FIVE ESTUARIES OFFSHORE WIND FARM

FIVE ESTUARIES OFFSHORE WIND FARM PLANNING STATEMENT

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DEFINITION OF ACRONYMS

Term	Definition
AEol	Adverse Effect on Integrity
AEZ	Archaeological Exclusion Zone
AfL	Agreements for Lease
AIS	Air Insulated Switchgear
ALARP	As Low As Reasonably Practicable
AONB	Area of Outstanding Natural Beauty
APFP	Application: Prescribed Forms and Procedures
ASCOBANS	Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas
BEIS	Business, Energy and Industrial Strategy
BNG	Biodiversity Net Gain
CAA	Civil Aviation Authority
CBD	Convention on Biological Diversity
CCUS	Carbon Capture Usage and Storage
CfD	Contracts for Difference
CNP	Critical National Priority
СОР	Conference of Parties
CoCP	Code of Construction Practice
CRoW Act	Countryside and Rights of Way Act 2000
DCO	Development Consent Order
dML	Deemed marine license
DPD	Development Plan Documents
EACN	East Anglia Connection Node
EIA	Environmental Impact Assessment
EMR	Electricity Market Reform
EPP	Evidence Plan Process
ES	Environmental Statement
ETG	Expert Topic Group
ECC	Export Cable Corridor
FID	Financial Investment Decisions
FSA	Formal Safety Assessment
GIS	Gas Insulated Switchgear
GOWF	Galloper Offshore Wind Farm
GES	'good environmental status'

GLVIA	Guidelines for Landscape and Visual Impact Assessment
GW	gigawatts
HDD	horizontal directional drilling
HRA	Habitats Regulations Assessment
IEMA	Institute of Environmental Management and Assessment
IMO	International Maritime Organisation
IPCC	Intergovernmental Panel on Climate Change
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
LCT	Landscape Character Type
LEDPP	Landscape and Ecology Design Principles Plan
LNG	Liquified Natural Gas
MarESA	Marine Evidence Based Sensitivity Assessment
MCAA	Marine and Coastal Access Act
MCZ	Marine Conservation Zones
MDS	maximum design scenario
MGN	Marine Guidance Note
MMMP	Marine Mammal Mitigation Protocol
ММО	Marine Management Organisation
MPA	Marine Protected Area
MPS	Marine Policy Statement
MSFD	Marine Strategy Framework Directive
MW	Megawatts
NATS	National Air Traffic Service
NNRs	National Nature Reserves
NPPF	National Planning Policy Framework
NPS	National Policy Statements
NRA	Navigational Risk Assessment
NRW	National Resource Wales
NSIP	Nationally Significant Infrastructure Project
NSWWS	National Severe Weather Warning Service
oLEMP	Outline Landscape and Ecological Management Plan
O&M	Operational and maintenance
ORCPs	Offshore Reactive Compensation Platform
OREI	Offshore Renewable Energy Installations
OSPs	Offshore Substation Platforms

OSPAR	Oslo and Paris Commissions
OSS	offshore substations
OTNR	Offshore Transmissions Network Review
OWF	offshore wind farm
PA2008	Planning Act 2008
PINS	Planning Inspectorate
PEIR	Preliminary Environmental Information Report
PTS	permanent threshold shift
RIAA	Report to Inform Appropriate Assessment
RLB	Red Line Boundary
SACs	Special Areas of Conservation
SCHAONB	Suffolk Coast and Heaths Area of Outstanding Natural Beauty
SoS	Secretary of State
SoCC	Statement of Community Consultation
SPAs	Special Protection Areas
SuDS	Sustainable Drainage Systems
TCE	The Crown Estate
TTS	temporary threshold shift
UXO	unexploded ordinance
UNFCCC	United Nations Framework Conventions on Climate Change
VE	Five Estuaries Offshore Wind Farm
VE OWFL	Five Estuaries Offshore Wind Farm Ltd
WSI	Written Scheme of Investigation
WTGs	wind turbine generators
WTP	Workforce Travel Plan
ZTV	zone of theoretical visibility



1 PLANNING STATEMENT

- 1.1.1 This Planning Statement has been prepared on behalf of Five Estuaries Offshore Wind Farm Ltd (VE OWFL), hereafter referred to as "the Applicant". The Planning Statement introduces the Five Estuaries Offshore Wind Farm project, hereafter referred to as 'VE'. VE will include both offshore and onshore infrastructure, including an offshore generating station (windfarm), export cables to landfall, and connection to the electricity transmission network.
- 1.1.2 This Planning Statement is one of a series of documents that have been submitted to the Secretary of State (SoS) in respect of a Development Consent Order (DCO) ('the Application'). The Application is in accordance with Section 37 of Planning Act 2008 (PA2008) and Regulations 5 and 6 of the Infrastructure Planning (Application: Prescribed Forms and Procedures) Regulations 2009 (the 'APFP Regulations').
- 1.1.3 The APFP Regulations do not require a Planning Statement to support applications for a DCO; however, to assist consultees and the SoS to determine VE, it is considered helpful to bring all the principal matters together into one statement. The supporting Policy Compliance Document (Document reference: 9.2) should also be read in conjunction with the Planning Statement in order to assist the SoS with considering VE in the context of relevant national and local policy.
- 1.1.4 VE is subject to formal Environmental Impact Assessment (EIA) procedures, the outcomes of which are reported in the Environmental Statement (ES) that accompany the DCO application. VE is also subject to Habitat Regulations Assessment (HRA) to determine its potential effects on European Designated Sites and Species.
- 1.1.5 Aspects concerning the need for VE (see Section 5), the site selection process and alternative design and technologies considered by the Applicant during the design development process are explained fully in the ES Volume 6, Part 1, Chapter 4: Site Selection and Consideration of Alternatives and presented in summary form within this Planning Statement. The full legislative and policy context relating to renewable energy within which VE would be progressed is presented in ES Volume 6, Part 1, Chapter 2: Need, Policy, and Legislative Context.
- 1.1.6 The outcomes of the EIA and Report to Inform Appropriate Assessment (RIAA) (Volume 5, Document Reference 5.4) have informed this Planning Statement, specifically in relation to assisting the determination of accordance of VE with the relevant National Policy Statements (NPSs) and English national policy.
- 1.1.7 This Planning Statement is structured as follows:
 - Section 2: Background and Context for Development
- 1.1.8 This section summarises VE and has been informed by Volume 6, Part 2, Chapter 1: Offshore Project Description and Volume 6, Part 3, Chapter 1: Onshore Project Description.
 - > Section 3: Application Location and Project Description



- 1.1.9 This section summarises VE description (as discussed in detail within Volume 1, Chapter 3: Project Description), including all of the main offshore project components necessary to deliver VE and connect VE to the National Grid Transmission System. Please note that this section is not intended to replace Volume 1, Chapter 3: Project Description, which remains the main reference point for the detailed project description.
 - > Section 4: Relevant Legislation and Policy
- 1.1.10 This section details the legislation and policy context for VE, where it is considered to be relevant to the determination of the application.
 - > Section 5: Project Need, The Case for and Benefits of VE
- 1.1.11 This section sets out the need case for VE, in the context of European, international and national policy and legislation. The supporting Policy Compliance Document (Document reference: 9.2) should also be read in conjunction with Section 5 in order to assist the SoS with considering VE.
 - > Section 6: Overall Policy Case for VE
- 1.1.12 This section summarises VE and concludes that VE meets all policy requirements at the date of submission.



2 BACKGROUND AND CONTEXT FOR DEVELOPMENT

- 2.1.1 In February 2017, The Crown Estate (TCE) announced the opportunity for developers to apply for project extensions to operating offshore wind farms. Eight applications were received, including VE, which met the specified criteria. In August 2019, TCE published a plan-level HRA which assessed the potential impacts of the proposed projects on relevant nature conservation sites of the European Natura 2000 network. Seven of the eight extension projects, including VE, proceeded to the award of leasing rights as part of the 2017 extensions round. The Agreements for Lease (AfLs) for these projects were awarded in summer 2019.
- 2.1.2 On 5 October 2021, the Applicant submitted a scoping report (VE OWFL, 2021) to the Planning Inspectorate (PINS) and received a formal scoping opinion (PINS, 2021) on 12 November 2021. PINS issued their transboundary screening document on behalf of the SoS in June 2022. This is provided in Volume 1, Annex 3.2: Transboundary Screening for the purposes of regulation 32 of the 2017 EIA Regulations.
- 2.1.3 The Applicant has engaged in post-scoping, pre-application consultation with both statutory and non-statutory consultees (including via the Evidence Plan (Document 5.2), a series of regular consultation meetings with key stakeholders on technical matters), as well as with the public. An interim consultation response was issued by the Applicant to the community in Autumn 2022 followings its first stage of non-statutory consultation.
- 2.1.4 The Applicant prepared a PEIR (Preliminary Environmental Information Report) in the format of an ES that formed the basis of the project information submitted for statutory consultation. Following that consultation, the PEIR documentation has been updated into the final ES that is accompanying the application for the Development Consent Order (DCO). Statutory consultation been carried out, under the requirements of Sections 42, 47 and 48 of the 2008 Act, with relevant comments being considered in developing the final project design. Through this consultation the Applicant has identified a number of issues that have led directly to design changes and commitments that will be made to construction methodologies.
- 2.1.5 A comprehensive account of all consultation undertaken to assist in the development of VE has been submitted alongside the DCO application (Document 5.1: Consultation Report, Document).

