, and only a fraction of tourist destinations / sensitive receptors are even within proximity of the Project see IMPACT 4 (construction Effects on Tourism) within 6.3.3: Socio-Economic, Tourism And Recreation [APP-085] of the ES, which confirms that there are limited significant effects on sensitive receptors related to tourism including LVIA and transport but also air quality, noise and cultural heritage;
- 3.16.12 The construction phase is temporary and short in duration, phased and localised in terms of effects, managed by the controls measures set out in the Outline Construction Traffic Management Plan (CTMP) [REP7-052], Code of Construction Practice (CoCP) [REP7-050], and Outline Public Access Management Plan (PAMP) [REP7-054]; and

The tourist economy is inherently strong and resilient to seasonal and annual change, and is spread widely with strongest centres of employment in areas that would not experience the Project. The Applicant notes that a number of existing offshore wind projects off the Suffolk and Essex coast, including Gunfleet Sands OWF (commissioned in 2010), London Array (commissioned in 2013), Great Gabbard (commissioned in 2012), Galloper Wind Farm (commissioned in 2018) and East Anglia ONE (commissioned in 2020) are already visible from various coastal and recreational assets. These wind farms do not empirically appear have influenced tourism in the area, suggesting that the Proposed Development is unlikely to have a noticeable impact on the tourism sector.

# **RESIDUAL MATTERS**

3.16.13 Suffolk County Council have requested to be a named as a statutory consultee within the dDCO, to allow for their input into the development and implementation of the Skills and Employment Strategy. The Applicant recognises that Suffolk is within close proximity of the Project and that there is a lot of current and planned infrastructure construction activity taking place within the county over the next few years, therefore engagement with them to help inform the approach is important. The Applicant notes that only a very small proportion of the workforce is likely to be drawn from Suffolk, based on the nature of construction labour market propensity to travel to work (evidence to support this is included in the Applicant's Comments on Local Impact Reports [REP3-025] at ref. SCC.23. Within the Outline Skills and Employment Strategy (OSES) [APP-260] Suffolk County Council is a named consultee and has been a key collaborator in its development. The Applicant has committed to continue engagement regarding the development of the full Skills and Employment Strategy with all of the OSES consultees which includes Suffolk County Council.



3.16.14 The Applicant notes TDC have requested that the tourism point remains under discussion in the Joint Councils SoCG, to be submitted at Deadline 8a. As set out above the Applicant considers this to be properly considered, and no evidence has been provided to support the claim that there will be a significant impact to tourism in Tendring during the construction period.

# **APPLICANT'S POSITION**

- 3.16.15 The Applicant's assessment complies with the requirements of EN-1 paragraphs 5.13.2 to 5.13.7, noting that for each receptor and likely significant effect considered within these paragraphs, an evidence-based assessment has been undertaken resulting, through the application of appropriate embedded mitigation, in the conclusion of no significant effects.
- 3.16.16 Through the development of the Outline Skills and Employment Strategy [APP-260], the Project provides a secured and collaborative approach to "positive provisions...and legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts" in accordance with EN-1 paragraph 5.13.11. This Strategy has been carefully planned to address a key tenet of decision-making relating to socio-economic effects (EN-1, paragraph 5.13.12).

### 3.17 TERRESTRIAL NOISE

#### **SUMMARY**

- 3.17.1 Assessment of noise and vibration impacts on residential amenity from the construction, operation and decommissioning phases of VE are set out in the ES Chapter on Airborne Noise and Vibration [APP-091]. This Chapter sets out that no residual adverse effects are anticipated following the application of mitigation. Measures to control construction noise are set out in the Code of Construction Practice (CoCP) [REP5-033].
- 3.17.2 Whilst not identified in the ExA's Principal Issues, noise impacts in relation to residential amenity were raised at ISH3, ISH5 and ISH6 and covered in the SoCG with Essex County Council and TDC (the LPAs). Matters discussed included the proposed measures for construction noise, including during nighttime construction at the junction of the A120 and Bentley Road, and in response to an action point from ISH3 the Applicant submitted a note in relation to Bentley Road Evening and Night-Time Construction Noise Impacts [REP4-036]. The LPAs were content with the measures proposed for construction noise secured through the CoCP.
- 3.17.3 At ISH3 the ExA raised queries regarding the assessment for cumulative operational noise in relation to the existing Ardleigh substation, the proposed OnSS and the proposed substations for North Falls and EACN. The LPAs also raised concerns regarding cumulative operational noise and requested that the Applicant commit to periodic noise monitoring during the operational phase.



3.17.4 The Applicant provided 10.36 Onshore Substations Operational Noise and the Outline Noise Complaints Protocol [REP7-080], which is a tripartite document with North Falls and National Grid. The purpose of this document is to provide reassurance that all three substations can operate with a limit on total noise from all three of 35 dB, with lower individual noise limits for each substation alone (secured through their respective DCO requirements), and the process that would be followed in the event of a complaint. This document was produced in response to the discussion at ISH3, submitted at Deadline 5 and updated at Deadline 7 to respond to queries from the LPAs and the ExA raised at ISH 6.

### **RESIDUAL MATTERS**

3.17.5 The Applicant does not consider there to be any residual ongoing points of discussion in relation to terrestrial noise assessment or proposed mitigation and controls measures during construction and the noise limits proposed at the nearby properties during operation. The Applicant does however, note that the Local Authorities, as set out in the SoCG submitted at Deadline 8A, are not fully comfortable with the Outline Noise Complaints Protocol [REP7-080], particularly the amount of time proposed to undertake the investigation. The Applicant notes that as this is a tripartite document produced to provide further explanation during the examination of how the process would work, further discussion would happen on the document during the North Falls and Norwich to Tilbury DCO examinations where Essex County Council and TDC will have opportunity to provide feedback and the document to evolve. The Applicant believes its approach is robust but notes that the protocol may evolve through these subsequent Examinations. The Applicant notes that the DCO requirement secures the need for the protocol to be produced and approved prior to operation of the substation.

### **APPLICANT'S POSITION**

3.17.6 The Applicant has secured broad agreement on the assessment of terrestrial noise and the proposed mitigation and control measures. In line with the conclusion of the ES the Applicant has demonstrated compliance with the NPS EN-1 and EN-5 through the assessment of impacts and securing appropriate mitigation. The mitigation measures associated with construction noise are set out in the Code of Construction Practice [REP7-050], secured through Requirement 9 in the DCO and are agreed by all parties. The controls for operation noise are secured through strict limits at receptors, set out in Requirement 15 in the DCO. These limits also ensure that the cumulative noise with National Grid and North Falls is appropriately managed and in line with the assessment in the ES. In addition, the commitment to a noise investigation protocol (an outline tripartite version was produced to support the examination) will set out how complaints and ongoing compliance will be managed.



#### 3.18 FARMING

#### **SUMMARY**

- 3.18.1 The ES Chapter on Ground Conditions and Land Use [APP-087] assesses the impacts of VE from the landfall, the onshore ECC and the OnSS during the construction, operation and decommissioning phases. This Chapter sets out that no residual impacts to farming (including ground conditions and land use) have been identified following the application of mitigation in the Code of Construction Practice (CoCP) [REP7-050] and the OLEMP [latest Revision F submitted at Deadline 8a]. Impacts from cable laying within the onshore ECC are temporary in nature, with impacts from the OnSS being considered permanent due to the lifetime of the OnSS.
- 3.18.2 With regard to impacts on agricultural land, VE would utilise only a small proportion of Best and Most Versatile (BMV) agricultural land and is not considered to compromise food security. The ES Site Selection and Alternatives chapter [APP-066] sets out at paragraph 4.10.2 that "One of the key technical requirements was for the OnSS to be within around 3 km (maximum 5 km) from the grid connection point to minimise the length of the 400 kV connection." All of the potential sites considered within this area are BMV land and as such impacts on BMV cannot be avoided. The OLEMP [latest Revision F submitted at Deadline 8a] includes a commitment to seek to minimise the impact to arable farm land as part of the OnSS landscape proposals "Containment of planting within shelterbelts to minimise the loss of agricultural land, by keeping fields in productive farming."
- 3.18.3 The Applicant used provisional NE Agricultural Land Classification (ALC) mapping to assess the grades of land crossed by the onshore works. The OnSS site is assessed as being permanently lost to agricultural use due to the length of time for which the substation will be required. Sub-grades are to be confirmed during pre-construction soil surveys in order to inform soil management during construction, secured in the CoCP [REP5-033]. The Applicant is not seeking to store soils onsite during the operational phase as soils stored would be rendered unsuitable for agricultural use due to the duration of the storage. The CoCP was updated at Deadline 7 to include commitment on the depth of burial for the cable ducts in agricultural land to ensure the potential impact on farming practices were minimised.
- 3.18.4 The Applicant has provided a Minerals Resource Assessment [APP-235] to consider the potential for sterilisation of sand and gravel within the DCO limits. This assessment concluded that VE is long-lived but temporary in nature, and that the potential to sterilise minerals would occur only during the lifetime of the project. This position is agreed with Essex County Council and TDC in the SoCG [REP5-054].
- 3.18.5 During the examination IP's raised a number of concerns about the impacts to soils from stripping and storing, and affecting the drainage. The Applicant revised the CoCP to address these points. Longer term IP's were concerned over the impact to farming practices from the burial depth of the cables, the Applicant notes it needed to maintain flexibility around the burial depth to manage constraints, such as ground conditions or existing drainage, the Applicant will continue to engage with IP's on this and has sought to provide additional commitments within the CoCP, updated at Deadline 8A at the request of the ExA.

# **RESIDUAL MATTERS**

3.18.6 The Applicant does not consider there to be any residual ongoing points of discussion in relation to farming.



#### APPLICANT'S POSITION

3.18.7 The Applicant appreciates the valuable feedback received from Interested Parties (IPs), especially landowners, throughout the consenting process. Following updates to the CoCP during the Examination, which addressed drainage, burial depth of ducts, and soil management measures, the Applicant believes that construction impacts will be appropriately managed in accordance with EN-5. While the loss of Grade 1 BMV land at the OnSS is unavoidable due to the prevalence of BMV land in the project search areas, the Applicant has made efforts to minimise BMV land take, particularly around the OnSS where land will need to be retained for the substation and screening planting. The OnSS has been co-located with North Falls' substation to reduce BMV land take and screening planting has been confined to field margins to support farming practices and agricultural food production as much as possible, whilst ensuring the necessary screen planting is implemented to minimise the impacts on visual receptors.

# 3.19 HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK

#### SUMMARY

- 3.19.1 During Examination the Environment Agency (EA) raised a number of points in their RR [RR-026] regarding the potential impacts of drilling and the potential release of fluids as a result of frac-out, including where works are undertaken under the Holland Haven SSSI. The Applicant engaged with the EA and revised the CoCP [REP5-033] to ensure that measures were secured to reduce the potential for and mitigate frac-out.
- 3.19.2 The EA also raised concerns regarding the potential impacts to watercourse/riparian habitat from run off from trenchless crossings undertaken in close proximity, and concerns regarding the amount of water required for HDDs. The Applicant included additional commitment in the CoCP to a 10 m standoff from HDD compounds and clarified that a supply of water would be required to undertake HDD and that works would comply with Schedule 5 of the Water Abstraction and Impounding (Exemptions) Regulations 2017. It is proposed to use a hybrid of abstraction from local water source(s) if available of up to 20m<sup>3</sup> and tankering in any additional water over and above this, which avoids the need for an abstraction licence. This approach seeks to reduce the number of HGVs arriving at site with balancing the impact on local water supplies/minimising the need for an abstraction licence. The Applicant has suggested a hybrid of abstraction from local water source(s) if available of up to 20m<sup>3</sup> and tankering in the remaining water to negate the need for an abstraction licence. Abstraction Licences if required would follow the standard process and be put in place by the Contractors. The Applicant's update to the CoCP [REP5-033] included identification of the potential need for abstraction licences.
- 3.19.3 The EA and the local authorities also commented on the Flood Risk and Emergency Flood Plan; however the revised CoCP [REP5-033] commitments to the production of emergency procedures and for the Principal Contractor(s) to sign up to the EA Flood Alerts and Floodline flood warning services which addresses this.
- 3.19.4 At Deadline 7 Essex County Council raised that the temporary drainage strategies would need to be approved via requirement. As set out in the SoCG submitted at Deadline 8A it is now agreed that this can be managed through the CoCP and additional agreed text added to the CoCP submitted at Deadline 8A.



- 3.19.5 The Applicant provided a Groundwater Risk Assessment [APP-159] as part of the Application. This was developed as effectively a "preliminary" groundwater risk assessment to identify all water supplies which could theoretically be impacted by the construction activities and to help inform the extent of the more comprehensive groundwater risk assessment to be developed at a later date.
- 3.19.6 Queries arose during Examination from the Environment Agency (EA) in their RR [RR-026] in relation to the use of the Bayer and Sichardt formulas and their limitations as applied within the groundwater risk assessment. The Applicant agrees that more comprehensive assessment would be required if abstraction licences were required and considers that the use of the formulas was appropriate as a worst-case assessment. The Applicant included details on the limitations in the updated Groundwater Risk Assessment submitted at Deadline 6 [REP6-017] to address this point.
- 3.19.7 The EA also noted that piling may be required during the construction phase, and sought to be consulted on any piling works that could affect water quality or affect groundwater flow mechanisms. The Applicant updated the CoCP [REP5-033] to include an additional section to secure groundwater controls, including the commitment to undertake a Piling Risk Assessment in accordance with the relevant guidance, should a piled foundation be required for the onshore substation. The potential need for piling has also been included in the updated groundwater risk assessment,
- 3.19.8 The updated Groundwater Risk Assessment submitted at Deadline 6 [REP6-017] has included an updated risk assessment which incorporates survey and monitoring of identified groundwater abstractions and has updated the risk assessment to include assessment of potential risk from general construction, use of cement bound sand, potential for 'frac-out' to occur and potential impact from piling (if needed).
- 3.19.9 A proposed outline groundwater monitoring plan has been incorporated into the updated Groundwater Risk Assessment submitted at Deadline 6 [REP6-017], included as Appendix 02 of that report and secured through a revised DCO requirement. A clean standalone version of Appendix 02 has also been submitted at Deadline 8 to be a certified document as 10.65 Outline Groundwater Monitoring Plan [REP8-039]. This addresses one of the primary recommendations from the original groundwater risk assessment.

### **RESIDUAL MATTERS**

3.19.10 The Applicant does not consider there to be any residual ongoing points of discussion in relation to hydrology. Hydrogeology and flood risk.

# **APPLICANT'S POSITION**

3.19.11 No significant issues have been raised in respect of hydrology, hydrogeology and flood risk, and in line with the conclusion of the ES the Applicant has demonstrated compliance with the NPS EN-3 through the assessment of impacts and securing appropriate best practice construction principals through the Code of Construction Practice [REP7-050]. Monitoring of groundwater to ensure the efficacy of construction controls is included within the groundwater monitoring plan [REP8-039].