2.1 THE APPLICANT

2.1.1 Five Estuaries Offshore Wind Farm Ltd is a joint venture company, made up of four partners who are committed to developing the Five Estuaries Offshore Wind Farm Project. The joint venture partners comprise RWE (33.3%), a Macquarie-led consortium (25%), ESB (20.9%) and Sumitomo Corporation (20.9%). Five Estuaries is an extension of the operational Galloper Offshore Wind Farm Project. RWE is leading the development of the Five Estuaries Offshore Wind Farm Project on behalf of the project partners.



- 2.1.2 In the UK, RWE is currently the third largest renewable generator, with a diverse portfolio of onshore wind and offshore wind amounting to over 2.2 gigawatts (GW) of generating capacity. Its biggest share of renewable generation is from offshore wind. RWE is ideally positioned in the UK, with an existing range of power generation assets in addition to wind and solar. RWE already generates around 15% of all the electricity generated in the UK, a figure that we expect to grow as we expand our renewables portfolio.
- 2.1.3 In the UK, RWE expects to invest up to £15 billion in new green technologies and infrastructure by 2030 and currently has an operating UK portfolio of ten offshore wind farms, and one also currently under construction. Community benefits from renewable energy projects operated by RWE in the UK total £25m over the last 20 years. In 2021, offshore wind farms operated by RWE contributed over £1.2 million to local community funds, including 139 different grants, and helped secure an additional £1.7 million in matching funding. RWE Renewables owns a stake in operational offshore wind farms on the East coast of England, Galloper (353 MW) and Greater Gabbard (504 MW). These generate enough low-carbon renewable energy each year to power the equivalent of over 780,000 UK homes.
- 2.1.4 These two projects have led to the creation of 15 skilled apprentice opportunities, around 180 long-term skilled jobs to support the operation and maintenance of the wind farms, and around £3 billion in project investment overall. The teams have worked extensively with schools and educational institutes, as well as teachers and pupils along the East coast, to deliver numerous career insight sessions and STEM presentations to promote knowledge of the renewables industry and associated job opportunities.
- 2.1.5 RWE is also actively involved in industry bodies including RenewableUK and the East of England Energy Group. Over recent years RWE has supported numerous supply chain and industry events, via sponsorship and speaking opportunities, and participation in meet the buyer events, business breakfasts, awards and sponsorship. This activity is ongoing, including participation in the recently launched EastWind the East of England's Offshore Wind Cluster forum.
- 2.1.6 UK will continue to be a key focus in RWE's strategy to grow its renewables business and to become carbon neutral by 2040. As one of the world's leading offshore wind developers, the company supports the UK Government in achieving its goal of having every single home powered by offshore wind within the next 10 years.

3 APPLICATION LOCATION AND PROJECT DESCRIPTION

3.1 **PROJECT LOCATION**

- 3.1.1 VE is a proposed extension project to the operational GOWF off the coast of Suffolk. The new wind farm would include up to 79 wind turbine generators (WTGs), across two separate sea bed areas in the southern North Sea and create enough energy each year to power hundreds of thousands of homes. VE will create job opportunities, support the UK Government's ambitions for up to 50GW of electricity generated from offshore wind by 2030 and help meet the objectives of the UK Energy Security Strategy. The existing GOWF consists of 56 WTGs and supplies electricity to approximately 380,000 households annually. A 60-strong team operates and maintains the wind farm from a state-of-the-art, purpose-built Operations & Maintenance (O&M) facility in Harwich International Port.
- 3.1.2 VEs WTGs will be situated within two array areas to the east of the operational Galloper. The array areas will be located approximately 37 km off the coast of Suffolk, England. Extension projects, such as VE, are considered to represent a significant opportunity for cost reduction in offshore wind through the benefits of experience in constructing and operating an offshore wind farm (OWF) neighbouring the site, as well as access to existing datasets and environmental studies. This is an increasingly important driver under the highly competitive UK electricity market which aims to deliver the best possible value to the consumer.

3.2 **PROJECT DETAILS**

- 3.2.1 VE will have an overall capacity of greater than 100 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under Section 15(3) of the Planning Act 2008. Such projects require a DCO to be granted by the relevant UK SoS; in this case, the SoS for Energy Security and Net Zero. Further information about the process of the DCO applications can be found in Volume 6, Part 1, Chapter 2: Policy and Legislation.
- 3.2.2 Offshore WTGs will be connected via subsea cables to Offshore Substation Platforms (OSPs) that will transform the voltage and transmit the power generated via further subsea cables within the offshore Export Cable Corridor (ECC) to a landfall compound located at Sandy Point, to the north west of the golf course, adjacent to Short Lane.
- 3.2.3 Connection to the National Grid will be at a new substation to be called the East Anglia Connection Node (EACN) via cable circuits installed underground between the landfall and the grid connection. A new onshore substation, for VE, will be constructed in the vicinity of National Grid's new EACN.
- 3.2.4 More information on VE design is provided in Volume 6, Part 2, Chapter 1: Offshore Project Description and Volume 6, Part 3, Chapter 1: Onshore Project Description.

3.3 COORDINATION WITH NORTH FALLS

3.3.1 VE and the North Falls Offshore Windfarm Project ('North Falls') have been allocated the same connection point to the national electricity transmission network and have been considering similar landfall locations for their export cables to come ashore.

- 3.3.2 Following the consultations carried out by the Applicant and North Falls both projects, and in response to the NPS's on co-ordination and feedback identifying the need for closer coordination, the two projects have worked together to develop a shared export cable corridor, landfall location, and single site for both onshore substations.
- 3.3.3 The shared 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. In order to realise these benefits during construction, the two projects need reach their decision points on whether to proceed with the projects (also known as their Financial Investment Decisions (FIDs)) within three years of each other. The shorter the gap between the projects' FIDs, the more coordination in construction can be achieved.
- 3.3.4 In order to allow the flexibility for coordinated construction, the DCO for VE has been drafted to allow for scenarios based on the gap between the two projects meeting their respective FIDs.
- 3.3.5 Three onshore construction scenarios with North Falls have been developed and are:
 - Scenario 1 parallel construction. With civils works for the ECC being carried at the same time.
 - Scenario 2 overlapping construction both projects construction carried out independently, but opportunities for reuse of enabling infrastructure e.g., haul roads/ site accesses etc. with the other project reinstating.
 - Scenario 3 Sequential construction. Projects are on significantly different programmes which mean that haul roads and TCC's are reinstated prior to the second project proceeding.
- 3.3.6 Two 'build options', which cover the above three delivery scenarios are secured within the draft DCO:
 - > Build option 1: This applies to scenario 1 where each project consents the onshore export cable ducts for the other within each DCO and delivers these as part of its own build. If the FID decisions are reached within a year of each other, this would then also allow for the use of a single civils contractor for the onshore export cable civils work for the two projects. Each project would then install its own electrical cables within the ducts. This has the potential to significantly reduce construction impacts during the civils phase, particularly traffic impacts.
 - Build option 2: This applies to scenario 2 and 3 where each project delivers its own ducts and cable works . In scenario 2, while this will not deliver a second set of ducts, if the projects reach FID within three years of each other, overlapping order limits still allow for elements of the construction work (such as elements of the haul roads and temporary construction sites) to be transferred for use by the second project where practicable and desirable (having regard to for example the impact on landowners), in order to reduce overall impacts
- 3.3.7 Some elements of construction (e.g., cable installation) would be reserved for each project regardless of the level of coordination for technical and commercial reasons.
- 3.3.8 The background to the FID scenarios, consenting options, and outline construction methodologies is set out in more detail in the accompanying Co-ordination Documents (Document 9.29 and 9.30).The Applicant has ensured the DCO Application covers all three FID Scenarios.