#### 3.20 TERRESTRIAL TRAFFIC AND TRANSPORT

#### **SUMMARY**

- 3.20.1 The Applicant has engaged with Essex County Council, National Highways and Suffolk County Council throughout the Examination to discuss and agree matters raised by each stakeholder. This has included regular meetings with each stakeholder and the submission of additional information to enable the positive resolutions by each stakeholder to each of the matters raised.
- 3.20.2 The ES Chapter on Traffic and Transport [REP1-018] sets out the assessment for onshore traffic and transport impacts for the construction and operational and decommissioning phases of VE and has been prepared in accordance with NPS EN-1, as summarised in Table 8.1 of the Chapter. No significant effects have been identified taking the Outline Construction Traffic Management Plan (CTMP) [REP7-052] and Outline Workforce Travel Plan (WTP) [REP7-056] into account.
- 3.20.3 Paragraphs 8.4.47 8.4.48 of this Chapter set out that effects associated with Operations and Maintenance (O&M) of the onshore infrastructure were scoped out given that the expected number of vehicle movements would be negligible. These paragraphs identify potential movements for this phase as being one annual inspection/testing visit to each cable joint pit/transition joint bay by personnel using a LGV; and weekly visits to the OnSS by approximately two vehicles (approximately eight traffic movements per week). During two-week annual maintenance period this would increase to approximately four to eight traffic movements per day.
- 3.20.4 This Chapter also assesses impacts on Public Rights of Way (PRoW), concluding that no significant effects have been identified for PRoW taking the Outline Public Access Management Plan (PAMP) [REP7-054] into account. It was identified that some changes had occurred to the network of PRoW following the submission of the DCO application; however the results of the assessment of impacts on PRoW did not change.
- 3.20.5 The ES Chapter on Traffic and Transport outlines that as the preferred base port for the offshore construction and operation and maintenance activities of the project is not known as this would be decided post-consent, an assessment of these vehicle movements does not form part of the Applicant's Traffic and Transport assessment and would instead be covered by the chosen port's own approval process, which is standard practise. No traffic or transport impacts have been assessed for offshore activities as materials are shipped from supplier facilities to the offshore construction site.
- 3.20.6 The cumulative assessment with North Falls is based on simultaneous co-ordinated construction and reliance on shared infrastructure, including shared construction accesses, haul road crossings, temporary construction compounds and haul roads. No significant cumulative effects have been identified, taking into account the Outline CTMP, WTP and PAMP.
- 3.20.7 The Applicant engaged with Essex County Council and TDC through the preapplication stage, and developed a Statement of Common Ground with these parties during Examination. Primary issues raised by these stakeholders related to the sufficiency of measures in the Outline CTMP, WTP and PAMP, which were updated and submitted into the Examination at Deadline 5, supported by a revised Temporary Speed Reduction Plan [REP5-006]. The dDCO was also updated at this deadline to align with the temporary speed limits sought by Essex County Council.



- 3.20.8 Essex County Council also raised concerns regarding cumulative impacts and the Applicant accordingly provided further information in the Cumulative Effects Assessment Methodology [REP4-009] submitted at Deadline 4 and included within the revised ES Chapter submitted at Deadline 7 [REP7-031]. The cumulative impacts identified have not shown to be severe as per Paragraph 5.14.21 of NPS EN-1.
- 3.20.9 As outlined in the Applicant's Summaries of Oral Submissions ISH5, ISH6, CAH3 and ISH7 [REP6-045], the Applicant and National Highways have met a number of times to progress various elements, such as the traffic and transport assessment, Protective Provisions, interactions with the Strategic Road Network and Abnormal Indivisible Loads (AIL). The Applicant undertook a Road Safety Audit for the A120/Bentley Road junction improvement, which was attended by National Highways with the audit report subsequently submitted to and approved by National Highways.
- 3.20.10 The Applicant engaged with East of England Ambulance Service Trust (EEAST), Essex County Fire and Rescue in regard to emergency planning and impacts of VE on the transport network. All matters with these parties are agreed, as set out in the SoCGs with EEAST [REP1-053], Essex County Fire and Rescue [REP5-055] and Essex Police [REP4-031] following updates to the CoCP and CTMP and WTP.
- 3.20.11 In response to discussions at ISH1, the Applicant submitted a Technical Note Abnormal Indivisible Loads (AIL) [REP2-029] to clarify and confirm the Applicant's access strategy. This note sets out the different categories of AIL, signposts to where they were assessed in the ES and controlled in the Outline CTMP, and considers tracking, routeing and an assessment for transformer delivery.
- 3.20.12 The Applicant also attended a meeting with Suffolk County Council Highways at the end of November to discuss issues raised during the Examination. The main concern related to management of construction port traffic and as mentioned previously this would fall under the management of the chosen port, not the Applicant.
- 3.20.13 The Applicant concludes that through the updates to the ES traffic and transport documents and associated management plans (outline CTMP, WTP and PAMP) to secure the mitigation and control measures (in accordance with NPS EN-1), and agreement enforcement limits during the examination have addressed the issues raised by the various stakeholders.

## **RESIDUAL MATTERS**

- 3.20.14 The Applicant has agreed all matters raised by National Highways and Essex County Council following comprehensive and positive dialogue with each stakeholder.
- 3.20.15 Whilst he Applicant has not received final comments from National Highways regarding the information provided for the assessment of traffic impact at three junctions on the A120 (Harwich Road, Bentley Road and the B1035), based on the comments received and subsequent update of information, National Highways confirmed that this matter is now resolved.
- 3.20.16 The Applicant notes, and is committed to, the need to continue to monitor the progress of the North Falls Offshore Wind Farm and future National Grid Electricity Network East Anglia Connection Node DCO applications and continue to engage with each project to proactively identify where co-ordination is required should there be any construction programme overlap with the Project.



- 3.20.17 The Applicant remains in disagreement with Suffolk County Council regarding the need for a Port Construction Management Plan similar to those produced for EA1N and EA2.
- 3.20.18 The Applicant submitted the Technical Note Use of Ports for Construction [REP5-072] which notes that the majority of offshore wind DCOs do not include reference to, or commitments for the submission of a Port Traffic Management Plan/Construction Management Plan. Recent Offshore Wind DCOs along the East Coast of England, including the Hornsea 4 project and the Sheringham Shoal and Dudgeon extension project do not include reference to specific port management plans.
- 3.20.19 The Technical Note also notes that the requirement to produce such a plan has proved difficult to implement on other schemes as a number of the local authorities are 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 (because the port traffic is considered and controlled under the port's own planning requirements). The Applicant's position is that there is no reason why project-related traffic should be considered any differently or cumulatively to any other user of an existing port.
- 3.20.20 A detailed response to this point is set out in the Applicant's Comments on Local Impact Reports [REP3-025] submitted at Deadline 3. The Applicant notes that Essex County Council agree with the Applicants position on the need for a Port Construction Management Plan or similar to be secured through the DCO [REP7-091].

#### **APPLICANT'S POSITION**

3.20.21 The Applicant has provided a robust assessment of traffic and transport, which has been shown to be compliant with NPS EN-1 and concludes that the anticipated construction traffic would not lead to any significant effects and can be suitably controlled and monitored through the implementation of a Construction Traffic Management Plan, Workforce Travel Plan and Public Access Management Plan for each stage of the works. The conclusions drawn have been comprehensively and positively discussed between the Applicant and NH, ECC and SCC, with only one residual matter of disagreement. On the need for a port travel plan or similar the Applicant sets out that a requirement cannot be imposed unless it is demonstrated to be necessary. The Applicant maintains that the requested requirement is not necessary, does not meet the tests for imposition and cannot be properly included in DCO.

### 3.21 AIR QUALITY

- 3.21.1 In compliance with NPS EN-1 the Air Quality assessment [APP-092] considered the potential effects of air quality associated with the Project that may occur across the full extent of the lifecycle. It is informed by a series of worst-case assumptions. The approach has been informed by the EIA consultation process and the following topics were scoped into the assessment:
  - > Construction Dust:
  - > Road Traffic;
  - > Machinery (NRMM); and
  - Offshore Activities.



- 3.21.2 Measures with respect to minimising construction phase dust and machinery emissions are included in the CoCP, whereby following implementation effects were found to be not significant. Measures include best practice controls such as damping down dusty activities and planning site layouts to avoid dusty activities close to sensitive receptors. They are also complemented by a monitoring and communication framework to provide assurances.
- 3.21.3 The assessment concludes that air quality impacts on both human and ecological receptors are not significant across all topics. Furthermore, no concerns regarding air quality were raised during the examination process.

# 3.22 HUMAN HEALTH

- 3.22.1 The Human Health and Major Disasters Chapter [APP-095] draws together the overlapping environmental and socio-cultural ES technical disciplines pertinent to public health (health protection, promotion and care). The scope and focus of the assessment were defined through formal scoping with key stakeholders and refined further through community engagement to provide outputs geared to not only meet planning rigour, but to also explore and address wider community concerns, that if left unaddressed, can often lead to unnecessary stress and anxiety through the DCO Process.
- 3.22.2 The assessment covered a wide range of health pathways associated with changes in air quality, noise, transport, ground and surface water through to social connectivity, physical activity, employment and wider societal benefits. During examination, further clarification was provided directly to Interested Parties on Electro-Magnetic Fields (EMF), where all infrastructure proposed will comply with International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidance protective of health, and does not present any measurable risk to public health.
- 3.22.3 A number of meetings were held with the emergency services, where it was demonstrated that neither construction or operation will impact on demand or response time with updates around engagement to the CoCP [REP7-050], these agreements are set out in the SoCGs with East of England Ambulance Service [REP1-053], Essex Police [REP4-031] and Essex Fire and Rescue [REP5-055].
- 3.22.4 All health matters are resolved, all potential hazards have been addressed to the satisfaction of all regulatory authorities, and the societal value of the renewable energy project is recognised.

### 3.23 CLIMATE CHANGE

3.23.1 The total emissions for the Worst-Case scenario assessed within the GHG Assessment [APP-094] for VE are 4,095,000 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e). The majority of emissions from VE would occur during the construction phase of the project. The UK carbon budget for 2028 to 2032 is 1,725 MtCO<sub>2</sub>e, meaning that the construction of VE would only contribute to 0.24% of the carbon budget during the construction phase.



- 3.23.2 VE is anticipated to 'pay-back' the emissions associated with the project in approximately two years. The energy produced after two years of operation, would then deliver annual savings for UK energy generation. Consequently, the effects of VE are deemed to be of beneficial significance regarding the reduction of GHG emissions, when compared to the baseline scenarios as shown in Table 1.8 in Climate Change [APP-093], in accordance with IEMA guidance (2022). This is considered to be significant (beneficial) in EIA terms.
- 3.23.3 NPS EN-3 underlines the importance of generating electricity from renewable sources, stating that it is a crucial element in the government's development of a low -carbon economy. It highlights the ambitious targets in place and the necessity for a substantial increase in large-scale renewable energy infrastructure. VE's two-year carbon pay-back period underscores the importance of renewable energy infrastructure in achieving these targets.

#### 3.24 WAKE LOSS EFFECTS

- 3.24.1 Given the complexity and novelty of this topic, the Applicant wishes to particularly stress that these closing submissions on wake effects are not a substitute for consideration of the Applicant's detailed submissions.
- 3.24.2 East Anglia Two Limited (EA2 Ltd) submitted a brief Relevant Representation [RR-022] and a Written Representation [REP2-079] at Deadline 2 which argued that the WTGs associated with VE will cause wake loss and that given the proximity of the EA2 DCO being just over 5km from the VE Order limits, it was EA2 Ltd's view that the loss would be material. This was the first point that EA2 Ltd had raised the question of wake loss with the Applicant.
- 3.24.3 Five Estuaries has been in the public domain since May 2018, as explained in the Applicant's note on The Crown Estate leasing process [REP6-047]. Five Estuaries signed its TCE Agreement for Lease in 2021. EA2 has its consent, but is not in construction, let alone operational. EA2 Ltd has been content to continue to promote the EA2 project knowing full well about Five Estuaries, including successfully bidding for a Contract for Difference
- 3.24.4 No other offshore wind farm or organisation has submitted representations in relation to wake effects.
- 3.24.5 The Applicant and EA2 Limited fundamentally disagree about the application of EN-3 to this situation and in particular whether Five Estuaries was obliged to carry out a wake assessment in relation to its potential effects on EA2 and (depending on its results) contemplate mitigation measures to seek to reduce such effects.
- 3.24.6 It is notable that when EA2 Ltd sought and obtained its own DCO, it did not follow the approach it urges so insistently on Five Estuaries, despite the fact that the NPS paragraphs relied on by EA2 Ltd are in the same terms as the provisions set out in the 2011 NPS, which applied when the EA2 DCO was granted. EA2 will have wake effects on the operational Greater Gabbard (operational from 2012) and Galloper (operational from 2018) wind farms, in particular. These have not been taken into account by EA2 Ltd in the development of EA2.



- 3.24.7 If the effect of those NPS provisions was to require any new offshore wind farm development to assess wake loss effects on existing or emerging wind farms, that would have become a well-established practice in the industry by this point. That is simply not the case. That is not how those policies have been applied historically and there is no basis for a change in interpretation now.
- 3.24.8 To the extent that the previous Secretary of State has applied those NPS provisions differently in the Awel y Môr decision, to imply that wake assessments are now required, the Applicant asks that the new Secretary of State reconsiders that approach. The implications of requiring wake assessments and potential mitigation were not considered in the Awel y Môr decision. There has been extensive consideration of these issues in the various Examinations under way in recent months (Mona, Morgan, Morecambe, Outer Dowsing, Dogger Bank South and Five Estuaries). These Examinations have drawn out a range of issues which require a considered and consistent approach by the Secretary of State. Five Estuaries is the only example where the project raising wake loss concerns has not even commenced construction. The Applicant would stress that this requires special consideration in contrast to cases like Mona and Morgan (and, indeed, Awel y Môr) where the projects raising concern are operational.
- 3.24.9 One key point in that consideration is the obvious unfairness of an unconstructed project (which did not consider wake effects on other operational and emerging projects) arguing that a new project should do so in relation to it. The Applicant has highlighted this issue a number of times and it is notable that EA2 Ltd has consistently declined to provide a substantive response to that point.
- 3.24.10 The Applicant highlighted in [REP6-045] (Summary of hearing) the range of complex technical and policy issues that would need to be considered in formulating a **coherent industry approach** to wake loss, which the Applicant argues should be addressed outside the planning system, whether through the Clean Power 2030 Action Plan or otherwise. This was the generally accepted position before the Awel y Môr decision and it should be restored by the new Secretary of State.
- 3.24.11 The Applicant has made the case in [REP3-024] and in other submissions that if the Secretary of State applies the policies on 'other offshore infrastructure and activities' to offshore wind farm projects, then he is directed by para 2.8.342 of NPS EN-3 to take a pragmatic approach in relation to the potential effects of an offshore wind farm project on other offshore infrastructure. This pragmatism is particularly important in relation to projects within the same asset class, where there is already a sophisticated quasi-regulator (The Crown Estate, which works closely with DESNZ on the design of new seabed licensing rounds) setting the parameters for the location of new projects in relation to existing or emerging ones.
- 3.24.12 These parameters included specifying a buffer distance to take account of wake effects and other considerations. The Applicant complied with TCE's buffer distance for Extension projects of 5km, which is a fundamental point in front of this Examination. In addition to complying with the buffer, the Applicant refined the northern array boundary during the pre-application consultation phase, which had the effect of increasing the average distance between the two projects. This change was made following stakeholder engagement on shipping and navigation impacts and was submitted as part of PEIR consultation, to which EA2 Limited was invited to comment.



- 3.24.13 The EN-3 policies in contention are stated to apply to 'existing offshore infrastructure' (which EA2 is not, as it has not been constructed) or offshore 'activities' where it is clear from paragraph 2.8.44 that these are not hard infrastructure, but mobile activities (the examples given are recreation and aviation). Accordingly, there is an important prior question as to whether the policies are engaged at all. Where infrastructure has not been constructed, there is clearly an opportunity for its promoters to take into account the new offshore wind farm proposal, which would be an obvious reason for the policy to not apply to unconstructed infrastructure.
- 3.24.14 In the alternative, if the policies do apply, the Applicant highlights that para 2.8.2 of NPS EN-3 urges developers to maximise offshore wind project capacity within the technological, environmental, and other constraints of the project. This is a fundamental point. To date, all offshore wind projects have been designed to maximise their Annual Energy Production to make the greatest contribution to government renewable energy targets. A departure from this approach would need the most careful consideration.
- 3.24.15 NPS EN-3 also expressly recognises that new offshore wind development will take place in or close to areas where there is other offshore infrastructure (para 2.8.196 and 2.8.197) and that there is potential for adverse impacts on those activities as a result.
- 3.24.16 TCE's Extension separation criteria, as referenced above, are also important in considering the correct application of paragraphs 2.8.197 and 2.8.198 of NPS EN-3. As already noted, TCE has a key role in the offshore wind industry as the authority responsible for leasing rounds. TCE has a strategic role to play in the development of the industry, part of which is implemented through the criteria that it imposes for each leasing round. NPS EN-3 should be read in light of that wider strategic context, and the exercise already undertaken by TCE in assessing what separation distance was acceptable for the Extension projects.
- 3.24.17 Whilst paragraph 2.8.197 of NPS EN-3 refers to an assessment of potential effects on existing infrastructure, paragraph 2.8.198 specifies that such an assessment should be undertaken 'in accordance with the appropriate policy and guidance for offshore wind farm EIAs.' In the case of wake effects, the Applicant is not aware of any policy or guidance which requires such an assessment to be carried out as part of offshore wind farm EIAs, or how an assessment ought to be undertaken. This point is considered further below. As already noted, there is a clear argument that paragraph 2.8.197 is not engaged at all because EA2 is not 'existing operational Infrastructure' and it is not an 'activity' in the sense intended. This is, first, because it is clear the NPS is drawing a distinction between hard infrastructure and mobile activities and, second, because there is no licencing regime that regulates the extraction of power from the wind (as distinct from, for example, oil and gas extraction).



- 3.24.18 Notwithstanding the lack of policy need for an assessment to be undertaken the various submissions by the Applicant and EA2 Ltd in the Examination have highlighted the **complexity** in undertaking an assessment. EA2 Ltd has submitted a wake assessment [REP2-079] and the Applicant has highlighted a range of issues with this [REP7-087]. The complexity relating to wake assessments is particularly the case where neither offshore wind farm has been constructed as here. There is a large range of modelling options (model types, developers, settings, assumptions) and no currently accepted industry standard model or methodology. There is also no recognised approach to assessment (e.g. IEMA guidance) that allows any robust analysis to be undertaken.
- 3.24.19 At Deadline 8 [REP8-044] EA2 Ltd has claimed that the Applicant has not engaged with the detail of the wake effects issue. All it means by that, in reality, is that the Applicant has not engaged in the way EA2 Ltd thinks the Applicant should have done. It is self-evident that the Applicant's technical wake effect submissions are substantial and highly pertinent. The Applicant would particularly highlight its submissions regarding the reciprocal impact of EA2 on Five Estuaries in [REP8-038] and its observation that the magnitude and range of impacts (on an order of magnitude approximation) are the same as that predicted by the EA2 wake effects assessment (putting aside the various methodological points the Applicant has made on that assessment). The Applicant would highlight that EA2 Ltd does not include North Falls in its consideration of 'up wind' projects in paragraph 2.4 of [REP8-044], for reasons which are not stated. The Applicant would also highlight that – despite the argument EA2 Ltd makes in section 3 of [REP8-044], its own wake assessment acknowledges that the models used "have not been validated for turbines of this size, or for very large clusters of wind farms, such as the combined cluster of Galloper, Greater Gabbard and Five Estuaries". (It is not clear why North Falls is not referenced here.) This is clearly at odds with its claim at paragraph 3.5 that the wake modelling used is appropriate, and the implication that the referenced work between RWE and DNV somehow endorses it, which is not accepted.
- 3.24.20 The Applicant submits that the planning system should operate consistently and fairly. It has promoted Five Estuaries on the basis that it knew and accepted the presence of EA2 as an emerging project, with related uncertainties to be managed. It knew there would be wake effects from EA2 and EA2 Ltd should accept the same in relation to Five Estuaries, as the Applicant submits it would have done but for the unexpected outcome in Awel y Môr. If the system is to be changed then it should apply to both projects in a case like this, not just one. Accordingly, the general submissions EA2 Ltd makes at Deadline 8 [REP8-044] around the creation of inappropriate uncertainty and the difficulties of uncertainty are rejected.
- 3.24.21 The Applicant would highlight that EA2 Ltd is, by contrast, advocating the creation of inappropriate material uncertainty for Five Estuaries by advocating a wake effects requirement. This could have substantial consequences for Five Estuaries for the reasons explained further below, particularly given the impact of mitigation measures on the AEP of Five Estuaries (see [REP7-087]). The Applicant submits that the overriding policy consideration should be to maximise the aggregate AEP of projects to contribute towards government targets.



- 3.24.22 The Applicant has highlighted in [REP8-038] that the wake effect assessment demonstrated that if any potential effects on the EA2 energy production are taken into account in the assessment of the Greenhouse Gas abatement it would be well within the existing uncertainties of that assessment, meaning the results of that assessment would remain unchanged, showing an overwhelmingly positive benefit from Five Estuaries. This means that the renewable energy benefits and HRA/IROPI case made by the Applicant remains unchanged.
- 3.24.23 EA2 Limited has argued that a requirement similar to that in Awel y Môr should be imposed. The Applicant does not believe that such a DCO requirement is either justified or workable, and would fail the tests set out in paragraph 4.1.16 of EN-1 that a requirement must be necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in all other respects.
- 3.24.24 That lack of policy in relation to wake loss and guidance as to how it might be assessed and taken into account is also of relevance to the drafting and benefit of a DCO requirement which might seek to control design parameters (similar to that included in the Awel y Môr DCO) in order to address EA2's concern.
- 3.24.25 It is completely unclear how any requirement would work in the absence of guidance that sets out what constitutes an effect which merits attempts at mitigation, or what change against a baseline assumed mitigation might need to deliver against the impact any mitigation would have on the new generation delivered by Five Estuaries.
- 3.24.26 There is considerable doubt as to how such a requirement would be discharged and how it could be enforced by the Secretary of State, thereby failing two of the relevant tests. The Applicant has explained in [REP7-087] and [REP8-038] that, in any event, the theoretical mitigation options available would reduce the overall AEP in aggregate. In other words that any mitigation imposed would have a significantly more detrimental impact on the energy generation from Five Estuaries than any benefit that may be accrued by EA2, leading to an overall net reduction in AEP. Such a requirement is unnecessary to make the development acceptable in planning terms, and wholly unreasonable. The unreasonableness of such a requirement is reinforced by the unfairness of such a harmful requirement being imposed on Five Estuaries, when no such requirement was imposed on EA2.
- 3.24.27 The Applicant does not consider a commercial agreement is suitable or necessary in this matter, given that it has followed normal practice and respected TCE's buffer distance.
- 3.24.28 The Applicant submits that the Secretary of State can and should conclude that no detailed wake loss assessment is required to be prepared by the Applicant, that Five Estuaries has complied with the terms of the NPS and the EIA Regulations and that no DCO requirement relating to wake loss is necessary or justified, when taking into account the tests in paragraph 4.1.6 of EN-1.



# 4. HABITATS REGULATIONS ASSESSMENT

## 4.1 SUMMARY

- 4.1.1 This section of the Closing Statement provides the Applicant's position in relation to Habitats Regulations Assessment (HRA) and potential Adverse Effects on Integrity (AEoI) of European Sites. It highlights where disagreement remains with NE on HRA matters. Other areas of discussion with NE are set out in Section 7.
- 4.1.2 The Applicant has followed all three stages of the HRA process and has prepared a Report to Inform Appropriate Assessment (RIAA) to support the application for VE. The relevant documents are as follows:
  - > Volume 5, Report 4: Report to Inform Appropriate Assessment [REP1-016];
  - > Volume 5, Report 5.5: Derogation Case [AS-003].
- 4.1.3 A summary of the conclusions of the RIAA are set out below. These are:
  - Potential for AEoI to the Alde-Ore Estuary (AOE) Special Protection Area (SPA) and Ramsar due to collision risk of Lesser Black Backed Gull (LBBG) during the operation and maintenance phase. The Applicant has prepared a derogation case to demonstrate that the three derogation tests can be met for LBBG.
  - In terms of the Flamborough and Filey Coast SPA (FFC SPA), although the SoS has concluded an AEoI for kittiwake for a number of recent projects, the contribution from VE alone across all bio-seasons equates to one (0.8) individual per annum (representing an increase of just 0.006% in baseline mortality). It is considered that this level of impact is not of sufficient magnitude to make a material contribution to natural kittiwake mortality rates at this site and, therefore, a conclusion of no AEoI has been reached for VE alone and in-combination. Kittiwake in the FFC SPA has therefore been included in the derogation case on a 'without prejudice' basis for if the SoS concludes otherwise.
  - For FFC SPA guillemot and razorbill the contribution from VE alone is less than one (0.8 and 0.2 respectively) individual per annum, representing an increase in baseline mortality of 0.009% for guillemot and 0.003% for razorbill. It is considered that this level of impact is not of sufficient magnitude to make a material contribution to natural guillemot and razorbill mortality rates at this site and, therefore, a conclusion of no AEoI has been reached for VE alone and incombination. Guillemot and razorbill have therefore been included in the derogation case on a 'without prejudice' basis for if the SoS concludes otherwise.
  - > For Margate and Long Sands (M&LS) SAC, the final route passes through the SAC overlapping with 1.26 km2 (0.11 % of the total SAC) of the site, (the tip of the most northerly of the nine sandbanks identified within the SAC (Long Sands Head)) being located within the offshore ECC. Although the Applicant's RIAA concludes no AEoI, NE does not agree. Therefore, the M&LS SAC is included in the derogation case on a 'without prejudice' basis for if the SoS concludes otherwise.



- 4.1.4 The Applicant strongly believes that if the SoS does find AEoI in respect of the AOE SPA, AOE Ramsar, the FFC SPA or the M&LS SAC, then, as presented in this document, there are no alternative solutions to VE, there are imperative reasons of overriding public interest for VE, and the policy objectives it will serve, that outweigh the risk of any adverse impact on these sites. Finally, there are deliverable and appropriate compensatory measures secured within the supporting documents.
- 4.1.5 The Applicant provided the Without Prejudice HRA DCO Schedules [REP5-090] at Deadline 5. The Applicant does not concede that there is any adverse effect on integrity for any national site in relation to the species to which the provisions apply, but has provided the wording to be inserted in Schedule 13 of the dDCO by the SoS if required.
- 4.1.6 Evidence, mitigation and monitoring is detailed in the following documents:
  - Volume 5, Report 5.5.1: Benthic Compensation Strategy Roadmap Revision C [REP8-008];
  - > Volume 5, Report 5.2.2: Outline Benthic In-Principle Monitoring Plan [REP5-013];
  - Volume 5, Report 5.5.3: Lesser Black-Backed Gull Compensation Evidence, Site Selection and Roadmap [REP5-015];
  - Volume 5, Report 5.5.4: Kittiwake Evidence, Site Selection and Roadmap [REP5-017];
  - Volume 5, Report 5.5.5: Guillemot and Razorbill Evidence, Site Selection and Roadmap [REP5-019];
  - Volume 5, Report 5.5.6: Lesser Black Backed Gull Implementation and Monitoring Plans [REP5-021];
  - Volume 5, Report 5.5.7: Kittiwake Implementation and Monitoring Plans [REP5-023];
  - Volume 5, Report 5.5.8: Guillemot and Razorbill Implementation and Monitoring Plans [REP5-025];
  - Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [REP5-027];
  - Outline Southern North Sea Special Area of Conservation Site Integrity Plan [REP6-022].

# 4.2 OFFSHORE ORNITHOLOGY

# **SURVEYS AND METHODOLOGY**

4.2.1 The aerial survey programme followed the industry-standard approach and data capture and processing methods were agreed with NE during preapplication consultation. There is agreement with NE, represented in the Applicant's response to NE's Relevant Representation [REP1-051], on the methodology used to prepare the ES and RIAA for almost all species and the Applicant is not aware that they are objecting to the methodology used.



#### REPORT TO INFORM APPROPRIATE ASSESSMENT

# LESSER BLACK BACKED GULL (LBBG)

- 4.2.2 With regard to LBBG evidence, NE are of the view that the evidence supporting conclusions quote the estimated impacts on lesser black-backed gull (LBBG) for the Alde-Ore Estuary SPA solely using the Applicant's approach and not those advised by NE. NE advocate 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.
- 4.2.3 These concerns have already been addressed in their Relevant Reps [PD2-005] and response to the Examining Authority's Written Questions 1 [REP3-034]. Consequently, NE advise that the impact on the Lesser Black Backed Gull (LBBG) Alde Ore Estuary SPA population, as calculated and apportioned by the NE advised parameters, is the appropriate one.
- 4.2.4 However the Applicant's position is that the assessment has been carried out using the correct mortalities estimates and the results both the Applicant's preferred approach and NE's preferred approach have been presented in the Lesser Black-Backed Gull Compensation Evidence, Site Selection and Roadmap [REP5-015] submitted at Deadline 5. The Applicant stands by the approach adopted using sabbaticals as it represents a more realistic approach to calculating the impacts. The NE approach uses the site-specific DAS data for calculating adult rates however this includes 'adult like' birds, and therefore overestimates the impacts.
- 4.2.5 At Deadline 8 in their response[REP8-051] NE proposed a compensation quantum target of 42.4 pairs which the Applicant agrees with.

### **KITTIWAKE**

- 4.2.6 The Applicant has conceded on the need for a derogation case for impacts to Lesser Black Backed Gull associated with the Alde Ore Estuary SPA, but disagrees with NE regarding the potential for AEoI on the kittiwake, guillemot and razorbill features of the Flamborough and Filey Coast SPA in combination. However, without prejudice derogation cases have been prepared for Kittiwake (see the Kittiwake Evidence, Site Selection and Roadmap [REP5-018] and the Kittiwake Implementation and Monitoring Plans [REP5-024].
- 4.2.7 At Deadline 8 in their response [REP8-051] NE proposed a compensation quantum target of 5.3 pairs which the Applicant agrees with should compensation be required for kittiwake.

### **GUILLEMOT AND RAZORBILL**

4.2.8 The Applicant has conceded on the need for a derogation case for impacts to Lesser Black Backed Gull associated with the Alde Ore Estuary SPA, but disagrees with NE regarding the potential for AEoI on the Kittiwake, Guillemot and Razorbill features of the Flamborough and Filey Coast SPA in combination. However, as for Kittiwake, without prejudice derogation cases have been prepared for Guillemot and Razorbill (see the Guillemot and Razorbill - Evidence, Site Selection and Roadmap [REP5-019] and the Guillemot and Razorbill Implementation and Monitoring Plans [REP5-025].



- 4.2.9 NE are broadly in agreement with the compensation measures set out for guillemot and razorbill, although are requesting that more baseline data is collected. This data will be collected from the 2025 breeding season onwards.
- 4.2.10 The guillemot and razorbill compensation measures are likely to be delivered in collaboration with other projects, and the benefits measured, in one of two ways:
  - Measures will form part of a wider strategic scheme that will target and benefit colonies across the region. However, the benefits of the compensation measures attributed to VE OWFL will be monitored at the shortlisted sites presented. It is foreseen that these shortlisted sites may be shared between VE OWFL and Rampion 2 as there is more than sufficient benefit available to compensate for both project's impacts; or
  - A broader, regional, compensation package with the same measures that will be undertaken in collaboration with a group of developers and the benefits from these measures will be proportionally distributed between each project at an agreed rate.
- 4.2.11 At Deadline 8 [REP8-051] NE proposed a compensation quantum target of 6.7 pairs for guillemot and 5.7 pairs for razorbill which the Applicant agrees with should compensation be required for guillemot and razorbill.
- 4.2.12 NE raised in their Relevant Representation that the Applicant had not undertaken an assessment of the Razorbill populations of the Farne Islands Special Protection Area. As outlined in the Applicant's Response to Rule 17 Requests for Information for Deadline 5 [REP5-091], given the distance from the Proposed Development to the Farne Islands SPA, there is only non-breeding season connectivity to the SPA for razorbill. The population of razorbill at the Farne Islands SPA is small (427 individuals for the most recent count and 572 individuals for the citation count) and therefore the SPA adult breeding population as a percentage of the relevant BDMPS is just 0.0007% for autumn and spring and 0.002% for winter. Consequently, the adult birds attributed to the SPA is 0.004 individuals for autumn, 0.03 individuals for winter and 0.008 individuals for spring. Applying displacement rates of 50% and a mortality rate of 1% results in an estimated annual mortality of 0.000, and the same applies if 70% displacement and 2% mortality is used. Therefore, the impact is considered negligible at this site.

### **GANNET AND RED-THROATED DIVER**

- 4.2.13 With regard to Gannet, NE are in agreement that an AEol on the gannet feature of FFC SPA can be ruled out and in a meeting with NE on 19<sup>th</sup> February 2024 they confirmed compensation for gannet is not required.
- 4.2.14 Red-throated divers were screened in for the construction and decommissioning (C&D) phase to assess the potential for an Adverse Effect on Integrity (AEoI) from displacement within the ECC from VE alone and in-combination as a feature of the Outer Thames Estuary (OTE) SPA.
- 4.2.15 The process to calculate the impacts on red-throated diver during construction and decommissioning works in the ECC can be found in detail in paragraphs 11.4.50 to 11.4.69 in the Report to Inform Appropriate Assessment [REP1-016]. Based on a 100% displacement rate and 1% mortality rate the predicted impacts range from 0.42 (mean density) and 1.10 (maximum density) birds.