- 3.3.9 The Development Consent Order (dDCO) prepared by the Applicant includes a list of works for which consent is sought; therefore, the cable circuits for the second project, common access points and the ability to undertake preparatory works for the second project substation area including levelling landscaping have been included in the list. The dDCO sets out two onshore 'build options' as shown at Paragraph 3.3.6 for the cable corridor works (including the haul roads and temporary construction compounds). The cable ducting works have been split so that those for the second project have their own Work Number (such as 6A, 7A) so that they can be easily identified and discussed separately from the first project's cable works.
- 3.3.10 ES chapters have considered how different construction scenarios set out in the Coordination Document (Document 9.29 and Document 9.30) affect the assessments. The ES chapters acknowledge that there are multiple scenarios and are clear on which has been assumed to be worst case for the purposes of the assessment.



4 RELEVANT LEGISLATION AND POLICY

4.1 INTRODUCTION

- 4.1.1 This section outlines the legislative and policy framework for determining applications for development consent under the PA2008, the matters to which the SoS must have regard, and the weight which should be ascribed to those matters in the decision-making process in accordance with the relevant policy.
- 4.1.2 To fully assess VE, the following factors have been reviewed and will form part of the decision-making process:
 - > International Obligations and National Climate Change legislation for energy;
 - > NPSs relating to energy (2023);
 - > The Infrastructure Planning (Decisions) Regulations 2010; and
 - > Any other relevant matters that the decision-maker has deemed significant and relevant towards their decision.
- 4.1.3 In addition to this, the following sub-sections discuss the national, regional, and local policy positions with regards to supporting the provision of renewable energy. These have also been discussed in relation to VE and its compliance with specific policies and policy objectives including environmental protection. A policy compliance document (document reference 9.2) has also been prepared and shared with PINS prior to submission as part of the Early Adopters Programme. Section 6 of this Planning Statement details an examination of the development's compliance with such policies based on the findings of the ES and RIAA (document reference 5.4).

4.2 INTERNATIONAL OBLIGATIONS ON CLIMATE CHANGE AND NATIONAL CLIMATE CHANGE AND ENERGY LEGISLATION

- 4.2.1 Volume 6, Part 1, Chapter 2: Policy and Legislation of the ES references international and national climate change legislation, and whilst this wider need is not reproduced in full in this Planning Statement, key legislation is described below and briefly outlined in Table 4.1.
- 4.2.2 The United Nations Convention on Climate Change supreme decision-making body is termed the Conference of Parties (COP) which reviews the implementation of the Convention and any other legal instruments that the COP adopts and takes decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements. In 2022, the 27th COP (COP27) was held in Egypt to pursue efforts to limit the global temperature increase to within 2°C of the pre-industrial average temperature, to continue the aspiration for an improved limit of 1.5°C building on the negotiated global agreement at the COP26 conference.
- 4.2.3 This was a development of the Paris Agreement for a binding and universal agreement on climate from all the parties. The agreement was reached by 196 parties, seeking to prevent a "climate catastrophe" by keeping temperature rises within 1.5°C.
- 4.2.4 Table 4.1 summarises some of the relevant and most recent policies and legislation that relate to the mitigation of climate change and the development of renewable energy, specifically discussing OWF developments such as VE.



Table 4.1: Summary of Relevant Policy Legislation Relating to the Mitigation ofClimate Change and the Development of Renewable Energy

Policy Legislation	Summary of Requirements
United Nations Framework Convention on Climate Change (Paris climate agreement)	The United Nations Framework Convention on Climate Change (UNFCCC) met in Paris 2015 and set out an international agreement by all parties to limit global temperature increase to below 2°C, while pursuing efforts to limit the increase to 1.5°C.
The Climate Change Act 2008	The Climate Change Act 2008 (HM Government, 2008) commits the UK to a net reduction in greenhouse gas emissions against the 1990 baseline by 2050, including a 34% reduction by 2022 and an 80% reduction by 2050.
Climate Change Act 2008 (2050 Target Amendment) Order 2019	Amending the Climate Change Act 2008 to implement a target of a net reduction in greenhouse gas emissions of at least 100% against the 1990 baseline (superseding the 80% target in the Climate Change Act 2008).
The Energy Act 2013	The Energy Act 2013 makes provisions to incentivise investment in low carbon electricity generation, ensure security of supply, and help the UK meet its emissions reduction and renewables targets; it included the framework for Contracts for Difference (CfD) as well as introducing requirements to enable a statutory 2030 decarbonisation target range for the UKs electricity sector.
Clean Growth Strategy 2017	The Clean Growth Strategy (2017) promoted 'clean growth' as growing national income while cutting greenhouse gas emissions. It aimed to promote further growth of offshore wind by holding auctions of CfDs, working with the industry to develop a Sector Deal for offshore wind, and to provide further funding for innovation in offshore wind.
National Infrastructure Assessment 2018	The first National Infrastructure Assessment by the National Infrastructure Commission (NIC, 2018) recommended that half of the UK's power is provided by renewables by 2030.
Net Zero Strategy: Build Back Greener 2021 (Presented to Parliament pursuant to Section 14 of the Climate Change Act 2008)	The Net Zero Strategy is a long-term plan for a transition that will take place over the next three decades and sets out key targets and delivery pathway of reaching net zero emissions by 2050 and 40 GW of offshore wind by 2030.
Energy White Paper: Powering our Net Zero Future	Increase in operating capacity to 40 GW by 2030, as part of the plan for the green industrial revolution. The 2020 white paper puts net zero and the effort to fight climate change at its core.



Policy Legislation	Summary of Requirements
Sixth Carbon Budget	Published in 2020, the UK Committee on Climate Change (CCC) recommended that offshore wind should become the backbone of the whole UK energy system, growing from 40 GW of capacity in 2030 to 100 GW or more by 2050.
British Energy Security Strategy	UK Government created the British Energy Security Strategy in 2022, where investing in offshore wind generation has been listed as one of the UK Government's '10 Point Plan', contributing to a carbon net zero by 2050.
Powering up Britain	Plans published in March 2023 setting out how the UK government will enhance Britain's energy security and deliver net zero commitments. Offshore wind is identified as a key aspect of the energy transition proposals set out in the strategy. The plans include a goal to develop up to 50GW of offshore wind by 2030.

4.3 LEGISLATION: REQUIREMENT FOR DEVELOPMENT CONSENT (PLANNING ACT 2008)

- 4.3.1 The requirement for a DCO relates to the provisions of the Planning Act 2008 (as amended)¹ (hereafter referred to as PA2008) which includes development that is, or comprises part of, a NSIP. The PA2008 defines the thresholds above which the specific types of infrastructure development are considered to be NSIPs and therefore require a DCO.
- 4.3.2 For offshore energy developments in England (including offshore wind) the threshold is a generating capacity of over 100 MW. VE will have a generating capacity of over 100 MW and is therefore classed as an NSIP.
- 4.3.3 Therefore, VE exceeds the threshold defined under Section 15(3) of the PA2008 and therefore constitutes an offshore generating station NSIP. Under Section 31 of the PA2008 this Project requires a development consent, for which an application has been submitted by the Applicant in respect of the proposed Project and in the prescribed form.
- 4.3.4 Section 104 of the PA2008 provides that any application for an order granting development consent must be determined in accordance with any relevant NPS (being a NPS which has effect in relation to development of the description to which the application relates) unless one of the following exceptions apply:

'104 Decisions in cases where national policy statement has effect

(3) The [SoS] must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies.

(4) This subsection applies if the [SoS] is satisfied that deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations.

¹ Planning Act 2008 (legislation.gov.uk)



(5) This subsection applies if the [SoS is] satisfied that deciding the application in accordance with any relevant national policy statement would lead to the [SoS] being in breach of any duty imposed on the [SoS] by or under any enactment.

(6) This subsection applies if the [SoS] is satisfied that deciding the application in accordance with any relevant national policy statement would be unlawful by virtue of any enactment.

(7) This subsection applies if the [SoS] is satisfied that the adverse impact of the Project would outweigh its benefits.

(8) This subsection applies if the [SoS] is satisfied that any condition prescribed for deciding an application otherwise than in accordance with a national policy statement is met.

(9) For the avoidance of doubt, the fact that any relevant national policy statement identifies a location as suitable (or potentially suitable) for a particular description of development does not prevent one or more of subsections (4) to (8) from applying.'