- 4.2.16 It was concluded that there was no potential for an AEoI to the conservation objective to maintain the population levels of the red-throated diver feature of OTE SPA in relation to disturbance and displacement effects in the C&D phase from VE alone and red-throated diver will be maintained as a feature in the long-term with respect to the potential for adverse effects from disturbance and displacement, including changes to their supporting habitats.
- 4.2.17 NE highlighted in their Relevant Representations [RR-081] that the conservation objective of concern was not red-throated diver abundance but the availability of unimpacted habitat in the SPA and maintenance of the birds' distribution.
- 4.2.18 The impact of vessel traffic on Red-Throated Diver within the Outer Thames Estuary was also highlighted as a potential concern by NE. Recognising that the area of where the ECC overlaps the OTE SPA is an area of lower density shipping and therefore reduced disturbance, the Applicant has committed to a seasonal restriction for cable laying activities and will follow NE's best practice guidelines on other vessel movements during all phases of the development for both the ECC and array area. The Applicant strongly considers this mitigates against impacts in the non-breeding season for the wintering red-throated divers at the OTE SPA and should result in almost a complete reduction in the impacts associated with vessel traffic.
- 4.2.19 NE updated their advice given during Section 42 consultation in their Relevant Representations [RR-081], requesting that vessel activities within the SPA plus a 2km buffer be undertaken outside the seasonal restricted period during the Construction and Decommissioning of the export cable. The Applicant does not believe that the 2km buffer is appropriate. As discussed above, the ECC lies in a high traffic shipping lane and is therefore already highly disturbed. Any additional vessels from the Project within this area outside the OTE SPA would therefore not increase the amount of disturbance nor reduce the distribution of RTD. The red-throated diver densities are not overly affected immediately outside of this area.
- 4.2.20 NE have stated that 'Burger et al. 2019 also show effects from shipping up to 3km distance and slower reoccupation rates to areas passed by fast moving vessels' as evidence for using the 2km buffer, however the construction and decommissioning vessels will be following the NE best practice guidelines in the SPA therefore the vessels will not be fast moving and will be avoiding an aggregations of red-throated diver in the area so the effects will not be comparable with Burger et al's findings. Therefore, following the onsite evidence the Applicant does not agree that a 2km buffer is necessary to maintain the SPA objectives.
- 4.2.21 Natural England have agreed that the northwestern and northeastern sectors of the buffer where RTD densities are low the seasonal restrictions are not required. The mid-northern sector that includes the DWRs has a small overlap with the buffer and the SPA (0.18% of the SPA) where densities are higher and the Applicant has updated the Working in Proximity to Wildlife in the Marine Environment Revision B (submitted at Deadline 8a) highlighting mitigation measures to limit disturbance in this area, which already has high volumes of vessel traffic.
- 4.2.22 The Applicant is satisfied that this represents appropriate mitigation to prevent AEol on RTD. The Applicant submitted the Red Throated Diver Note [REP6-052] at Deadline 6 to confirm its position.



#### ORNITHOLOGY COMPENSATION

4.2.23 The Applicant's LBBG compensation and without prejudice compensation cases include reference to the Marine Recovery Fund (MRF) being developed by DEFRA. The Applicant is seeking to retain flexibility to deliver compensation through the MRF where that forms an available and appropriate mechanism at the time it is required.

#### **LBBG**

- 4.2.24 For LBBG, the Applicant has been developing two alternative compensation proposals at Orford Ness and Outer Trial Bank. These compensation proposals would consist of predator proof fencing and habitat management at Orford Ness, or predator control on Outer Trial Bank. Provision on either site would more than compensate for the predicated worst-case impact of the proposed development. At this time, the Applicant continues to seek powers to deliver Orford Ness and remains in discussion with The Crown Estate and Defra to progress Outer Trial Bank.
- 4.2.25 Powers of compulsory acquisition are sought for Orford Ness in the dDCO in order to ensure that a deliverable solution is secured and that the ExA and Secretary of State can therefore have confidence in making the HRA decision that a deliverable compensation proposal is in place.

# **KITTIWAKE (WITHOUT PREJUDICE)**

- 4.2.26 The Applicant and NE remain in disagreement for the supporting calculations for the Kittiwake artificial nesting structure [REP5-017] 5.5.4 Kittiwake Evidence, Site Selection and Roadmap Revision C (Clean). As discussed in [REP7-076] 10.20.12 Methodological Differences Between the Applicant and NE on Ornithology Matters, the NE position in regards to the levels of precaution when calculating the compensation quantums is unrealistic and unsustainable. However, following the Deadline 8 Relevant Reps [REP8-051]NE tendency to ask for greatly increased amount on projects. However, following the Deadline 8 response [REP8-051 NE have proposed a quantum of 5.3 pairs. The Applicant agrees with this approach should compensation be required for kittiwake.
- 4.2.27 For Kittiwake, nesting space is proposed at an existing artificial nesting structure on the Tyne Estuary at Gateshead. There is high certainty in the success of this measure as it is already constructed and agreements are being progressed with the relevant parties [REP5-017] 5.5.4 Kittiwake Evidence, Site Selection and Roadmap Revision C (Clean) and [REP5-023] 5.5.7 Kittiwake Implementation and Monitoring Plans Revision C (Clean).

# **GUILLEMOT AND RAZORBILL (WITHOUT PREJUDICE)**

4.2.28 The Applicant has developed measures to reduce human disturbance at colonies in the southwest of England as a compensation measure for Guillemot and Razorbill. NE requested in their Appendix D to the Relevant Representations of NE – Ornithology Compensation Case [PD2-006] that the Applicant carries out significant amounts of on-site monitoring and engagement with local experts to establish a baseline for disturbance at the proposed compensation sites. The Applicant undertook survey work in 2024 to investigate ten sites, and has established three shortlisted sites where disturbance was highest.



- 4.2.29 The Applicant has outlined the monitoring that will be undertaken at the sites in the Guillemot and Razorbill Implementation and Monitoring Plan, which was updated at Deadline 7 to include potential use of alternative techniques as adaptive management as requested by NE. The 2024 surveys were undertaken to establish sites where disturbance was an issue and future monitoring will be undertaken at these sites including colony counts, productivity and disturbance to further understand the sites. Baseline monitoring could commence in the 2025 breeding season.
- 4.2.30 The Applicant is confident that given the very low level of impact on auks, with agreed compensation quantums of 9.7 pairs for guillemot and 5.7 pairs for razorbill, and the appropriate sites that can provide the necessary compensation have been identified. The Applicant is confident the measures we are proposing are suitable and of a type agreed by other offshore wind projects, with NE being in broad agreement on the scale and location of the measures. The compensation measures are likely to be delivered in collaboration with other projects, and the benefits measured, in one of two ways:
  - Measures will form part of a wider strategic scheme that will target and benefit colonies across the region. However, the benefits of the compensation measures attributed to VE will be monitored at the shortlisted sites presented. It is foreseen that these shortlisted sites may be shared between VE and Rampion 2 as there is more than sufficient benefit available to compensate for both project's impacts; or
  - A broader, regional, compensation package with the same measures that will be undertaken in collaboration with a group of developers and the benefits from these measures will be proportionally distributed between each project at an agreed rate.
- 4.2.31 The Applicant submitted at Deadline 8a a letter of comfort from the Cornwall Wildlife Trust setting out the proposed implementation of compensation measures in collaboration with other offshore wind projects.
- 4.2.32 If compensation is required for guillemot and razorbill, which is not conceded, a more detailed on-site monitoring programme will be implemented. This will focus on measuring productivity and disturbance events with greater accuracy, ensuring that at least two years of baseline data are collected to effectively assess the benefits of the compensation measures once implemented. The Applicant is also currently in correspondence with local groups regarding establishing compensation measures that will benefit the populations in the south west, and is seeking to collaborate as far as possible with other offshore wind farm projects seeking similar measures in the region.



### 4.3 BENTHIC ECOLOGY

### MARGATE AND LONG SANDS SAC - AEOI ON ANNEX I SANDBANK

- 4.3.1 The Applicant's offshore ECC includes a short length within Margate and Long Sands SAC. This route was selected following identification and avoidance of a number of sensitive environmental features and consideration of other shipping and navigational users. The final corridor was unable to avoid M&LS SAC due to safety concerns raised by shipping stakeholders with regards to cable installation and presence in close proximity to the Sunk pilot boarding station. The Applicant concluded and remains confident that this represents the appropriate balance given the competing constraints in this area. NE confirmed that the Applicant had taken their advice in taken into account, to reduce, avoid and where required mitigate impacts when selecting the cable route through the M&LS SAC [REP2-059], as the site could not ultimately be avoided.
- 4.3.2 Within the SAC, the Applicant's assumptions include a need to use cable protection. That assumption is very precautionary and the Applicant notes that the figure used for assessment purposes is very much a worst case. The value of 900m covers the anticipated maximum length of both cables within the SAC (noting that final routeing within the corridor is not completed yet), and assuming half of both cables would require external protection. It is stressed this is considered to be very precautionary given that current data would indicate cable protection is unlikely to be required in this location as cable burial is likely to be successful.
- 4.3.3 Even on that highly precautionary assessment approach, the area of the SAC affected by cable protection would be 5,400 m², which equates to approx. 0.0008% of the SAC area. As a result, the Applicant's RIAA accordingly concluded that an impact on this scale would not constitute an AEoI upon M&LS SAC. However, NE consider any amount of cable protection on a designated sandbank feature constitutes an AEoI.
- 4.3.4 NE set out in their RR Appendix E Benthic and Intertidal Ecology [PD2-007] their concerns with the methods and information used to determine the maximum length of cable protection within the M&LS SAC, advising that due to uncertainty NE cannot support the Applicant's conclusion of no AEoI.
- 4.3.5 The Applicant has committed that where possible, the length of cable routed through the SAC will be minimised and that cable protection would only be used as a last resort following attempts to ensure burial. Finally, rock dumping will not be used, instead a form of protection such as concrete matressing, will be used so they will be removed upon decommissioning. These measures are secured in the Outline Cable Specification and Installation Plan [REP6-020] and the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan [Rev G submitted at Deadline 8a].



#### WITHOUT PREJUDICE BENTHIC COMPENSATION

- 4.3.6 Noting that NE do not agree with the conclusion reached on AEoI, the Applicant has prepared a without prejudice derogation case should cable protection ultimately be required within the SAC. The Applicant and NE are in agreement that strategic compensation measures present the most suitable form of mitigation. Whilst NE question the need for alternatives to the strategic compensation, the Applicant has provided a number of project-alone compensatory measures, should strategic compensation ultimately not be possible. The Applicant and NE have been in discussion regarding deliverability of those measures (as set out in NE's response to the Rule 17 letter dated 23 December 2024 [REP5-097] and the Applicant's Comments on NE's Deadline 5 Submission [REP6-044]).
- 4.3.7 The derogation case sets out that the compensation proposed would be delivered through the Marine Recovery Fund by means of the extension or new designation of another SAC with Annex 1 sandbank feature by DEFRA. As set out in the Benthic Compensation Strategy Roadmap [APP-047], that measure is being developed by DEFRA to address potential impacts of multiple developers. The Written Ministerial Statement<sup>7</sup> (WMS) (29 January 2025) notes that the DESNZ Secretary of State will usually expect to see greater clarity and certainty regarding the compensation and the ongoing management and monitoring before works which give rise to the adverse effect for which compensation is required can commence. However, it is recognised that the detailed information usually expected by DESNZ Secretary of State may not be fully available until the Government's MPA designation/extension programme is complete. The WMS therefore commits to the production of high-level Implementation and Monitoring Plans, which should be obtained from Defra by the applicant and provided to the DESNZ Secretary of State before works which give rise to the adverse effect for which compensation is required can commence.
- 4.3.8 The Applicant has demonstrated that there is sufficient undesignated Annex 1 sandbank, adjacent to existing SACs, and its future designation would represent a significant increase in Annex 1 sandbank area protected.

## 4.4 MARINE MAMMALS

- 4.4.1 NE disagree with AEoI for in-combination impacts of VE due to a lack of robust evidence and also contest that the Outline Site Integrity Plan defers HRA questions to subsequent decisions, at a point in time where mitigation may not be feasible due to project/financial decisions.
- 4.4.2 The Applicant has committed to mitigation that is in line with the latest policy developments on piling and UXO clearance (Defra, 2025; UK Government, 2025), and has secured mitigation through industry-standard approaches of an Outline SIP and Outline MMMPs. As such, the Applicant maintains that the SIP is the appropriate and accepted approach to mitigating impacts to the SNS SAC and this will be now done under the guidance of the Defra (2025) policy paper.

<sup>&</sup>lt;sup>7</sup> Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance



- 4.4.3 NE and the MMO advise that the NAS within the MMMP and SIP should be committed to [REP8-046] as it will likely be required for all piling in the coming years. However, the Applicant highlights that noise reduction can be achieved by several methods and NAS are not the only option. Therefore, the Applicant is confident that the current commitment is in line with policy and does not agree that any updates are necessary.
- 4.4.4 Residual matters relate to the mitigation of underwater noise impacts to the SNS SAC, but in the Applicant's view these do not affect the conclusion of no AEoI which can be maintained without further mitigation commitments due to the established SIP process.



# 5. ORFORD NESS PROPOSED LBBG COMPENSATION SITE

# 5.1 ISSUE SPECIFIC AND HRA OVERVIEW

#### **SUMMARY**

- 5.1.1 As described in Sections 1.4 and 2.7 earlier, there is a need for, and NE recommends, compensation measures for potential harm to LBBG, proposing predator control and habitat restoration at Orford Ness within the Alde-Ore Estuary SPA. The Orford Ness site is included within the DCO Order Limits, ensuring delivery security through proactive initiative, an approach that is supported by stakeholders.
- 5.1.2 A LBBG Compensation Area EIA [REP4-013] and a LBBG Compensation Site HRA [REP7-025].have been produced for proposed predator exclusion fencing at Orford Ness and considers cumulative impacts with other developments. It is supported by various documents submitted as part of the DCO Application, covering flood risk, landscape and visual impact, ecological impact, implementation and monitoring plans, site selection and suitability, offshore ornithology, and specific surveys at Orford Ness.
- 5.1.3 All relevant policy and guidance has been complied with, including NPS EN-1 and EN-3, as evidenced in the policy and legislation sections of the LBBG Compensation Area EIA [REP4-013] and a LBBG Compensation Site HRA [REP7-025].

# POTENTIAL IMPACTS TO DESIGNATED SITES

- 5.1.4 NE has advised (in Section 3 in its Deadline 6 Cover Letter [REP6-066]) that "the need remains for the Applicant to complete their baseline characterisation of their Proposed Compensation Site pre-construction, to close the evidence gap and inform mitigation measures and to undertake their surveys at the optimum times of year. If these pre-construction survey data indicate the need for further mitigation, then this should be agreed with the relevant SNCB and regulator prior to the commencement of any works by the Applicant. The requirement to confirm adequacy of the mitigation should also be secured within the DCO. If the Applicant agrees to this approach, commits to carrying out the necessary onshore ecology pre-construction surveys at the appropriate time/season, and present updated mitigation proposals for the SAC/SSSI/Ramsar Site if needed in the post-consent phase then we would be able to support a conclusion of no adverse effect on site integrity."
- 5.1.5 The Applicant considers that there is already sufficient information available to conclude that the works at the PCS would not have an adverse effect on the integrity of any European or Ramsar site and this has been set out in the LBBG Compensation Site HRA Revision D [REP7-025]. Notwithstanding, the applicant has committed to undertaking further surveys at the appropriate season and updating or confirming the requirements for mitigation once these surveys are completed.



#### **OPERATIONAL AND MAINTENANCE IMPACTS**

- 5.1.6 Regarding the Orford Ness LBBG Proposed Compensation Site (PCS), NE raised concern over potential adverse effects on the Annex I habitats (shingle and coastal lagoons) which form part the qualifying interest of the Orfordness-Shingle Street SAC, the invertebrates associated with coastal lagoons, other invertebrate and plant assemblages which are listed on the Ramsar citation, and the unique lichen communities of East Anglian beaches and shingle habitats. This concern relates to (the installation and) the maintenance of predator fencing and the management of the PCS area (see 3.4.1 Appendix P7 to the NE Deadline 7 Submission NE's Response to the Report on the Implications for European Sites (RIES) [PD-027])
- 5.1.7 It is important to understand that the shingle habitats at the PCS are now modified due to previous activity at the site (1970s) and this area does not support natural, wave-formed shingle ridges, with natural sediment sorting, which are the natural form of this habitat type. All areas within and around the PCs have been levelled, showing evidence of vehicle tracks, and the banks comprise spoil excavated to make or maintain ditches. Therefore, the PCS is not as vulnerable to adverse effects arising from maintenance and management as might be the case elsewhere and such effects can be mitigated sufficiently to avoid adverse effects on the integrity of Orfordness-Shingle Street SAC and the Alde Ore Estuary Ramsar Site.
- 5.1.8 The applicant has set out in the LBBG Compensation Site HRA Revision D [REP7-025] the mitigation measures that are required to ensure that the features of the SAC and Ramsar will be protected from damage during the (installation and) maintenance of predator fencing and the management of the PCS area, such that the integrity of the SAC and Ramsar will not be adversely affected. As set out above, NE has suggested, and the applicant has agreed to, undertake further surveys and revise or confirm the requirements for mitigation. NE has also provided potential mitigation actions (see 3.4.3 Appendix P7 to the NE Deadline 7 Submission NE's Response to the Report on the Implications for European Sites (RIES) [PD-027]) which are already committed to by the applicant or can be included in the Construction Method Statement (pre-construction) and final Lesser Black Backed Gull Implementation and Monitoring Plan.

# **RESIDUAL MATTERS**

## POTENTIAL IMPACTS TO DESIGNATED SITES

5.1.9 At Deadline 8 Natural England stated that they cannot rule out adverse effects on the above sites unless seasonally appropriate surveys and an adaptive mitigation strategy commitment are secured in the DCO. These surveys and a commitment to review mitigation accordingly are secured in the LBBG IMP submitted at Deadline 8a, and as such the Applicant considers there is agreement on this approach, and that the ExA should be satisfied that a conclusion of no AEoI can be concluded.



### **APPLICANT'S POSITION**

- 5.1.10 The Orford Ness site is included within the DCO Order Limits, ensuring delivery security through proactive initiative, an approach that is supported by stakeholders.
- 5.1.11 The Applicant asserts that sufficient information is available to conclude that the works at the PCS will not adversely effect the integrity of any European or Ramsar site, as detailed in the LBBG Compensation Area EIA [REP4-013] and the LBBG Compensation Site HRA [REP7-025]. Nonetheless, the Applicant has committed to conducting further surveys during the appropriate season and updating or confirming the mitigation requirements upon completion of these surveys.
- 5.1.12 The Applicant has outlined in the LBBG Compensation Area EIA [REP4-013] and the LBBG Compensation Site HRA [REP7-025] the necessary mitigation measures to protect the features of the SAC and Ramsar sites from damage during the installation and maintenance of predator fencing and the management of the PCS area, ensuring that the integrity of the SAC and Ramsar sites is not compromised. As previously mentioned, NE has recommended, and the Applicant has agreed to, undertake additional surveys and revise or confirm the mitigation requirements. NE has also provided potential mitigation actions (refer to 3.4.3 Appendix P7 in the NE Deadline 7 Submission NE's Response to the Report on the Implications for European Sites (RIES) [PD-027]), which the Applicant has already committed to or can include in the pre-construction Construction Method Statement and the final Lesser Black Backed Gull Implementation and Monitoring Plan.



# 6. COMPULSORY ACQUISITION

## 6.1 COMPLIANCE WITH STATUTORY TESTS

- 6.1.1 Government has concluded that there is a critical national priority ("CNP") for the provision of nationally significant low carbon infrastructure. Section 4.2 of NPS-EN1 (Overarching National Policy Statement for Energy) states that offshore renewable generating technologies are CNP infrastructure.
- 6.1.2 S104 makes it clear that the SoS "must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of the subsections" of specified exceptions apply. Therefore, subject to the exceptions in s104, the SoS should start with a presumption in favour of granting consent to applications for energy NSIPs.
- 6.1.3 The Applicant has set out the need case and policy compliance of the development in the Planning Statement (APP-231) and also noted that compliance with the legislative tests must also be considered and are submitted to be complied with.
- 6.1.4 Section 122(3) of the PA 2008 requires that there is a compelling case in the public interest for all of the land subject to the Compulsory Acquisition (CA) powers sought by the Applicant to be acquired compulsorily. The case for the development is set out in the Planning Statement [APP-231]. The project falls within the scope of the current NPSs and is firmly rooted in national policy as required by paragraph 19 of the guidance<sup>8</sup> and addressed throughout this submission.
- 6.1.5 Both the Statement of Reasons and the Funding Statement are required as part of the application in accordance with reg 5 of the IP APFP regs 2010. In order to demonstrate the compelling case, the Statement of Reasons [REP7-015] summarises the need case and policy support for the development which is set out in full in other application documents. It also explains the alternatives considered and the engagement which has been had with affected parties. Section 9 sets out the overall case for the powers sought and section 11 specifically considers why that case would justify the grant of powers with regard to human rights and specifically the right to peaceful enjoyment of one's possessions.
- 6.1.6 For all of the powers sought, section 122 and the guidance at paragraph 9 provides that the Applicant must demonstrate a clear idea of how each plot would be used. The need and proposed use for each area is set out in the Statement of Reasons [REP7 -015] in section 9.
- 6.1.7 For the onshore cable corridor, the Applicant is seeking compulsory powers and temporary possession over a corridor of land within which it proposes to microsite the cable corridor. That corridor is, in the majority of cases, 90m wide to allow for flexibility at the detailed design stage, having regard to further investigation of the land and including seeking to minimise impacts on ecology, including trees and species. Within that corridor, the working corridor is generally 60m, with a final land take of a 20m corridor with rights overlain on that for each set of cables or ducts. Those rights are to allow access to inspect and maintain the cables, and to protect it and are the minimum necessary to deliver the proposed development.

<sup>&</sup>lt;sup>8</sup> Planning Act 2008 Guidance related to procedures for the compulsory acquisition of land (Department for Communities and Local Government, September 2013)



- 6.1.8 Although powers are sought over a wider corridor than that which will be finally acquired, that is necessary to allow the development to undertake detailed design in the final routing of the corridor. It is disproportionate to do that work ahead of consent being granted, given both the substantial costs involved and the intrusive works, including more GI and trenching required. This approach is common in DCOs including other offshore wind farms, for example, Awel y Mor in 2023 and Sheringham and Dudgeon in 2024, both of which adopted a similar approach.
- 6.1.9 The majority of the onshore cable corridor is currently in agricultural use and that use will be able to resume once the cables have been installed. Accordingly, seeking rights to install, use, maintain and protect the cables (as opposed to the acquisition of the land) is considered to be appropriate and necessary under s122 of the PA 2008.
- 6.1.10 For the substation, given that the landowner will not be able to resume the current use and the Applicant needs to be able to control this area for the life of the development, it is appropriate that freehold interest is taken and the landowner is compensated for the full value of the land.
- 6.1.11 The Applicant is seeking powers over land required for mitigation (primarily landscape and mitigation planting). The guidance at paragraph 11 sets out that powers should not be sought over more land than is 'reasonably required'. The guidance is clear that land necessary for works to make the development acceptable, such as landscaping, may be acquired compulsorily, as set out in paragraph 12.
- 6.1.12 The Applicant is also seeking to acquire rights over land Orford Ness in order to provide compensatory habitat for lesser black backed gull. The provision of this habitat is necessary compensation in order to comply with the habitats regulations. It therefore forms necessary mitigation for the project. The Applicant accordingly submits that these areas are therefore reasonably required and met the statutory tests and the guidance.
- 6.1.13 Within the National Grid EACN substation site, the Applicant is seeking powers to acquire rights to install and maintain the cables and to access those. These powers are necessary and sought over the whole area as it is not yet known where in the area identified National Grid will site the substation or where the connection point will be. The Applicant accordingly needs to be able to route the cables to any point that National Grid determine. That may involve both land that National Grid later acquires and land they do not. The Applicant also needs to be able to access those cables.
- 6.1.14 At this time the intention is that, rather than create multiple access points to this site, the Applicant would use whatever access point National Grid will use to align with and minimise impacts. That does, however, mean that the route through the wider site to the cables cannot yet be known and the rights are accordingly sought over the whole area. The powers sought are accordingly necessary to ensure that the development can get the cables to the connection point and operate and are accordingly compliant with s122 of the PA 2008.
- 6.1.15 The Applicant is seeking temporary possession for land required in construction but not in operation. This minimises the land over which permanent rights are required to be sought. The use of temporary possession powers in DCOs commonly includes the ability to use land for access during construction. In this case, there are a number of plots where the Applicant requires to be able to take access during construction but does not intend to do so exclusively.



#### **ALTERNATIVES TO COMPULSORY AQUISITION**

- 6.1.16 The consideration of land and land use is set out in the Site Selection and Alternatives Chapter of the ES. The Applicant has undertaken a logical, staged process to arrive at the VE location and design. The Site Selection and Alternatives Chapter of the ES sets out in detail the approach to and consideration of alternatives with further technical assessment in the associated annexes. The site selection and consideration of alternatives has been a sequential process informed by an understanding of the potential locations for infrastructure and the detail of those areas and refining the location options.
- 6.1.17 The Applicant made a commitment early in the project development process to avoid the need to seek compulsory acquisition powers over residential dwellings. Land ownership and land use were factors taken into account when refining the project location/routing. Through the design of the project and engagement with landowners, the project has sought to reduce the overall land take requirements and mitigate the impact on landowners by limiting the land take required for construction whilst at the same time ensuring enough space and flexibility is retained ahead of detailed design to ensure the most appropriate construction practices can be employed to best mitigate impact on land and expedite construction.
- 6.1.18 Other than site selection, the main reasonable alternative to CA is voluntary acquisition. The Applicant has contacted all identified landowners and is seeking voluntary agreements to acquire the necessary land and rights. Negotiations are ongoing with affected parties to seek to reach voluntary agreements, however it has not been possible to secure all of the necessary land and rights. As set out in the Land Rights Tracker [REP7-062], to date 25 Heads of Terms for Option agreements have been agreed with Category 1 Landowners.
- 6.1.19 The Applicant has been seeking to engage with affected parties since April 2021. The Applicant continued to seek to engage with landowners throughout 2022 and 2023. To streamline the discussions, joint Head of Terms were developed with North Falls so that landowners where not trying to parallel process the two projects land negotiations. A number of land agents representing landowners along the route formed a land agents' group with which the Applicant has been working. That group was issued with template heads of terms in April 2023. Negotiation on those heads then continued for 12 months but the group took the position that they could not agree them without seeing the DCO. At that stage the Applicant issued individual populated heads of terms in April 2024. The Applicant therefore notes but entirely rejects the various relevant representations made that there was insufficient engagement with affected landowners or that heads of terms were issued at a late stage. Rather, the Applicant engaged at an early stage, before non-statutory consultation, and actively sought input to help shape the project as it developed.
- 6.1.20 In line with DCLG guidance, the Applicant has continued to explore all reasonable alternatives to compulsory powers and this included proposing to make amendments to the order where that is possible and will facilitate reaching a voluntary agreement. The Applicant would note that, for example, the changes made to the Application through its Examination and in response to landowners include:
- 6.1.21 Changes to off-route haul roads; changes to the extent of the LBBG compensation area; and changes to operational access routes, as set out in 10.18 Report on Proposed Changes [AS-057];



- 6.1.22 Continuing work on the landscaping for the substation site as demonstrated by 10.20.8 Technical Note Screen planting options for Land Plot 17-024 [REP4-038] and revisions to the OLEMP [latest Revision F submitted at Deadline 8a] and associated written commitments [REP8-024];
- 6.1.23 Amendment to the wording of rights sought to be acquired in Schedule 7 of the dDCO (Deadline 6);
- 6.1.24 Amendment to the size and extent of CA sought at Orford Ness (Deadline 7).
- 6.1.25 The Applicant accordingly considers that this demonstrates that it has been meaningfully engaging with landowners and has been acting reasonably in seeking to accommodate requests where possible and practical.

## OTHER IMPEDIMENTS TO DELIVERY

- 6.1.26 The Applicant has considered the need for other consents to be obtained to deliver and operate the project and has set these out in the Details of other consents and licences document [APP-060]. That identifies no known impediment to the delivery of the scheme. As already set out, the financing of the use of powers and for the delivery of the project is available. The Applicant has therefore taken all prudent steps to properly manage potential risks to the project as required by the CA guidance in paragraph 19.
- 6.1.27 The Applicant notes that it objects to the imposition of a Grampian requirement as sought by SCC on the basis that this could act as an impediment to delivery and prolong the period before compulsory acquisition is exercised. The Applicant cannot order long lead items including the substation components until it knows it has an unencumbered consent it can build. That will delay the build programme, which delay delivery is contrary to the NPS and will act to delay the exercise of any CA powers thereby extending the period landowners are waiting for certainty.
- 6.1.28 In summary, the Applicant considers that the powers sought are necessary to deliver the proposed development, are proportionate, and are sufficient to justify the interference with landowners' rights. The strong policy support for the proposed development, and importantly the contribution it would make towards achieving net zero demonstrate the clear public benefit of the project being granted the powers necessary to ensure its delivery.
- 6.1.29 The Applicant has explained the reasons for the inclusion of compulsory acquisition and related powers in the Order, and sets out why there is a clear and compelling case in the public interest, in accordance with s122 of the 2008 Act, for the Order to include such powers. Please see the Statement of Reasons [REP7-015], the summaries of oral submissions at CAH1 [REP1-059] and CAH2 [REP3-022], the legal submission on s104 and s122 [REP4-037] and the Opinion of King's Counsel submitted at Deadline 6 [REP6-050]. The Applicant has also explained the reasons why the Application is in accordance with NPSs; please see the Planning Statement [APP-231].



6.1.30 In the absence of compulsory acquisition, all of the land and rights required to allow VE to be constructed and operated may not be secured and VE will therefore not proceed. The Applicant needs to have certainty that the required rights and land can be obtained within a reasonable timeframe and to be able to evidence this certainty to its funders. Given the very clear and substantial policy support for the development of projects of this type, the granting of powers of compulsory acquisition to VE represents a proportionate and legitimate interference with private rights

# 6.2 LAND TAKE AT THE ONSHORE SUBSTATION

- 6.2.1 The land for the substation would be lost to its current use. The levelling and landscaping design requires access to, and vehicle movements over, the whole area. The whole area would be required to be occupied to carry out the development. The landscape proposals aim to place screening as close to visual receptors as possible to minimise the visibility of the substation in the shortest possible time frame. The remaining areas within and including the screening have been optimised for maximum ecological benefit, in compliance with legislative requirements and guidance. This ensures the best use of the overall land take and avoids leaving small islands of land to return to the landowner which would be adversely affected by the severance from the larger landholding, making them difficult or impractical to farm.
- 6.2.2 The proposed landscape planting on the perimeter of the land parcels is necessary to screen the Five Estuaries substation, even in the event the North Falls substation was not brought forward. The assessment of LVIA impacts, design and implementation of suitable mitigation, and residual impacts largely rely on the current screening design (Landscape and Visual Impact Assessment [APP-084]) and is aligned to the objective of:
  - "Locating planting adjacent to roads, PRoWs and properties to ensure that an outer perimeter of effective visual screening is formed in the shortest time possible"
- 6.2.3 Planting proposed along the boundary of Grange Road (traditional orchard interspersed with higher landscape screening planting) on the far northwestern edge, and Barn Lane (woodland shelter belt) on the northeastern edge and south following field boundaries, would still be required. The rationale for this is that screening should be placed as close to the visual receptor(s) as possible to maximise the influence of perspective and provide effective screening as soon as possible. This is set out in detail in REP6A-005 (10.55 Additional Information Regarding CAH3 Action Point 3).