4.3.5 Additionally, S104 of the PA2008 lists the other relevant matters that the SoS must take into account when determining an NSIP which includes:

- > Appropriate Marine Policy Statements (MPS);
- > Local Impact Reports;
- > Any matters prescribed in relation to the development; and
- > Any matters the SoS considers important and relevant.
- 4.3.6 Therefore, compliance with the policies set out in the relevant NPSs and the identification of any specified exceptions is considered a key test within the DCO process. This also allows for the application to be considered in the context of NPS policies relating to the deliverability of renewable energy and in relation to any identified adverse impacts. VE's relevance to MPS and other national policies is considered in the accompanying Policy Compliance Document (Documents Reference 9.2) following consideration of the NPS tests.
- 4.3.7 The Policy Compliance Document (Document Reference 9.2) discusses the accordance of all aspects of VE with the NPS policies and other policy and legislative requirements. The Guide to the Application (Document Reference 1.3) lists the suite of documents submitted as part of the application. This includes a draft DCO which identifies requirements that will be applied to VE, and also incorporates dML's that would otherwise be required under the Marine and Coastal Access Act 2009, and which include conditions that will be applied to VE.
- 4.3.8 Additionally, the draft DCO Application includes provisions to allow construction and operation of VE as well as the implementation of landscape and ecological mitigation using the following:
 - > Powers to compulsorily acquire land or rights;
 - > Powers to remove and reinstate important hedgerows;
 - > Powers to undertake works in streets;
 - > Powers to create or alter accesses to highways;
 - > Powers to create drainage; and



> Powers to divert Public Rights of Way.

4.4 POLICY AND GUIDANCE

NATIONAL POLICY STATEMENTS (NPS)

- 4.4.1 NPSs are produced by the UK Government and set out the Government's policy for the delivery of energy infrastructure and provide the legal framework for planning decisions for major infrastructure projects. A DCO application for VE will be assessed and decided on by the Inspectorate in the context of the policy set out within the NPSs.
- 4.4.2 In January 2024, the Department for Energy Security and Net Zero (DESNZ) designated revised NPSs (November 2023) for Energy. These versions replace the 2011 versions and include:
 - > EN-1 Overarching Energy (DESNZ, 2023);
 - EN-3 Renewable Energy Infrastructure (DESNZ, 2023), which covers nationally significant renewable energy infrastructure (including offshore generating stations in excess of 100 MW); and
 - > EN-5 Electricity Networks Infrastructure (DESNZ, 2023), which covers the electrical infrastructure associated with an NSIP.
- 4.4.3 Revisions to the 2011 NPSs were required in response to the Energy White Paper published in December 2020 which confirmed the government's intention to revise the NPSs to ensure they reflect the policies and broader strategic objectives of the White Paper and to ensure that policy supports the infrastructure required for the transition to net zero.
- 4.4.4 This level of urgent need, established by the NPSs, has been further underlined by the UK Government's policy and legislative commitments set out below. Importantly, Paragraph 3.3.62 of EN-1 highlights that the Government has concluded that there is a Critical National Priority (CNP) for the provision of nationally significant low carbon infrastructure. Paragraph 4.2.5 goes on to identify offshore generation as falling within the definition of a CNP.
- 4.4.5 This Planning Statement should be read alongside the Policy Compliance Document (document reference 9.2).
- 4.4.6 Table 4.2 summarises the requirements of EN-1, EN-3 and EN-5 and their relevance to VE.

Table 4.2: Relevant National Policy Statements to VE

National Policy Statement	Summary of Requirements
Overarching National Policy Statement for Energy (EN-1) (2023)	EN-1 sets out the national policy for the delivery of energy infrastructure, including offshore renewable electricity generation.
	Part 3 of NPS EN-1 explains why the UK Government sees a need for significant amounts of new large scale energy infrastructure to meet its energy objectives and why the UK



National Policy Statement	Summary of Requirements
	Government considers that the need for such infrastructure is urgent. (3.1.1) The Secretary of State is directed to assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the Government has demonstrated that there is a need for those types of infrastructure which is urgent. In addition, substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008. Furthermore, the Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS (3.2.6 - 3.2.8).
	With regards the role of offshore wind, the NPS notes that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar (3.3.20) with an ambition to deliver up to 50GW of offshore wind by 2030 (3.3.21).
	In decision making the Secretary of State is directed consider the impacts and benefits of all CNP Infrastructure applications on a case-by-case basis. Where residual non- HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. The exception to this presumption of consent are residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero (4.2.15 - 4.2.17).
NPS for Renewable Energy Infrastructure (EN-3) (2023)	NPS EN-3, taken together with the Overarching NPS EN-1, provides the primary policy for decisions by the Secretary of State on applications they receive for nationally significant renewable energy infrastructure (1.1.5). EN-3 makes clear reference to the target of 50GW of new offshore wind capacity by 2030 (2.8.1). Given the ambitions to deliver up to 50GW of offshore wind by 2030, there is a need to speed up and reduce delays in the consenting process (2.8.7).
NPS for Electricity Networks Infrastructure (EN-5) (2023)	NPS EN-5 taken together with the Overarching NPS EN-1, provides the primary policy for decisions taken by the Secretary of State on applications it receives for electricity networks infrastructure (1.1.9).



National Policy Statement	Summary of Requirements
	The infrastructure covered by EN-5 is confirmed as above ground electricity lines (1.6.2):
	> whose nominal voltage is expected to be 132kV or above,
	 > whose length is greater than 2km, > that are not a replacement line within the meaning of
	 Section 16(3)(ab) of the 2008 Act, and that are not otherwise exempted for reasons set out in
	Sections 16(3)(b) and (c) and (3A) and (3B) of the 2008 Act.
	This NPS will apply to other kinds of electricity infrastructure including offshore transmission of any type (defined at paragraph 2.12.4), underground cables at any voltage, associated infrastructure as referred to above and lower voltage overhead lines, where that infrastructure becomes subject to the 2008 Act in the following circumstances:
	 if it constitutes associated development for which consent is sought along with an NSIP such as an offshore wind generating station or relevant overhead line4; or
	> if the Secretary of State gives a direction under Section 35 of the 2008 Act (for developments which, when completed, will be wholly in one or more of the areas specified in subsection 35(3)) that it should be treated as an NSIP and requires a development consent order (DCO) (1.6.4).
	In considering factors which influence site selection and design, EN-5 advises that the Secretary of State should bear in mind that the initiating and terminating points – or development zone – of new electricity networks infrastructure is not substantially within the control of the applicant, with siting being determined by the location of new generating stations or other infrastructure requiring connection to the network, and/ or system capacity and resilience requirements determined by the Electricity System Operator. These twin constraints, coupled with the Government's legislative commitment to net zero by 2050, strategic commitment to net zero by 2050, strategic commitment to new interconnectors with neighbouring North Sea countries and an ambition of up to 50GW of offshore wind generation by 2030, means that very significant amounts of new electricity networks infrastructure is required, including in areas with comparatively little build-out to date (2.2.1 - 2.2.3).



4.4.7 Whilst the NPSs are the primarily policy framework for the assessment and determination of NSIPs, other planning policy may be important and relevant where it does not conflict with the NPSs. The extent to which other planning policy including the National Planning Policy Framework (December 2023), marine policy documents and local planning policy has been considered is set out below.

UK MARINE POLICY

- 4.4.8 The MCAA 2009 introduced new planning and management systems for overseeing the marine environment, most notably through the requirement to obtain marine licences for works at sea (including the deposition or removal of any substance or object from the sea below Mean High Water). The MCAA 2009 created a strategic marine planning system that seeks to promote the efficient, sustainable use and protection of the marine environment, guided by the Marine Policy Statement (MPS) and a series of Marine Plans.
- 4.4.9 The MCAA 2009 provides the framework for a marine licensing system, which is administered by the Marine Management Organisation (MMO) for activities in English waters, a statutory consultee within the DCO application process. The relevant marine activities that require a licence include the construction and maritime works located in the sea or on the seabed, as well as the deposition of any substance or object in the sea or on/ under the seabed (such as the disposal of dredged material), as well as the operational maintenance activities associated with VE. A deemed marine licence for VE pursuant to the provisions of the MCAA 2009 are included within the draft DCO, through provisions in Section 149A of PA2008, ensuring that the MMO act as a statutory consultee to the DCO process.
- 4.4.10 The MCAA 2009 also enabled the designation of Marine Conservation Zones (MCZs) and Highly Protected Marine Areas (HPMAs). MCZs and HPMAs are types of Marine Protected Areas (MPAs) in England, Wales and UK offshore waters, which seek to protect a range of nationally important marine wildlife, habitats, geology and geomorphology. A MCZ assessment has been undertaken as part of the application (document reference 5.6).
- 4.4.11 Marine plans translate the MPS into detailed policy and guidance for particular areas, intended to inform and guide decisions on marine and coastal development by conserving and enhancing the environment, reducing costs and increasing certainty for developers, and boosting economic and employment benefits. The potential effects on the marine environment from the application will be assessed in accordance with the UK MPS, the MCAA 2009 and East offshore, the East inshore and the South East Inshore marine plans and policies. A marine licence is required under the MCAA 2009 before carrying out any licensable marine activity. The marine licence for VE will be deemed within the DCO through provisions in Section 149A of the Planning Act 2008.
- 4.4.12 The MPS provides the policy framework for the preparation of marine plans, and the basis for decisions affecting the marine areas. The MCAA requires that all public authorities taking decisions regarding the marine area should do so in accordance with the MPS, unless relevant considerations indicate otherwise. Once adopted, marine plans carry the same weight.