### COORDINATION WITH NORTH FALLS AND IMPACT ON LAND TAKE

- 6.2.4 The footprint of the North Falls substation has been included in the Land Plans in order to:
  - > Facilitate levelling of the site and relocation of drainage in a sensible and comprehensive manner. Excluding this would leave an 'island' of land that would need to be tied into altered land levels and drainage.
  - Allow permanent acquisition of land to avoid leaving an 'island' of land unfit for its current use, as it is deemed unacceptable to use compulsory powers in such a manner. Landowners should be compensated for the full value of such land to ensure fairness and compliance with policy.



- 6.2.5 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.
- 6.2.6 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.
- 6.2.7 The Coordination Document [REP8-024] provides information on the coordinated approach between North Falls and Five Estuaries, including site selection and construction opportunities, and how these are secured with the overarching goal of minimising environmental and community impacts.
- 6.2.8 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 Limits. 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.
- 6.2.9 The compulsory powers applied for are intended to facilitate the necessary coordination at the substation site in line with the NPS and are therefore in compliance with section 122 of the Planning Act 2008 as set out by King's Counsel in his opinion [REP6-050] at paragraph 87.

# 6.3 LAND TAKE RELATED TO NORTH FALLS DUCTING AND WORKS

- 6.3.1 The key issue is the definition of associated development and what can be included within that definition. Section 122 of the PA 2008 relates to the compulsory acquisition being related to the development for which consent is sought. The Applicant has considered this definition very carefully during the application process. The Applicant is confident that the definition of associated development as included in the application is appropriate, having regard to the AD guidance. It is important to note that the second set of ducts and the site preparation for the wider substation site, which would include the area on which the North Falls substation will be constructed, form part of the development for which consent is sought. These are works listed in Schedule 1 of the dDCO. The Applicant is not seeking powers of acquisition for works which are not part of its authorised development.
- 6.3.2 As set out in previous submissions [REP1-059 at 1.2, REP4-037] and as supported the Opinion of King's Counsel submitted at Deadline 6 [REP6-050], and referred to below, the second set of ducts and preparatory works at the substation form part of the associated development for which consent is sought in this Application:



- 6.3.3 "the works for installing the ducts needed to accommodate the cabling for the second project and the preparatory works for the site required for both project substations constitute 'associated development' related to the VE scheme for the purposes of section 115 of the PA 2008 and can therefore lawfully be granted development consent in the VE scheme DCO"9
- 6.3.4 As set out in the Planning Statement [APP-231] at section 3.3. the Co-ordination Document [REP8-029], the summary of oral submissions at CAH1 (REP1-059), the legal submission on the CA case [REP4-037] and the Opinion of King's Counsel submitted at Deadline 6 [REP6-050] the objective of including the second set of ducts is to provide a route to minimise impacts where possible. The design keeps the potential impacts from the projects to a single swathe of land and enables coordination during construction, which has the potential to significantly reduce the impacts associated with the construction phase.
- 6.3.5 Land needed for mitigation of impacts can be, and routinely is, subject to compulsory acquisition as it is necessary to facilitate the overall development. The inclusion of works to mitigate impacts as associated development is supported by the core principles of the associated development guidance:
- 6.3.6 "Associated development should therefore either support the construction or operation of the principal development, or help address its impacts." 10
- 6.3.7 The Applicant notes that the requirement of s104 of the Planning Act 2008 that applications must be determined in accordance with the updated National Policy Statements. 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.
- 6.3.8 The Applicant submits that its approach is demonstrative of the co-ordination that is being sought and the meaningful attempts being made to reduce overall impacts on landowners. The Applicant cannot deliver collaboration in accordance with the NPS, co-ordination as sought by landowners and minimise impacts if it does not have the necessary rights to deliver the works. The public interest is served by allowing the option to collaborate and minimise impacts.
- 6.3.9 The inclusion of works for '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' is explicitly provided for in the guidance<sup>11</sup>.

<sup>&</sup>lt;sup>9</sup> 10.46 Opinion of King's Counsel [REP6-050], at paragraph 5.

<sup>&</sup>lt;sup>10</sup> Department for Communities and Local Government 2013 Guidance on Associated Development, paragraph 5(i).

<sup>&</sup>lt;sup>11</sup> Ibid, paragraph 5 (iv).



- 6.3.10 Government has concluded that there is a critical national priority ("CNP") for the provision of nationally significant low carbon infrastructure. Section 4.2 of NPS-EN1 (Overarching National Policy Statement for Energy) states that offshore renewable generating technologies are CNP infrastructure. S104 makes it clear that the SoS "must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of the subsections" of specified exceptions apply. Therefore, the SoS should start with a presumption in favour of granting consent to applications for energy NSIPs, including both Five Estuaries and North Falls.
- 6.3.11 For the purpose of demonstrating need for the onshore connection works as overcapacity, the NPS inarguably establishes that need. As the Applicant set out in 10.20.7 Legal Note Compulsory Acquisition Case [REP4-037], the conclusion that the need for the development is established and that it complies with Government policy under s104 forms a core part of the compelling case and is indeed put forward as such in this Application by the Applicant. The Applicant's position on this point is supported by the 10.46 Opinion of King's Counsel which is has been submitted at this deadline (Deadline 6).
- 6.3.12 Section 122 of the PA 2008 requires that the Secretary of State be satisfied that the powers sought are required for the development or required to facilitate or are incidental to it. This second limb under s122(2)(b) of the PA 2008 is widely drawn. The powers of acquisition sought meet this test. In particular, the seeking of powers for the second set of ducts allows the project to comply with the obligation under the NPS EN5 to seek a co-ordinated approach (section 2.13) which includes considering co-located substations and transmission lines (paragraph 2.13.16).
- 6.3.13 King's Counsel has addressed this point in the opinion submitted [REP-050] noting;
- 6.3.14 "[...] it is my opinion that 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."12
- 6.3.15 "In forming a judgment under section 122(3) as to whether there is a compelling case in the public interest for the proposed compulsory acquisition, I consider that the Secretary of State will be obliged to have regard to what is said in the NPSs so far as relevant about the public interest benefits associated with cooperation and coordination between undertakers and the rapid deployment of new offshore wind generating capacity. That will be an obligatory material consideration by virtue of section 104(2)(a) and (3) of the PA 2008."

"Provided the development proposed is properly to be regarded as associated development, the policy support in the NPSs can only serve to support the compelling case in the public interest for the use of compulsory powers to enable that coordination and cooperation to be effective in delivering the public interest benefits it is designed to achieve." <sup>14</sup>

<sup>&</sup>lt;sup>12</sup> Paragraph 85

<sup>&</sup>lt;sup>13</sup> Paragraph 7

<sup>&</sup>lt;sup>14</sup> Paragraph 89



#### 6.4 STATUTORY UNDERTAKERS AND SERIOUS DETRIMENT

- 6.4.1 Section 127 of the Planning Act 2008 applies to statutory undertakers' land, which is defined as land which has been acquired <u>for</u> the purposes of the undertaking and does not, for example, include land which is held in another capacity In order to grant powers of compulsory acquisition over such land the Secretary of State must be satisfied that the powers can be granted without causing serious detriment to the undertaker's statutory undertaking. Section 138 of the Planning Act 2008 provides that a DCO may include provision for the extinguishment of a relevant right or removal of relevant apparatus only if the Secretary of State is satisfied that this is necessary for the purpose of carrying out the development to which the order relates.
- 6.4.2 The Applicant set out its detailed positions on the drafting of protective provisions in its deadline 7 submission [REP7-090] which has been updated where relevant at Deadline 8a and submitted along with this closing submission. In the cases where the Applicant accepts that 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.
- 6.4.3 It is clear from previous considerations of section 127 in DCO decisions that what constitutes 'serious detriment' is a high bar. Just because there is a potential or actual adverse impact or detriment will not mean that serious detriment exists. In the Lake Lothing DCO<sup>15</sup> examination, the Examining Authority in their recommendation report found that

"the Proposed Development would cause material harm to the operational port. However, the extent of this harm, when considered in the context of the port operation as a whole, may be characterised as no more than moderate" <sup>16</sup>.

6.4.4 In the decision letter, the Secretary of State concluded that the "effect of the Proposed Development on the operation of the port would not justify refusing development consent" 7. The Secretary of State determined that

"in the context of section 127 of the 2008 Act that the CA and [temporary possession] powers sought would be detrimental to the carrying out of ABP's statutory undertaking but this detriment would not be serious" 18.

<sup>&</sup>lt;sup>15</sup> Planning Inspectorate reference TR010023

<sup>&</sup>lt;sup>16</sup> Examining Authority Recommendation Report on the Lake Lothing Third Crossing Development Consent Order, paragraph 5.8.156

 <sup>&</sup>lt;sup>17</sup> Secretary of State Decision Letter on the application for the proposed Lake Lothing Third Crossing
 Development Consent Order dated 30 April 2020, Paragraph 25
 <sup>18</sup> Ibid, Paragraph 35



- 6.4.5 The Applicant notes that there have been various considerations of the interaction between SU's over whom CA powers are sought in DCOs and the Protective Provisions which apply to them. In numerous instances it has been decided that some Protective Provisions are required to prevent the CA powers resulting in serious detriment. That does not however mean that the relevant Protective Provisions were granted in the form sought by the SU or that serious detriment is only avoided where SUs have agreed such provisions. Rather, it is entirely open to the SoS to determine what provisions are appropriate to prevent serious detriment arising.
- 6.4.6 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. In this case, Network Rail is seeking inclusion of its 'standard' provisions unaltered and therefore contrary to the guidance<sup>20</sup>. In the Hinkley Point C DCO<sup>21</sup>, CA of rights to install, operate and maintain an electricity line over Network Rail infrastructure were sought. Network Rail had objected to the CA of rights (in the form of an easement) over its operational land. The ExA concluded that Network Rail had not demonstrated that the grant of a permanent easement "would in any way compromise or otherwise adversely affect the safe and efficient operation of the railway"<sup>22</sup>. The ExA concluded with regard to the interface with Network Rail that

"Apart from the construction phase, the only possible interference would be on those occasions when maintenance or emergency works were being carried out to the Applicant's equipment. The Panel is satisfied that rights required by the Applicant over the operational land in question could be taken without serious detriment to the carrying on of the undertaking"<sup>23</sup>.

- 6.4.7 This was subject to appropriate Protective Provisions being agreed.
- 6.4.8 Network Rail submitted that its preferred drafting of Protective Provisions was required to "ensure the safe operation of the railway and compliance with its Network Licence" However the Applicant did not agree that the Network Rail drafting was appropriate. Therefore, while it was appropriate that Network Rail's approval for the physical works was secured by Protective Provisions, there was no justification for a restriction on use of CA powers to require Network Rail's consent. The ExA concluded

"The Panel considers that it is not necessary, nor would it be reasonable, to include paragraph 4 of [Network Rail's] preferred form of the protective provisions and that it could compromise the Applicant's ability to deliver the proposed development." 25

<sup>&</sup>lt;sup>19</sup> The following are given as indicative examples only and are not an exhaustive list: Hinkley Point C Connection Project Development Consent Order, Richborough Connection Development Consent Order, Thurrock Flexible Generation Plant Development Consent Order, M25 Junction 28 Improvement Project Development Consent Order

<sup>&</sup>lt;sup>20</sup> Planning Act 2008: Content of a Development Consent Order required for Nationally Significant Infrastructure Projects Guidance on the content of a Development Consent Order required for a Nationally Significant Infrastructure Project.

<sup>&</sup>lt;sup>21</sup> Planning Inspectorate reference EN020001

<sup>&</sup>lt;sup>22</sup> Examining Authority Recommendation Report on the Hinkley Point C Connection Project Development Consent Order paragraph 8.5.227

<sup>&</sup>lt;sup>23</sup> Ibid, paragraph 8.5.224

<sup>&</sup>lt;sup>24</sup> Ibid, paragraph 8.5.225

<sup>&</sup>lt;sup>25</sup> Ibid, paragraph 8.5.230



- 6.4.9 The Applicant has sought to minimise impacts on statutory undertakers and for the purposes of CA sought to avoid creating risk of serous detriment by minimising the potential impact on undertakings. For example by using a trenchless installation technique to avoid interfering with infrastructure such as busy roads and the operational rail line and by routing the cable corridor to minimise direct interaction with existing water mains.
- 6.4.10 Protective provisions have been agreed with Cadent, Environment Agency Essex County Council as Drainage Authority, Essex County Council as local highway authority, National Grid, National Highways, North Falls Port of London Authority (onshore) and with those in place the Applicant considers that no risk of serious detriment to the undertaking arises.
- 6.4.11 The Applicant's position on the not agreed provisions is set out in the Deadline 8a update to the Deadline 7 10.62 Note on dDCO Drafting Applicant's Position on Protective Provisions [REP7-090].
- 6.4.12 Affinity Water. Several plots showed on the land plans [REP7-004] contain current interests or apparatus of Affinity Water. The standard protections for apparatus are included and are sufficient to ensure that no serious detriment can arise. Plots 05-004 and 05-005 form the current access to the East Clacton Reservoir. The Applicant is not seeking to acquire or extinguish the existing rights of access. The Applicant has proposed bespoke drafting in the Protective Provisions to provide for the protection of that access. That drafting reflects the similar protections for the PLA (onshore) and Anglian water and the Applicant accordingly submits that they are sufficient to secure that no detriment will arise.
- 6.4.13 Anglian. The Applicant does not propose to acquire or extinguish any interest of Anglian. The primary interaction with the project is that the access to the landfall (beach) working area is the same as that used by Anglian to access their facility on Manor. The Applicant's drafting provide protection for that access and any apparatus of Anglian's which is within the Order Limits and to which the powers sought may therefore apply (even though no works to those are anticipated). The Applicant submits that this is entirely sufficient to prevent any serious detriment arising to Anglian.
- 6.4.14 Essex CC as highway authority: The Applicant understand that the ECC is content with the drafting of the PPs following an amend made ahead of Deadline 8a, but is still requesting that the Applicant enters into a framework highway agreement which the Applicant will not agree to do.
- 6.4.15 Network Rail: The Applicant proposes to install the cables under the railway using trenchless installation techniques. Technical approval of those works will require to be obtained from Network Rail before such works can be undertaken to ensure that the safety of the railway is maintained. As with National Highways, Network Rail are seeking to exclude the power of compulsory acquisition for land in which they have an interest. As the voluntary land agreement has not been agreed, the Applicant cannot agree to this. The Applicant therefore considers that the exclusion of CA is not necessary to prevent serious detriment arising to the statutory undertaking, and exclusion of such powers could compromise the Applicant's ability to deliver the proposed development.



- 6.4.16 Port of London Authority (onshore). No compulsory acquisition is proposed which would acquire or extinguish any interest of the PLA. The onshore interaction is limited to the Applicant seeking rights to use an access which is also used by the PLA to access their onshore facilities. The PLA and the Applicant have agreed protective provisions to ensure that the PLA's interest in and use of this access is maintained throughout construction and operation of the authorised development. Accordingly, no detriment can arise to the PLA from the powers sought as part of the application.
- 6.4.17 Port of London Authority (offshore). No CA powers are sought in the offshore area. Accordingly, no detriment can arise to the PLA.

# 6.5 SPECIAL CATEGORY LAND

#### **COMMON LAND**

6.5.1 There are no rights of common over any of the open space within the Order Land.

#### **CROWN LAND**

- 6.5.2 The offshore wind farm array area and offshore cabling will be situated within seabed/land owned and managed by The Crown Estate, and no compulsory acquisition is proposed in this area. An agreement for lease for the array area is already in place with The Crown Estate and the terms of a further agreement for lease for the cable route and interlink cables has also been agreed.
- 6.5.3 No freehold Crown interests have been identified within the onshore cable corridor or within the intertidal and foreshore areas.
- 6.5.4 Four Plots have been identified at Orford Ness, the location of proposed Lesser Black Back Gull compensation (Plots 19-001, 19-002, 19-003, 20-003), where rights in land are held by The Crown Estate Commissioners and the Secretary of State for Defence. The Applicant is not seeking any compulsory acquisition rights over any Crown interests in these plots, but is instead seeking to create new rights to access, manage and maintain the land to provide compensatory habitat. This proposal will not prejudice any Crown right in the land. Consent of the Crown to this approach under section 135 of the Planning Act 2008 is being sought.