- 4.4.13 The MPS sets out (at paragraph 3.3.4) that when decision-makers are examining and determining applications for energy infrastructure (and marine plan authorities are developing Marine Plans) they should take into account, inter alia:
 - The national level of need for energy infrastructure, as set out in the Overarching National Policy Statement for Energy (EN-1), which applies in England and Wales;
 - The positive wider environmental, societal and economic benefits of low carbon electricity generation and carbon capture and storage as key technologies for reducing carbon dioxide emissions;
 - That the physical resources and features that form oil and gas fields or suitable sites for gas or carbon dioxide storage occur in relatively few locations and need first of all to be explored for and can then only be exploited where they are found. Similarly, renewable energy resources can only be developed where the resource exists and where economically feasible; and
 - The potential impact of inward investment in offshore wind, wave, tidal stream and tidal range energy related manufacturing and deployment activity; as well as the impact of associated employment opportunities on the regeneration of local and national economies. All of these activities support the objective of developing the UK's low carbon manufacturing capability.
- 4.4.14 The MPS accepts that renewable energy infrastructure can potentially have adverse effects on fish, mammals, and birds but at the same time recognises at paragraph 3.3.19 that "the UK has some of the best wind resources in the world and offshore wind will play an important and growing part in meeting our renewable energy and carbon emission targets and improving energy security by 2020, and afterwards towards 2050" and that "offshore wind has the potential to have the biggest impact in the medium-term on security of energy supply and carbon emission reductions through its commercial scale output".
- 4.4.15 VE is in line with the vision and objectives of the MPS by virtue of its substantial contribution to renewable energy targets, thereby helping in the development of a low carbon economy and as a sustainable economic development. As demonstrated by the assessment contained in the ES, potential likely significant effects of VE have been or will be avoided or reduced as far as possible and the societal benefits of the marine area will be retained, in line with the requirements of the MPS.
- 4.4.16 The relevant marine plan policies have therefore been taken into account when preparing the application, and are discussed within each offshore ES chapter where relevant.

4.5 NATIONAL PLANNING POLICY FRAMEWORK

- 4.5.1 The NPPF was originally implemented in 2012, with the most recent update in December 2023. The NPPF sets out the UK Government's planning policies for England and how these are expected to be applied (see Table .**Error! Reference source not found.**).
- 4.5.2 The NPPF does not contain specific policies for NSIPs (for which particular considerations apply, determined in accordance with the decision-making framework set out in the Planning Act 2008 and relevant NPSs) but may be considered as a relevant consideration.



- 4.5.3 The NPPF provides principles that cover protection and conservation of the natural and built environment and promotes sustainable growth and development.
- 4.5.4 The key principles considered by VE are listed in Table . below.
- 4.5.5 The NPPF is also supported by a collection of guidance, known as the Planning Practice Guidance (PPG). This guidance covers a range of policy areas and advises applicants on how to address them in any relevant planning applications. It should be noted that all relevant PPGs are contained within the Policy Compliance Table (Document Reference 9.2).

Table .: Summary of National Planning Policy Framework Considerations

Principle	Summary of NPPF Considerations
Achieving Sustainable Development	The purpose of the planning system is to contribute to the achievement of sustainable development, which should be achieved by three overarching objectives:
	 a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
	 b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
	 c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy (paragraphs 7-9).
Meeting the Challenge of Climate Change, Flooding and Coastal Change Making Effective Use of Land Achieving well-designed places	The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources; and support renewable and low carbon energy and associated infrastructure. Additionally, development should be directed



Principle	Summary of NPPF Considerations
	away from areas of highest flood risk (present or future) (paragraph 157).
	New development should be planned for in ways that:
	 avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and
	 b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards (paragraph 159).
	To help increase the use and supply of renewable and low carbon energy and heat, plans should:
	 provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts);
	 consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and
	 identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers. (paragraph 160).
	Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions (paragraph 123).



Principle	Summary of NPPF Considerations
	The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this. So too is effective engagement between applicants, communities, local planning authorities and other interests throughout the process (paragraph 131).
	Planning policies and decisions should contribute to and enhance the natural and local environment by:
	 a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
	 b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
	c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
Conserving and Enhancing the Natural Environment	 d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
	 e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
	 f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate (paragraph 180).



Principle	Summary of NPPF Considerations
Facilitating the sustainable use of minerals	Local planning authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working (paragraph 218).

4.6 OTHER POLICY

LOCAL POLICY

- 4.6.1 Where it is deemed important and relevant, existing and emerging local planning policy and guidance will carry some weight in the consideration of an application for development consent, according to the stage of preparation, the extent to which there are unresolved objections to relevant policies and the degree of consistency of the relevant policies to the NPPF 2023. Nevertheless, it is the NPSs that provide national policy for a DCO application and provide the primary basis for decision making under the Act.
- 4.6.2 Local Authorities are required to prepare and maintain an up-to-date Local Development Framework and other documents which set out their objectives for the use and development of land within their jurisdiction, and general policies for implementation. Where a conflict might arise between the NPS and local policy, the NPS will supersede local policy.
- 4.6.3 VE falls under the jurisdiction of the following county council and local planning authorities:
 - > Tendring District Council; and
 - > Essex County Council.
- 4.6.4 A review of both county council and local planning authority has been considered during the onshore site selection for VE (Volume 6, Chapter 4: Site Selection and Consideration of Alternatives) to avoid conflict with site specific planning allocations.
- 4.6.5 The Local Development Framework for Tendring District Council comprises:
 - Section 1 of the Tendring District Local Plan 2013-2033 and Beyond. North Essex Authorities' Shared Strategic Section 1 (adopted on 26th January 2021); and
 - Section 2 of the Tendring District Local Plan 2013-2033 and Beyond was (adopted on 25th January 2022).
- 4.6.6 Sections 1 and 2 of the Tendring District Local Plan 2013-2033 and other relevant guidance from Essex County Council, have been considered by the Applicant. The LDP policies and relevant guidance have been considered and outlined below in Table 4.3. Local policies are also considered in detail against individual topic areas in Section 6.
- 4.6.7 The onshore development area falls under the jurisdiction of both Tendring District Council and Essex County Council and a Memorandum of Understanding has been signed between these two councils. This will ensure Essex County Council and Tendring District Council's work is collaboratively aligned when dealing with the different stages of the application.



- 4.6.8 The LDP policies for VE were considered in the PEIR and the local authorities have been consulted regarding VE. In addition, a number of neighbouring local authorities have been consulted and their comments have been considered and incorporated within the ES, these include East Suffolk Council and Suffolk County Council.
- 4.6.9 In addition, Essex County Council and Tendring District Council have been consulted on the Policy Compliance Table (Document Reference 9.2).

TENDRING DISTRICT LOCAL PLAN 2013-2033

- 4.6.10 The adopted Local Plan consists of two sections, Section 1 which was adopted on 26 January 2021 and Section 2 which was adopted a year later, on 25 January 2022. Section 1 is shared by Tendring, Braintree and Colchester's Local Plan due to strategic cross-boundary policies and allocations, and Section 2 includes policies and allocations specific to Tendring.
- 4.6.11 Table 4.3 below outlines the relevant policies from Sections 1 and 2 of the Tendring District Local Plan. A full review of local policy compliance is contained within the accompanying Policy Compliance Table (Volume 9, Document 9.2).

Table 4.3: Relevant Policies from the Tendring District Local Plan 2013-2033 andBeyond - North Essex Authorities' Shared Strategic Section 1 Plan (Adopted Jan2021)

Policy	Relevance to Project
Policy SP 1 Presumption in Favour of Sustainable Development	Seeks to take a positive approach to development, in line with the presumption in favour of sustainable development contained with the NPPF. The Local Planning Authorities will work pro-actively to find solutions to approve developments which improve economic, social and environmental conditions in the area.
Policy SP 6 Infrastructure and Connectivity	 This policy covers Tendring/ Colchester Borders garden community, transportation and travel, social infrastructure, digital connectivity, and water & waste water. It seeks to facilitate the delivery and provision for: adequate and sustainable connections and transport; a range of social infrastructure required for healthy, active, and communities; comprehensive digital access; and sufficient water supply and waste water infrastructure.
Policy SP 7 Place Shaping Principles	Ensures that all new development meets high standards of urban and architectural design.



Table .4: Relevant Policies from Tendring District Local Plan 2013-2033 and Beyond -Section 2 Plan (Adopted Jan 2022)

Policy	Relevance to Project
Objective 2 Employment/ Commercial	Seeks to create conditions for economic growth and employment opportunities across various economic sectors including established business sectors and growing sectors, such as renewable energy and care and assisted living. Also seeks to support diversity of employment opportunities through development of employment land to reduce the need to travel and promote sustainable growth.
Objective 4 Infrastructure Provision	Seeks to promote sustainable transport, upgraded broadband infrastructure and services, flood defence infrastructure, and to ensure there is adequate capacity in the foul water sewerage, and that new growth brings opportunities to enhance existing services, facilities, and infrastructure for the benefit of existing and new communities.
Objective 7 The Historic Environment	Supports the conservation and enhancement of Tendring's District historic environment.
Objective 8 Biodiversity	Seeks to provide interconnected multi-functional natural green and blue spaces securing biodiversity and geodiversity net gain, promoting healthy lifestyles, and enhancing the quality of the natural and built environment.
Objective 9 Water and Climate Change	Seeks to secure appropriate locations and design of new development reducing the risk from all types of flooding and having regard to the likely impact of climate change.
Policy SPL 2 Settlement Development Boundaries	Aims to encourage sustainable growth patterns and carefully control urban spawl. There is a general presumption in favour of new development (subject to other relevant policies) within Settlement Boundaries and outside of the Settlement Boundaries the Council will consider the Settlement Hierarchy and other relevant policies.
Policy SPL 3	Ensures that all new development:
Sustainable Design	 makes a positive contribution to the quality of the local environment and protects or enhances local character;
	 meets practical requirements (in terms of highway networks, access, safety and security, greenhouse gas emissions, design for daylight, outlook and privacy, private amenity space, waste storage, recycling, and parking);
	 is compatible with surrounding uses and minimises adverse environmental impacts; and



Policy	Relevance to Project
	 incorporates climate change adaptation measures and technology from the outset, including reduction of emissions, renewable and low carbon energy production, passive design, and through green infrastructure techniques.
Policy HP 1 Improving Health and Wellbeing	Aims to improve the health and wellbeing of residents in Tendring, by requiring a Health Impact Assessment on development sites of 50 or more dwellings, all development in Use Class C2, and all non-residential developments delivering 1,000 square meters or more gross internal floor space, amongst other measures.
Policy HP 2 Community Facilities	The Council will support the delivery and maintenance of new community facilities where appropriate.
Policy HP 3 Green Infrastructure	Aims to use green infrastructure as means of adapting to and mitigating the effects of climate change and ensures that all new development is designed to include ad protect and enhance existing green Infrastructure in the local area.
Policy HP 4 Safeguarded Open Space	 Development that would result in the loss of the whole or part of areas designated as Safeguarded Open Space, as defined on the Policies Map and Local Maps will not be permitted unless the following criteria are met: a. the site is replaced by the provision of new site at least equal in quality and size and accessible to the community, which the existing site serves; b. it is demonstrated that there is no longer a demand for the existing site; and c. the site is not appropriate for other open space functions; and d. the development of the site would not result in the loss of an area important to visual
Policy PPL 1 Development and Flood Risk	Ensures that all development proposals include appropriate measures to reduce risk of flooding on and/ or off site.
Policy PPL 3 The Rural Landscape	The Council will protect the rural landscape and will not support development which would cause an overriding harm to its character or appearance.
Policy PPL 4 Biodiversity and Geodiversity	Aims to ensure that new development is supported by relevant surveys and appropriate ecological assessments. It also ensures new infrastructure and major developments consider enhanced biodiversity. The Council will only support new development which would harm biodiversity and geodiversity under exceptional circumstances.



Policy	Relevance to Project
Policy PPL 5 Water Conservation, Drainage and Sewerage	Seeks to secure adequate provision for drainage, sewerage, and Sustainable Drainage Systems (SuDS). Confirms that applicants should explain their approach to water conservation, including the potential for the re-use of 'greywater' and 'rainwater 'capture and use' within their development.
Policy PPL 7 Archaeology	Ensures that new development proposals which would or might affect designated or non-designated archaeological remains is supported by an appropriate desk-based assessment. The Council will not support new development which is not able to demonstrate that known or possible archaeological remains will be suitably protected from loss or harm or have an appropriate level of recording.
Policy PPL 8 Conservation Areas	The Council will support new development in the Conservation Area or which affects its setting, provided it has regard to the desirability of preserving and enhancing the special character.
Policy PPL 10 Renewable Energy Generation and energy efficiency Measures	The Council will consider all renewable energy scheme with regard to the scale, impact, and energy generation. The policy also requires development proposals to demonstrate how renewable energy solutions have been incorporated in existing and new buildings, facilitating the retro-fitting of renewable energy installations.
Policy CP1 Sustainable Transport and Accessibility	Ensures that new development is sustainable in terms of transport and accessibility and encourages opportunities for access to sustainable modes of transport.
Policy CP 2 Improving the Transport Network	Seeks to secure provision for a safe and efficient transport network for new development proposals. For major developments, measures to prioritise cycle and pedestrian movements, should be included.
Policy DI 1 Infrastructure Delivery and Impact Mitigation	Ensures that all new development is supported by, and has good access to, all necessary infrastructure and confirms that developers will be expected to contribute towards the delivery of relevant infrastructure.

ESSEX COUNTY COUNCIL

4.6.12 Table 4.5 presents a summary of the local policies and guidance of Essex County Council relevant to VE.



Document Policy and Guidance Summary 'Everyone's Essex' sets out 20 commitments to improve the lives of people of Essex between 2021 to 2025. The 20 commitments are divided into four key areas of economy, environment, health and family. Those of most relevance to this Application are summarised within Table 4.5. In particular, the following commitments are relevant to VE: Economy: "We will develop Essex as a centre for innovation, supporting new technologies and business models to enable Essex County Council our economy to transition to net zero and secure green jobs for the future by ensuring we have the right local skills and drawing Evervone's Essex: our plan for levelling up the in investment opportunities." county, 2021 to 2025 Environment: "We will work across the council and the county to hit our net zero targets, by ensuring that the council significantly reduces its carbon footprint, whilst also supporting an acceleration in the progress towards sustainable housing and energy, and active and alternative forms of travel across the county. We will work with communities and businesses, providing advice and support to enable and empower local action to reduce greenhouse gas emissions and build climate resilience." Net Zero: Making Essex Carbon Neutral, sets out recommendations to 2050 and recognises that Essex County **Essex Climate Action** Council (ECC) cannot tackle this challenge alone. This Plan document outlines the immediate actions ECC is taking directly Essex County Council's and in concert with partners to drive effective progress against response to Net Zero: the Essex Climate Action Commission's (ECAC) Making Essex Carbon recommendations. Neutral One of the priorities is to support the development of renewable energy generation in the county. Essex County Council This document aims to manage the risk of flooding in the region Local Flood Risk and inform all groups and individuals who may have an interest Management Plan in, or an ability to influence or manage flood risk. Essex County Council This document forms part of Tendring District Councils LDF and **Minerals Local Plan** is a policy framework for all parties involved in future minerals July 2014 and minerals related development. The document contains policies that determine how the Council determine minerals development in the county taking place up to 2029, the steps needed to make it happen and the measures necessary to assess the progress. In particular, Policy S8 of the MLP states that for Mineral Safeguarding Areas:

Table 4.5: Relevant Policies and Guidance from Essex County Council



Document	Policy and Guidance Summary
	<i>"Mineral Safeguarding Areas are designated for mineral deposits of sand and gravel, silica sand, chalk, brickearth and brick clay considered to be of national and local importance, as defined on the Policies Map.</i>
	The Mineral Planning Authority shall be consulted on:
	 all planning applications for development on a site located within an MSA that is 5ha or more for sand and gravel, 3ha or more for chalk and greater than 1 dwelling for brickearth or brick clay; and
	 b) any land-use policy, proposal or allocation relating to land within an MSA being considered by the Local Planning Authority for possible development as part of preparing a Local Plan (with regard to the above thresholds).
	Non-mineral proposals that exceed these thresholds shall be supported by a minerals resource assessment to establish the existence or otherwise of a mineral resource of economic importance. If, in the opinion of the Local Planning Authority, surface development should be permitted, consideration shall be given to the prior extraction of existing minerals."
Essex County Council Local Transport Plan	Assesses transport needs and challenges and sets out its transport aspirations over the 2011 – 2026 period. To improve maintenance of existing transport networks, support sustainable economic growth and regeneration; reduce carbon emissions.
Essex County Council Green Infrastructure Strategy	The strategy provides a plan to guide the future planning and delivery of green infrastructure in Essex.
Essex County Council Rural Strategy	The Essex Rural Partnership brings together organisations in the public, private and voluntary sectors to co-ordinate action on the major economic, social and environmental issues facing rural Essex.
Essex County Council Waste Local Plan 2017	The Plan provides the key principles and policies to guide future management of waste in the plan area up until 2032.
NSIPs Policy 2022	Sets out the Council's position in relation to NSIPs in general terms, including how and when it will engage in the DCO process.