### **OPEN SPACE**

6.5.5 The Order Land includes a number of Plots which might be considered to fall within a definition of open space within the 2008 Act. However, as set out in the Statement of Reasons [REP7-015] the Applicant considers that while there will be some temporary disruption to the use of open space during construction, once the cables have been installed there will be no ongoing impact and the acquisition of the rights sought will not render the open space less advantageous than it is at present to its owner or the public engaging the exemption under s132(3) of the 2008 Act.

#### **NATIONAL TRUST LAND**

6.5.6 A number of Plots (19-004, 19-005, 19-006, 19-007) have been identified at Orford Ness, the location of proposed Lesser Black Back Gull mitigation, where the freehold is held by The National Trust For Places Of Historic Interest Or Natural Beauty (Natural Trust). The Applicant is not seeking to compulsorily acquire the freehold of, or compulsorily acquire any rights in, any of these plots, and is in discussion with the National Trust to seek their consent to a voluntary agreement.



# 7. DCO DRAFTING

#### 7.1 INTRODUCTION

- 7.1.1 The drafting of the dDCO has had regard to recent applicable precedents and drafting practice from the Secretary of State. As far as the Applicant is aware the unagreed drafting points with IPs are:
  - > Articles: Article 7 the MMO objects to the transfer of the benefit of the DML;
  - Schedule 2: the wording of the cable level requirement is not agreed with the Port of London Authority or London Gateway Port;
  - Schedule 2 various parties have requested to be included as named consultees in requirements;
  - Schedule 9 Protective Provisions; and
  - > Schedules 10 and 11 various drafting points are not agreed, in particular, the MMO comments made at Deadline 7 and 8 are not all accepted by the Applicant.
  - > The Applicant notes that a number of IPs made submissions on drafting very late in the Examination. While the Applicant has endeavoured to respond to each point, where it has not done so it should not be assumed that the Applicant concedes the point or agrees to any change sought.

#### 7.2 DCO DRAFTING

#### **ARTICLE 7**

- 7.2.1 The MMO object to the transfer of the benefit of the DML being included in this provision. The he Applicant maintains its position as set out in the response to relevant representations [REP1-049], and the response to second written questions [REP4-039].
- 7.2.2 The drafting in the dDCO reflects a long established precedent regarding the transfer of DCO powers and deemed marine licences that has been considered acceptable by the Secretary of State many times. Where a transfer of a deemed marine licence is sought under Article 7(2), the Secretary of State would consider the context of all the provisions of the DCO being transferred. That process would be robust in ensuring a suitable approach is being taken. It is appropriate that the Secretary of State has the ability to approve the transfer or grant of a deemed marine licence such that the transfer or grant can fully reflect the relevant DCO and deemed marine licence powers.
- 7.2.3 It is undesirable to separate the transfer of the benefit of the order generally and the transfer of the benefit of the deemed marine licence as doing so could result in transfers occurring at different times and inconsistency in position. Having deemed the marine licence in the Order it is also appropriate that any transfer under that order include the deemed marine licence as part of the wider transfer it is one element of the wider order powers and should not be separated out from the authority to construct, operate and maintain the NSIP granted by the order.



- 7.2.4 The Planning Act 2008 is clear that marine licences may be deemed in a DCO in appropriate areas (s149A) and that a DCO may include such further provisions ancillary to the operation of that deemed marine licence (s120(3))<sup>26</sup>, including transfer along with the benefit. It is inarguable from the wording of section 120(5)(a) and (c) that a DCO may "apply, modify or exclude a statutory provision which relates to any matter for which provision may be made in the order" or "include any provision that appears to the Secretary of State to be necessary or expedient for giving full effect to any other provision of the order". Deemed marine licences are clearly matter for which provision may be made in a DCO, section 72 MCAA 2009 is a provision relating to that deemed marine licence and the transfer power is accordingly authorised by s120 of the planning Act.
- 7.2.5 The ability to transfer the deemed marine licence is related to the deeming and is submitted to be a sensible, expedient part of the wider power to transfer the benefit of the order. There is no legal barrier to including these provisions in the dDCO and there is strong precedent clear authority for its inclusion demonstrated set by DCOs in English waters on this position which has been repeatedly adopted by the Secretary of State and has not been subject to legal challenge as to its competency
- 7.2.6 In the Hornsea 4 Offshore Wind Farm examination, the MMO submitted that "there is already a mechanism for transferring the DMLs under the Marine and Coastal Access Act 2009 (MCAA). In the MMO's view Article 5 should be reserved to the transfer of the Order and should not refer to the DMLs. The DMLs should be considered separately and dealt with under MCAA" (Hornsea 4 examination library reference AS[1]031, Additional submission, accepted at the discretion of the Examining Authority). The Examining Authority in that case rejected the MMO's request noting that the provision had been included in the recently made Orders for Norfolk Vanguard, Norfolk Boreas, East Anglia ONE North and East Anglia TWO. The Secretary of State's decision accepted inclusion of wording which permitted the transfer of the deemed marine licence. The same provision as sought in this case is included in Article 5 of the granted Hornsea 4 DCO.
- 7.2.7 The drafting in the dDCO reflects a well-tested precedent regarding the transfer of DCO powers and deemed marine licences that has been considered acceptable by the Secretary of State many times, including most recently in the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024.

# ARTICLE 8 APPLICATION AND MODIFICATION OF LEGISLATIVE PROVISIONS.

7.2.8 The consent of the Environment Agency is required to the disapplication sought of regulation 12 (requirement for environmental permit) of the 2016 regulations in respect of a flood risk activity only, in accordance with s150 of the Planning Act 2008. The updated Statement of Common Ground with the Environment Agency (Revision B) submitted at Deadline 8A includes confirmation of this consent.

<sup>&</sup>lt;sup>26</sup> The Applicant notes that in REP1-049 the section was erroneously noted as s122, it should be s120.



7.2.9 Article 8(c) provides for the disapplication of consents ordinarily required in respect of the Land Drainage Act 1991. Specifically, these are the requirements for consents for the construction of culverts, together with the requirements for approval under byelaws made under the Land Drainage Act 1991. These are consents for activities which may be a necessary part of constructing the authorised development. To provide certainty that the authorised development can proceed, the Order disapplies the requirement for a separate statutory consent to be obtained in relation to these activities. These consents are prescribed for the purposes of section 150 of the Planning Act 2008. It is common for DCOs to seek to disapply thee consents with the provisions of protective provisions in favour of the lead local flood authority to ensure no detriment arises from such disapplication. This protective provisions have been agreed and included at schedule 9] of the dDCO. The updated Statement of Common Ground with Essex County Council and TDC (Revision B) submitted at Deadline 8A includes confirmation of this agreement.

# **REQUIREMENT 2(3)**

7.2.10 The PLA and London Gateway Port have both sought changes to the drafting of requirement 2(3), which sets out the parameter for cable level in the Deep Water Routes. The Applicant does not accept that the changes sought by the parties are necessary or appropriate. The Applicant has responded to the drafting sought in 10.62 Note on DDCO Drafting - Applicant's Position on Protective Provisions [REP7-090].

# **INCLUSION OF NAMED CONSULTEES**

7.2.11 A number of parties have requested to be a named consultee in various requirements and DML conditions. The Applicant has always been very clear that it is open to the relevant body from whom discharge is sought to consult any body that they wish to, that does not need to be specified in the relevant provision. Where the Applicant agrees that consultation is appropriate it is generally considered to be more productive to carry that out before the application is made for discharge so that the submission can reflect the comments received. The outline plans therefore specify where the Applicant will carry out consultation in advance of submitting any discharge application.

# REQUIREMENT 5 ONSHORE SUBSTATION WORKS, DESIGN AND LANDSCAPING

7.2.12 The Applicant received a request from Essex County Council that this requirement be amended to refer to the drainage strategy. That strategy is an interim step require to produce the detailed design. That detailed design requires to be submitted to and approved by the Council as discharging authority under paragraph 5(1)(i). The Council therefore has the necessary control of the final drainage design. Seeking to insert an artificial step of submission of a strategy that does not require approval and comprises only an intermediate step in the drainage design process is unnecessary and would create delay. The Applicant has included further information to engage with the Council during the development of the drainage design within the updated 9.4 Onshore Substation Design Principles Document [REP8-020] which the Applicant considers addresses this.



# **REQUIREMENT 6: CODE OF CONSTRUCTION PRACTICE**

7.2.13 As the Applicant has set out in 10.41 Applicant's Summaries of Oral Submissions - ISH6, CAH3 and ISH7 [REP6-045], the CoCP (being the final version as submitted during Examination) is a full and not an outline document. It is not intended that a further iteration will be required to be prepared and submitted under this requirement. There are however here a number of outlines in the CoCP for other, detailed plans that will come forward later, such as the soil management plan, which is secured by requirement 11

# **REQUIREMENT 9: ONSHORE ARCHAEOLOGY**

7.2.14 As the Applicant indicated in ISH7, work has been ongoing to with Essex County Council to seek to agree the drafting of this requirement. The drafting as set out in revision I of the dDCO (submitted at deadline 8a) has now been agreed with the Council.

# REQUIREMENT FOR PORT CONSTRUCTION MANAGEMENT PLAN

7.2.15 The Applicant opposes any imposition of a requirement for a Port Construction Management Plan as set out in, particular, 10.20.9 Technical Note Use of Ports for Construction [REP5-072]. The Applicant has provided considerable detail throughout the examination explaining why the requirement sought by SCC is not necessary or appropriate. As noted at deadline 7 [REP7-085], the suggested wording is predicated on the requirement being dispensed with where it is not necessary however a requirement cannot be imposed unless it is demonstrated to be necessary. The Applicant maintains that the requested requirement is not necessary, does not meet the tests for imposition and cannot be properly included in DCO.

#### **DML DRAFTING**

- 7.2.16 The MMO sought a number of drafting changes at Deadline 7 [REP7-097] which the Applicant has responded to at Deadline 8 [REP8-xxx]. The Applicant notes that the MMO has made a submission which very closely mirrors a request from the PLA that 'over-dredge' is added to the level parameter within the deep water route areas. The Applicant objects to such an addition. The need to allow for over-dredge is already built into the limits applied. The addition sought is too imprecise to be properly conditioned. The need to consider over-dredge is also already set out in the outline CSIP and any addition in the DML is accordingly not necessary.
- 7.2.17 There are a number of requests for parties to be named consultees in conditions. As with the requirements, the Applicant does not consider this to be necessary or appropriate. The MMO are entitled to consult any party they confer is appropriate in any case, the lack of named inclusion does not prevent such consultation. As set out in the Deadline 8 submission, the Applicant also considers that, where a party is only relevant or interested in a part of an approval, such as the PLA, it is imprecise and inappropriate for them to be a named consultee for the whole condition. This is particularly the case where there may be other, non-named, consultees who have equal or greater interest in a particular condition, and could therefore be seen to be disadvantaged or in 'lesser' in terms of their responses or engagement.



- 7.2.18 The Applicant notes the MMO request for decommissioning plan to be part of the consenting process and the reference to Offshore Energies UK (OEUK, 2024) for 'Designing for Decommissioning of Offshore Wind' guidelines. The 'guidelines' referred to by the MMO is a report produced by Offshore Energies UK (formally Oil and Gas UK), only available behind a paywall. The Applicant is not aware that this has been endorsed by government and as it is a non-publicly available document produced by a private organisation it is not a reasonable basis on which to inform the process for considering offshore decommissioning in the statutory context. The government has its own guidelines which the Applicant will follow in producing a decommissioning plan in line with the Energy Act 2004.
- 7.2.19 The Applicant notes that it is the explicit position of Government in the Guidance that the Energy Act process should form a "one-stop shop" for decommissioning of offshore windfarms. The decommissioning programme which will be required under that Act includes the timing of the decommissioning to be undertaken, securing a limit on the operational life of the windfarm from before construction. The Applicant accordingly maintains that the DCO does not need to duplicate this regime and should not seek to do given the clear position of Government that the Energy Act is the appropriate mechanism for securing and controlling decommissioning.

### 7.3 GRAMPIAN CONDITION

- 7.3.1 The Applicant has made numerous detailed submissions setting out its grounds for opposing a Grampian requirement in the terms suggested by SCC and supported by ECC. The detail of those submissions is set out in response to ExA questions 10.28 Applicant's Responses to ExQ2 [REP4-039], ] in response to SCC's LIR [REP3-025], in the summary of submissions to ISH7 ([REP6-045] at section 3.2) and supported by the opinion of King's Counsel [REP6-050].
- 7.3.2 The Applicant notes the submission made by SCC at Deadline 6A [REP6A-009] at paragraph 56 onwards where SCC makes a submission that delaying the start of the commencement of construction of the offshore turbines is somehow acceptable because a German wind farm, was paid compensation due to a delay in the grid connection being delivered. That project was operating under a different statutory regime, with a different grid operator (a regime of which SCC do not claim to have any first hand knowledge or understanding), SCC's assertion that the Applicant is therefore somehow required to explain why this does not support SCC's request for inappropriate imposition of a planning requirement under English planning law, is misconceived. It is not incumbent on the Applicant to explain why an anecdotal report of a German contract is not a reasonable basis for imposing a planning requirement in this DCO.



- 7.3.3 The Applicant submits that the commercial terms relating to compensation for breach of an agreement between the developer and the grid operator <u>cannot</u> be a material consideration in the determination of a planning application in England. They can also not form a valid reason for imposition of a planning requirement. That SCC "has not yet seen any information from the Applicant on the availability of compensation in the event that a Grid connection is not provided (either on time or at all)"<sup>27</sup> is because such information is <u>entirely</u> irrelevant to the planning determination to be made. It is not incumbent on the Applicant to explain commercial arrangements outside of the planning system which do not and cannot form material planning considerations. The implication that not addressing this red herring issue is a failing on the Applicant's part is entirely rejected.
- 7.3.4 It is not an acceptable reason to impose a planning requirements on the basis that SCC imagine that the Applicant would receive some compensation for the delay in commencing generation. In any case the German position (as alleged by SCC) does not reflect the English position. The Applicant confirms that it would not receive compensation due to a delay in the provision of the grid connection.
- 7.3.5 SCC's submission misunderstands the issue that the requirement would cause. In order to construct an offshore wind farm the Applicant requires to order a large number of long lead items at considerable cost. It cannot do that on the basis of a DCO which cannot be implemented because a Grampian requirement is still to be fulfilled. Therefore a Grampian requirement preventing the building of the turbines would delay construction because long lead items could not be ordered until the Applicant had sufficient certainty that the Grampian requirement was discharged. The reference to the German system is entirely inapplicable to this point.
- 7.3.6 The policy requirement under the NPS is for the Applicant to have engaged with National Grid and have secured a connection agreement. It has done so. The Applicant's position is therefore entirely compliant with the NPS. SCC's request is not compliant with NPS, does not recognise the critical national priority status of this development, and crucially, does not meet the tests for the imposition of a planning condition. This is very clearly expressed by King's Counsel in his opinion as submitted at paragraph 114 "the suggested requirement would not satisfy the policy tests for the imposition of requirements".
- 7.3.7 The Applicant notes the single reference given to precedent referring to the Lower Thames Crossing DCO. It also notes that f this DCO application has <u>not yet been determined</u> and the position cited by SCC has not been accepted or endorsed by the Secretary of State.



- 7.3.8 As set out in response to SCC's LIR in 10.26.1 Applicant's comments on Local Impact Reports [REP3-025], the Applicant submits that a Grampian requirement would fail the tests for planning conditions as applicable to DCO requirements pursuant to the MHCLG guidance 'Planning Act 2008: Content of a Development Consent Order required for Nationally Significant Infrastructure Projects' (April 2024). The Applicant refers the ExA to the opinion of King's Counsel submitted which concludes that "that imposition of the proposed requirement would be inappropriate and unjustified". The Applicant maintains its position that such a requirement is not necessary. It is noted that King's Counsel in the opinion submitted concludes: "the draft requirement provided by SCC is both unnecessary and unreasonable in its specifics". It is not justifiable to impose the kind of fetter proposed, even if it were better defined.
- 7.3.9 Even if accepted at face value, the allegation of harm to the AoNB (which is not accepted) does not justify the type of requirement proposed. The opinion of King's Counsel advises that the imposition of a requirement would not meet the test of reasonableness stating: "the imposition of a requirement such as this is likely to delay the implementation of urgently needed CNP renewable energy infrastructure and/or hamper its delivery by putting VE Ltd. at an unfair commercial disadvantage compared to other schemes, it is difficult to see how the requirement could nevertheless be found to be reasonable".