5 PROJECT NEED, THE CASE FOR AND BENEFITS OF VE

5.1 OVERVIEW

- 5.1.1 NSIPs, under PA2008, are required to be determined in accordance with any relevant NPS. Accordance of VE with the decision making policies of the relevant NPSs is set out in the Policy Compliance Document (Document Reference 9.2).
- 5.1.2 The NPSs establish the policy need for new renewable energy generation. The key drivers underpinning the need for renewable energy within the UK, and why the government believes there is an urgent need for new electricity NSIPs, are discussed throughout this section.
- 5.1.3 The NPSs of relevance to VE were revised in November 2023 and comprise:
 - EN-1 Overarching NPS for Energy Provides the primary basis for decisions on applications for nationally significant energy infrastructure. EN-1 sets out national policy for energy infrastructure and has the effect, in combination with the relevant technology specific NPSs, of providing the primary basis for decision making under the Planning Act 2008;
 - EN-3 Renewable Energy Provides the primary basis for decisions on applications for renewable energy infrastructure, defined as energy from biomass and/ or waste (>50 MW), offshore wind (>100 MW) or onshore wind (>50 MW); and
 - EN-5 Electricity Networks Infrastructure Provides the primary basis for decisions on applications for electricity networks infrastructure defined as aboveground electricity lines of 132 kV and above, or other infrastructure for electricity networks that is associated with an NSIP.
- 5.1.4 Part 3 of EN-1 explains why the government sees a need for significant amounts of new large-scale energy infrastructure to meet its energy objectives and why the government considers that the need for such infrastructure is urgent.
- 5.1.5 Paragraph 3.2.6 3.2.8 are of relevance in assessing the need for VE. The paragraphs state:

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

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

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



5.1.6 One of the more notable changes to the NPSs in November 2023 was the introduction a new policy presumption known as critical national priority (CNP). The Government has concluded that there is a for the provision of nationally significant low carbon infrastructure which includes for offshore wind and supporting onshore and offshore network infrastructure. In addition, new text has been included in the adopted EN-3 and EN-5 setting out the CNP for offshore wind infrastructure. This seeks to provide clarity on the need for additional offshore wind infrastructure, at pace, to meet the Government's ambition to deliver up to 50GW of offshore wind by 2030. Paragraph 3.3.63 of EN-1 states:

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

- 5.1.7 VE is designed to meet this imperative and enacts such fundamental and urgent national objectives articulated at the highest level in legislation and policy documents.
- 5.1.8 Extensions to operational wind farms have proven to be a successful way of efficiently developing more offshore generating capacity (e.g. Burbo Bank, Kentish Flats, and Walney Extensions). VE is an Extension project which meets the TCE's specified application criteria and was granted a lease in August 2019 following a selection process which included a Plan HRA. It is worthy of not that TCE is currently (as of March 2024) drafting a supplementary HRA to consider potential/ proposed capacity increases for Extension projects.
- 5.1.9 Extension projects take advantage of the technological gains made since the original installations were made. They benefit from data, information and experience from existing infrastructure, real life experience of working on site, earlier geological and environmental studies and direct experience of the wind resource through existing wind turbine performance (TCE, 2019).
- 5.1.10 The wind farm extensions, which together offer significant generation potential, will also play a key part in building the industry scale necessary to meet the government's climate change targets. Scale is crucial to delivering further cost reductions, making offshore wind ever cheaper. Not only are offshore wind turbines becoming larger and more efficient, but a larger UK offshore wind industry with a proven track record derisks future projects.
- 5.1.11 Given the pre-existing knowledge of these sites, and the ability for them to be brought forward in good timescales, wind farm extensions represent a low risk and low-cost option for the UK.
- 5.1.12 Paragraph 4.1.7 goes on to further advise that:

"Where this NPS or the relevant technology specific NPSs require an applicant to mitigate a particular impact as far as possible, but the Secretary of State considers that 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

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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".

- 5.1.13 The CNP policy does not create an additional or cumulative need case or weighting to that which is already outlined for offshore wind project. The policy applies following the normal consideration of the need case, the impacts of the project, and the application of the mitigation hierarchy. As such, the Applicant has followed the mitigation hierarchy across all EIA topics and HRA and has aimed to avoid adverse impacts through consideration of reasonable alternatives.
- 5.1.14 In instances where adverse impacts cannot be avoided, mitigation is proposed by the Applicant and as a last resort, appropriate compensation measures have been sought. Mitigation is discussed in Table 6.1 below. In addition, Volume 9, Document 31: Schedule of Mitigation and Monitoring lists all measures proposed on a topic-by-topic basis. They are grouped by document relationships and signposts where the commitments are made in the ES, how they are secured within the draft Development Consent Order (DCO) & Deemed Marine Licence (dML) and associated documents.
- 5.1.15 The approach taken for the development of VE has been based on early engagement with key stakeholders, the public and a range of environmental and technical appraisals. Stakeholder engagement has been a key influence on the project design, with each phase of consultation carefully designed to provide opportunities for review and provision of additional information to guide site selection decisions and refine the project proposals to reduce impacts from VE. A full description of the site selection process is provided in Volume 6, Part 1, Chapter 4: Site Selection and Alternatives.
- 5.1.16 In most cases, mitigation measures have already been identified and adopted as part of the evolution of the project design and specific to each topic. This has included project design measures, such as the use of trenchless crossing techniques, e.g. Horizontal Directional Drilling onshore and compliance with elements of good practice and use of standard protocols.
- 5.1.17 Paragraph 4.2.8 of EN-1 advises that CNP policy will influence how non-HRA and non-MCZ residual impacts are considered in the planning balance.
- 5.1.18 Paragraph 4.2.15 further advises that:

"Where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts. The exception to this presumption of consent are residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk."



- 5.1.19 The DCO Application is supported by an ES which has applied the policy set out in Parts 4 and 5 of the NPS where relevant to minimise effects as far as possible. The accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for further information as to how these policies have been complied with. In accordance with Paragraph 4.2.15, no residual impacts have been identified which present an unacceptable risk to, or interference with:
 - > human health and public safety;
 - > defence;
 - > irreplaceable habitats;
 - > unacceptable risk to the achievement of net zero;
 - > offshore to navigation; and
 - > onshore to flood and coastal erosion risk.
- 5.1.20 The Applicant has demonstrated that there are no non-HRA and non-MCZ residual impacts and therefore, in line with the Paragraph 3.3.63 "the Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible."
- 5.1.21 Paragraph 4.2.18 4.2.19 of EN-1 advises that:

"any HRA or MCZ residual impacts will continue to be considered under the framework set out in the Habitats Regulations and the Marine and Coastal Access Act 2009 respectively. Where, following Appropriate Assessment, CNP Infrastructure has residual adverse impacts on the integrity of sites forming part of the UK national site network, either alone or in combination with other plans or projects, the Secretary of State will consider making a derogation under the Habitats Regulations".

- 5.1.22 A Marine Conservation Zone Assessment has been undertaken and supports the DCO Application (Volume 5, Report 6: Marine Conservation Zone Assessment).
- 5.1.23 The following three MCZs have been screened in for consideration as a result of their proximity to VE.
 - > Blackwater, Crouch, Roach and Colne Estuaries MCZ;
 - > Kentish Knock East MCZ; and
 - > Orford Inshore MCZ.
- 5.1.24 The document concludes that the VE construction, operation and maintenance and decommissioning activities within the offshore ECC and array areas will not hinder the achievement of the conservation objectives of either MCZ, either alone or cumulatively and therefore a stage 2 assessment is not required.
- 5.1.25 With regards to HRA, the Applicant has produced a Report to Inform Appropriate Assessment (Volume 5, Report 4: Report to Inform Appropriate Assessment) (RIAA), 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 in-combination with other plans or projects.
- 5.1.26 The RIAA concludes that, 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).
- 5.1.27 In terms of the Flamborough and Filey Coast SPA (FFC SPA), although the SoS has concluded an AEoI for kittiwake (Rissa tridactyla) 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.
- 5.1.28 Where there is a need to reduce impacts further following the outcome of the assessment, extra measures have been identified for a majority of the impacts. Compensation has been sought as a last resort and applies only to impacts to Lesser Black Backed Gulls as a result of the operational wind farm.
- 5.1.29 An area has been identified at Orford Ness where fencing to protect breeding from predators may be installed. This area, if implemented, would compensate for impacts to this species as a result of the operational wind farm. In addition to the installation of fencing, the habitat would be managed to make it more suitable for Lesser Black Backed Gulls and the success of this measure would be monitored throughout the lifetime of the Project. Further information can be found within Volume 6, Part 8, Chapter 1: Lesser Black Backed Gull Compensation Area EIA.
- 5.1.30 Whilst, the Applicant has endeavoured to avoid and reduce impacts, in relation to Lesser Black Backed Gulls this has not been possible and compensation is proposed in line with the mitigation hierarchy. The Applicant has submitted with the application, securable proposals for suitable compensatory measures to enable consent to be granted.
- 5.1.31 Accordingly, it is clear within Paragraph 3.1.2 of EN-there will sometimes be significant residual adverse impacts that cannot be avoided. It states:

"it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts. These effects will be minimised by the application of policy set out in Parts 4 and 5 of this NPS."