# 7.4 PROTECTIVE PROVISIONS

- 7.4.1 The protective provisions as shown in revision I of the DCO submitted at Deadline 8a are agreed with Cadent, Environment Agency, Essex County Council as drainage authority, Essex County Council as highway Authority (in so far as the drafting of the PPs is concerned), National Grid, National Highways, North Falls, and the PLA (onshore). The Applicant has provided an update on the position on protective provision drafting set out in REP7-090 along with this submission in [10.62.1 Update to 10.62 Note on dDCO drafting Applicant's position on Protective Provisions].
- 7.4.2 **Affinity Water**: The protective provisions are not agreed. The Parties have continued to negotiate since Deadline 7 and some changes have been made to the drafting submitted by the Applicant at Deadline 8a to reduce the remaining points of disagreement. The remaining points of disagreement between the parties are set out in the Deadline 8a update on the drafting of these provisions
- 7.4.3 **Anglian Water**: There has been no material change from Deadline 7 and the position remains as set out in [REP7-090].
- 7.4.4 **Essex CC as highway authority**: The Applicant understand that the ECC is content with the drafting of the PPs.
- 7.4.5 **London Gateway Port**: the Applicant and LGP remain in disagreement regarding the precise wording of protective provisions following the submission of LGPL's drafting at Deadline 6 [REP6-080]. The Applicant does not agree that the changes sought are necessary or appropriate and maintains its position as set out in the Deadline 7 submission [REP7-090]
- 7.4.6 **Network Rail**: The terms of the Protective Provisions for the protection of Network Rail have not been agreed. Network Rail is submitting that its 'standard' protective provisions must be included in the dDCO unaltered and without any negotiated amendments being included. This position is directly contrary to the relevant DCO guidance which provides;



"Most statutory undertakers have now developed their own preferred form of protective provisions which is very helpful to the preparation of the draft DCO. However, these must be adapted as necessary so they accurately reflect the proposed development.

- ... Examining Authorities are expected to ensure that the final form of a recommended DCO contains protective provisions which are bespoke to the application under consideration."<sup>28</sup>
- 7.4.7 The Applicant notes that is has now received technical approval for its works from Network Rail for its works which involve trenchless installing the cables under the railway line and no direct interference with the railway. Given that and that the Applicant's drafting provides sufficient protection to Network Rail to ensure that no detriment would arise, the Applicant does not agree that the 'standard' drafting is necessary or appropriate.
- 7.4.8 The Applicant has set out its full case on the drafting of these provisions in the Deadline 8a update to REP7-090.
- 7.4.9 **PLA (offshore):** The Applicant has set out full case on the PLA's offshore Protective Provisions are sought in its Deadline 7 submission REP7-090. As the Applicant has noted in previous submissions, the authorised development is not located inside the jurisdiction of the PLA.
- 7.4.10 The Applicant recognises and has always recognised the interest of the PLA in the proper functioning of the deep water routes which are used to transit in and out of the Port. The Applicant considers that, while the PLA desire to be aware of and consulted on works in this area is valid, it does not amount to being part of the PLA's statutory undertaking. Given the changes to the dDCO made during Examination and, in particular, the agreement of the Applicant to an addition to the offshore parameters requirements specifying the cable level within the deep water routes, the Applicant does not consider that there is any trigger requiring protective provisions in favour of the PLA.
- 7.4.11 The Applicant however agrees that given the PLA's interest in works within the deep water routes, it is reasonable that it is given some consultation on a notification of such works. The Applicant does not agree that the PLA needs or in any legal sense 'requires' control or approval of the plans secured under the deemed marine licence for which it is seeking approval in its preferred protective provisions. Given that no part of the authorised development is within at the PLA's jurisdiction, the regulator is the MMO and not the PLA.

<sup>&</sup>lt;sup>28</sup> Paragraph 12 of Planning Act 2008: Content of a Development Consent Order required for Nationally Significant Infrastructure Projects.



# 8. PLANNING BALANCE AND CONCLUSION

#### 8.1 LEGISLATIVE CONTEXT

- 8.1.1 The VE application will be determined pursuant to Section 104 of the PA 2008, where NPS EN-1, EN-3 and EN-5 are the relevant NPSs that have effect. These NPSs and other national energy policy set out the Government's objectives to provide secure and affordable energy supplies whilst decarbonising the UK's energy system, as necessary to address the legally binding commitments set out in the Climate Change Act 2008 (as amended) to reduce carbon emissions and achieve net zero emissions by 2050.
- 8.1.2 The Planning Statement [APP-231] explains how VE complies with the relevant prescribed matters, relevant planning policy and other matters that the Applicant considers are likely to be important and relevant to inform the SoS's decision as to whether to grant the DCO for VE. This Closing Statement sets out where the Applicant has engaged with IPs through the course of Examination to resolve outstanding matters and to provide further information to aid the SoS in determining the application for VE.

# 8.2 NEED AND BENEFITS OF VE

- 8.2.1 There is a clear and urgent need for energy NSIPs such as that applied for which is supported by NPS EN-1 establishing a critical national priority for renewable energy infrastructure, for which there is an urgent need to deliver to achieve energy security and net zero. NPS EN-3 acknowledges the role of offshore wind in meeting demand and decarbonisation of the energy system and the government's target to deliver up to 50GW of offshore wind by 2030 (paragraph 2.8.1).
- 8.2.2 An increase in the amount of renewable energy generated by offshore wind will contribute to better energy security and the resilient network required to meet future demand.
- 8.2.3 VE will be a necessary part of the future generation mix, and as such will make a valuable contribution in the direction of adopted UK Government policy and achievement of decarbonisation commitments. The rapid deployment of a significant increase in offshore wind capacity is also acknowledged as a fundamental part of NESO and the UK Government's Clean Power 2030 advice and Action Plan.
- 8.2.4 The designation of new renewable energy infrastructure as a Critical National Priority (CNP) means that, subject to any legal requirements, the urgent need for offshore wind 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.
- 8.2.5 With the energy sector contributing approximately 21% of all Greenhouse Gas in the UK and the urgent need to replace polluting generating stations, such as coal, VE will play a critical role in helping to reduce carbon emissions. VE should accordingly benefit from the policy position that the urgent need for VE is established, that the principle of the project is strongly supported and that NPS EN-1 therefore provides for a presumption in favour of consent being granted.



- 8.2.6 Alongside the overall environmental benefits, further development in the offshore wind sector can contribute to a skilled, diverse workforce and strengthen the existing manufacturing base. Offshore wind is a highly skilled industry, which is well placed to create jobs and boost earning power in regions across the UK which require economic growth.
- 8.2.7 VE specifically offers the following benefits:
  - The VE development proposes a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity, from as early as the late 2020s. This is in line with the Climate Change Committee's recent identification of the need for urgent action to increase the pace of decarbonisation in the GB electricity sector; and
  - VE's connection to the National Energy Transmission System (NETS) means that it will be required to play its part in helping National Grid Electricity System Operator (NGESO) manage the national electricity system. This includes participating in mandatory balancing markets (to help balance supply and demand on a minute-by-minute basis and provide essential ancillary services) as well as providing visibility to the GB power market of its expected generation. This means that the low marginal cost wind power it will produce, can be forecast and priced into future contracts for power delivery by all participants, thus allowing all consumers to benefit from the market-price reducing effect of low-marginal cost offshore wind generation.
  - In accordance with NPS EN-5, the Applicant has sought to co-ordinate with North Falls and has included in the Application works and powers which would facilitate co-ordination and mitigation of impacts where deliverable.
  - > VE will enhance biodiversity through delivery of an overall biodiversity net gain (in line with EN-1, Section 4.6 and EN 3, (para 2.8.101)).
  - Long term socio-economic and employment benefits, which will be enhanced by Skills and Employment, Strategy (Volume 9, Report 9.27) which will be secured as part of the DCO.
  - No significant negative effects are assessed as arising on Climate Change receptors. Instead, there will be a significant positive impact from the reduction in carbon emissions via clean energy production, which will help to meet UK ambitions for Net Zero and act a low cost, secure source of energy.

Many of the onshore impacts of the development are limited to the construction phase only. Once in operation, much of the order limits will comprise the buried cables, with the current land uses, particularly agriculture, resumed. There will be no significant impact in operation from traffic and transport as access during operation is minimal.

The Applicant has appropriately considered and sought to avoid or minimise cumulative impacts of the onshore construction where possible. This has included seeking to allow for co-ordination with North Falls as required by the NPS. The Applicant has also worked with North Falls and National Grid to seek alignments to minimise cumulative impacts.



#### 8.3 PLANNING BALANCE

- 8.3.1 The urgent need for the project is established by the NPS and the benefits are set out above.
- 8.3.2 Table 6.1 of the Planning Statement sets out the key points for consideration by the SoS, with regard to the matters within NPS EN-1.
- 8.3.3 The Applicant has sought to work collaboratively with the key stakeholders to develop and secure a comprehensive suite of measures that have sought to avoid, minimise and where necessary mitigate and compensate the significant effects of the project. However, as is recognised by paragraph 3.1.2 of the NPS EN-1 'it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts'. Paragraph 3.3.63 goes on to state:
  - "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 Overarching National Policy Statement for Energy (EN-1) hierarchy. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as guickly as possible."
- 8.3.4 Paragraph 4.1.7 states that where 'there would still be residual adverse effects after the implementation of such mitigation measures, the Secretary of State should weigh those residual effects against the benefits of the proposed development. For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases. This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk'.
- 8.3.5 In terms of terrestrial landscaping, whilst there would be some significant effects upon landscape receptors these would be localised and would gradually reduce as mitigation measures, such as planting, become established and grow to screen the new substation visually. In terms of offshore landscaping, as evidenced in other decisions for NSIP offshore wind farm developments, the residual effects have been considered in the context of the need for the project and recognition of the policy context.
- 8.3.6 In ecological terms, the Applicant has taken significant care in the development of its mitigation and compensation measures. There would be no significant effects aside from the locally significant effect on skylark and a significant effect at a county-level on corn bunting. This effect is as a result of direct permanent arable habitat loss and effective habitat loss as a result of landscape planting which renders adjacent arable land unsuitable for use by ground nesting birds that require open arable habitat on the OnSS as a result of VE alone and/or cumulatively with the adjacent North Falls substation and National Grid's EACN. The Applicant considers the benefits of the project outweigh the impact on skylark and corn bunting, and that the proposed habitat creation at the OnSS would benefit a range of other bird species.
- 8.3.7 In agricultural land terms, there will be loss of Grade 1 BMV at substation site this loss is unavoidable given the prevalence of BMV land within the area of search.



- 8.3.8 The project will result in non-significant adverse impacts to seascape and landscape, marine processes, marine ecology, commercial fisheries and shipping, with appropriate mitigation secured. Disagreement remains on the need to commit to noise abatement solutions (NAS) at this stage. The Applicant maintains that this is unnecessary as noise reduction can be achieved through a variety of solutions and NAS is not the only, or in all cases best, available option. The Applicant is confident that the approach put forward is in line with current (2025) DEFRA guidance. The Applicant has avoided impacts to military radar through the reduction in tip height.
- 8.3.9 With regards to HRA, the Applicant has produced a Report to Inform Appropriate Assessment (RIAA) [REP1-016] which assesses the potential effects from VE with respect to the conservation objectives of the European and Ramsar sites identified where a potential for a Likely Significant Effect (LSE) cannot be ruled out, to determine the potential for an Adverse Effect on Integrity (AEoI) alone and/ or incombination with other plans or projects.
- 8.3.10 The RIAA concludes that for VE, in-combination with other plans and projects, would have no AEoI on any designated European site, apart from the following two sites:
  - > Alde-Ore Estuary (AOE) SPA lesser black-backed gull (Larus fuscus) feature (collision during the O&M phase); and
  - Alde-Ore Estuary Ramsar lesser black-backed gull feature (collision risk during the O&M phase).
- 8.3.11 A clear case can be made for derogation under the Habitats Regulations with regard to Lesser Black Backed Gull (LBBG) at the Alde-Ore Estuary SPA and Ramsar sites (see the Habitats Regulations Derogations Case [AS-003]).
- 8.3.12 Although the Applicant's RIAA concludes no AEoI for the following European sites, this conclusion is not fully agreed by NE. Therefore, derogation cases have been prepared for the Flamborough and Filey Coast SPA (FFC SPA) for kittiwake (*Rissa tridactyla*), FFC SPA guillemot (*Uria aalge*) and razorbill (*Alca torda*) and for Annex 1 Sandbanks within the M&LS SAC. These have been included in the Habitats Regulations Derogation Case [AS-003] on a 'without prejudice' basis for if the SoS concludes that there is likely AEoI on these sites.

### 8.4 CONCLUSION

- 8.4.1 VE benefits from considerable, current, significant policy support. Not only does national policy establish an urgent need for new, low carbon energy generation, it specifically identifies offshore wind as a key part of the Government's strategy for decarbonisation of the energy sector. The Project is also compliant with the NPPF and other important and relevant planning policies, including marine policy.
- 8.4.2 NPS EN-1 affirms that 'Given the level and urgency of need for infrastructure of the types covered by the energy NPSs set out in Part 3 of this NPS, the Secretary of 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'.
- 8.4.3 Through the delivery and operation of VE, the Project will deliver benefits to the local economy and communities. It will create regional investment, commitment to deliver at least 10% BNG, alongside skills and employment opportunities. There is also a future commitment to a community benefit package (which is not material planning consideration).



- 8.4.4 Whilst the Applicant has worked hard to avoid, minimise and mitigate/ compensate any significant effects (in line with the mitigation hierarchy and policy), it is inevitable for a project of this scale that there would be some residual effects and that is recognised in the NPS. The residual impacts of VE are not unacceptable in terms of NPS EN-1. Furthermore, as is demonstrated in the documentation submitted by the Applicant in support of this application, none of those effects would present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero or present an unacceptable risk to, or unacceptable interference to offshore to navigation, or onshore to flood and coastal erosion risk.
- 8.4.5 It is concluded that the benefits of VE, particularly the delivery of new offshore wind generating capacity, carry overwhelmingly greater weight than the residual adverse effects.
- 8.4.6 Where the HRA has concluded potential AEoI, the Applicant has prepared a clear Derogation Case [AS-003] that demonstrates that:
  - > There are no "Alternative Solutions" to the project;
  - > There are "imperative reasons of overriding public interest" (IROPI) for the project to proceed; and
  - > Any necessary compensatory measures are secured to ensure that the overall coherence of the network of European sites is protected.
  - > The urgent need for the project and public benefit, contribute to the compelling case in the public interest for the granting of the compulsory powers sought, which are necessary to ensure delivery of the project.
- 8.4.7 The Applicant therefore submits that the SoS can conclude (under Section 104 of the Planning Act 2008) that VE would be in accordance with relevant NPSs and legislation, would bring significant benefits under a range of national, international and local policy considerations, and:
  - > Would not lead to the UK being in breach of any of its international obligations;
  - > Would not lead to the SoS being in breach of any duty imposed on the SoS by or under any enactment;
  - > Would not be unlawful by virtue of any enactment;
  - > Can be satisfied that the benefits of the proposed development outweigh any adverse impacts; and
  - > That there is no condition prescribed for deciding the application otherwise than in accordance with the relevant NPSs.
- 8.4.8 There is a clear and compelling case in favour of the DCO being made. The Project accords with the relevant NPSs which have effect. None of sections 104(4) to (8) of the PA 2008 apply. Accordingly, the application should be determined in accordance with the relevant NPSs by granting consent.



PHONE EMAIL WEBSITE 0333 880 5306 fiveestuaries@rwe.com www.fiveestuaries.co.uk

ADDRESS Five Estuaries Offshore Wind Farm Ltd Windmill Hill Business Park

Whitehill Way, Swindon, SN5 6PB

COMPANY NO Registered in England and Wales

company number 12292474