- 5.1.32 For FFC SPA guillemot (*Uria aalge*) and razorbill (*Alca torda*) 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.
- 5.1.33 Despite these RIAA conclusions for kittiwake, guillemot and razorbill species of the FFC SPA, they are included in the derogation case (Volume 5, Report 5: Habitats Regulations Assessment 'Derogation Case) on a without prejudice basis in case the SoS concludes otherwise.



- 5.1.34 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. The maximum total area that is expected to be impacted by cable protection is 0.6 km2 which equates to 0.09 % of the total SAC. Further details of the assessment can be found within Volume 6, Part 2, Chapter 5: Benthic Ecology and Volume 5, Report 4: RIAA.
- 5.1.35 Although the Applicant's RIAA concludes no AEoI, this conclusion is not fully agreed by Natural England. Therefore, the M&LS SAC is included in the derogation case (Volume 5, Report 5: Habitats Regulations Derogation Case) on a 'without prejudice' basis for if the SoS concludes otherwise.
- 5.1.36 The Applicant has therefore provided an Article 6(4) Habitats Regulations Assessment (HRA) derogation case (Volume 5, Report 5: Habitats Regulations Derogation Case) to provide to the SoS for DESNZ with the necessary information to support a clear and overriding case for VE, should they conclude AEoI.

5.1.37 Paragraph 4.2.21 of EN-1 advises that:

"for both derogations, the Secretary of State will consider the particular circumstances of any plan or project, but starting from the position that energy security and decarbonising the power sector to combat climate change:

- requires a significant number of deliverable locations for CNP Infrastructure and for each location to maximise its capacity. This NPS imposes no limit on the number of CNP infrastructure projects that may be consented. Therefore, the fact that there are other potential plans or projects deliverable in different locations to meet the need for CNP Infrastructure is unlikely to be treated as an alternative solution. Further, the existence of another way of developing the proposed plan or project which results in a significantly lower generation capacity is unlikely to meet the objectives and therefore be treated as an alternative solution; and
- are capable of amounting to imperative reasons of overriding public interest (IROPI) for HRAs, and, for MCZ assessments, the benefit to the public is capable of outweighing the risk of environmental damage, for CNP Infrastructure."
- 5.1.38 The Applicant has accordingly submitted all of the information necessary to inform the planning inspectorate and the SoS and enable consent to be granted. The HRA derogation, Section 5.3 of the RIAA and Volume 5, Report 5: Habitats Regulations Assessment Derogation Case, demonstrates that there are imperative reasons of overriding public interest for VE, and details the policy objectives it will serve. This need case section also supports the derogation case.

5.2 THE NEED FOR NEW NATIONALLY SIGNIFICANT ENERGY INFRASTRUCTURE PROJECTS AND OFFSHORE WIND PROJECTS

- 5.2.1 The impacts of climate change are global in scope and unprecedented in human existence. The science linking the concentration of greenhouse gas emissions to average global temperature on earth is unequivocal. The climate stability that has enabled humans to prosper is now at risk. This has been highlighted by the Sixth Assessment Report published recently by the Intergovernmental Panel on Climate Change (IPCC, 2023). This report highlighted amongst other things that it is unequivocal that human influence has warmed the atmosphere, ocean and land and that widespread changes in the atmosphere, ocean, cryosphere, and biosphere have occurred.
- 5.2.2 The direct and indirect consequences of climate change, which include extreme weather events (flooding, heat waves and droughts), species extinctions and ecosystems collapse all threaten the health, safety, and environment of global citizens. For example, by hindering food production, water resources and putting lives and settlements at risk.
- 5.2.3 The UK government recognises that people are already experiencing some impacts and that those impacts will become more severe and widespread as global temperatures rise. The measure of the impacts that citizens experience depends upon how successfully greenhouse gas emissions can be reduced. The IPCC has stressed that global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in carbon dioxide (CO2) and other greenhouse gas emissions occur in the coming decades.
- 5.2.4 With the potential to generate an estimated capacity of at least 100 MW, VE will deliver a substantial, near-term contribution to GB decarbonisation objectives and security of supply and will significantly help to reduce the UK's greenhouse gas emissions, by offsetting millions of tonnes of CO2 emissions per annum.
- 5.2.5 The UK has demonstrated global leadership on climate change. It has in place a comprehensive set of measures to reduce greenhouse gas emissions through investment in renewables. Recent enhancements of UK government policy and legislation to tackle climate change provide unequivocal evidence that the objectives of VE fall within a framework of fundamental policies for the state (and the society it serves).
- 5.2.6 In July 2019, the UK became the first major economy to legally commit to reducing its greenhouse gas emissions to net zero by 2050. In their 2019 Report (CCC, 2019), the UK's CCC advise that consistently strong deployment of low-carbon generation in the lead up to 2050 will be required to meet net zero, including "...at least 75GW of offshore wind." In the most recent CCC report (CCC, 2022), the CCC emphasise that in order to achieve Net Zero there is a required "a rapid scale up in low carbon investment...and speed up the delivery which will need to accelerate even where ambition is broadly on track. For example, although the Government's 2030 target for offshore wind is in line with the CCC pathway, a minimum of 4GW of additional offshore wind capacity will be needed each year from the mid-2020s onwards, significantly greater than the current 2GW per year".



- 5.2.7 The adoption of a net zero by 2050 commitment requires a substantial reduction in the carbon emissions from transport and heat. This in turn is expected to create a substantial additional demand for low-carbon electricity in the 2030s and 2040s. This additional demand places a new urgency on the development of new and additional sources of low-carbon electricity that must be established in the 2020s to meet the UK government's carbon budgets out to 2050.
- 5.2.8 Again, this closely aligns with the Energy NPS HRA which states that the key objectives of the Energy NPS suite are for the energy system to ensure supply of energy always remains secure, reliable, affordable, and consistent with meeting our target to cut greenhouse gas emissions to net zero by 2050.
- 5.2.9 Through the British Energy Security Strategy (BESS) the UK government has pledged to install 50 GW of offshore wind capacity by 2030, up from the previous target of 40 GW (BEIS, 2022d). This pledge represents a five times increase of the UK's installed offshore wind capacity within the next decade and reflects Government's aim to accelerate its journey in order to deliver net zero greenhouse gas emissions. As illustrated in Figure 4.1, the development of large-scale offshore wind farms typically takes more than eight years. Projects that are not consented, in planning or well-advanced are unlikely to contribute by 2030.
- 5.2.10 Without the contribution from VE, it is very possible that delivery of the Sector Deal and the UK government's 2030 ambition would fall short. Offshore wind is recognised as being an important technology for low-carbon generation and the urgent need for large capacities of low-carbon generation is clear to avoid compromising security of electricity supply. Specifically, 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.
- 5.2.11 As a result of the ongoing war in Ukraine and its impact on global energy markets, sharp focus is placed on the UK's dependence on imports to heat homes, fuel cars and generate electricity. Energy security is considered to be a primary policy driver, with the need for offshore wind forming a critical part of the BESS. This includes:
 - > The need to secure safe, affordable, reliable energy, preferably generated in the UK for the UK market;
 - > The need to replace existing ageing energy generation infrastructure; and
 - > The need to meet expected electricity demand whilst meeting climate change commitments.
- 5.2.12 Beyond the principle of offshore wind being needed, it is important to note that the targets within the NPS require a level of deployment such that all currently planned and proposed offshore wind projects are needed. This is captured within paragraph 3.2.7 of EN-1 which states that the SoS has determined that substantial weight should be given to this need when considering applications for development consent under the PA2008.



- 5.2.13 With regards the role of offshore wind, the NPS notes that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar (paragraph 3.3.20). EN-1 further notes the committed target of 50GW of offshore wind by 2030 (paragraph 3.3.21), which in practice means the installation of in the region of 2,666 of the larger turbines currently available at a rate of 333 turbines per year.
- 5.2.14 There is a clear and urgent need for offshore windfarms in order to meet Government targets. The need for electricity generating capacity is discussed within EN-1 at Paragraph 3.3.57 to 3.3.64. Paragraph 3.1.1 of EN-1 is clear that "*The UK needs all the types of energy infrastructure covered by this NPS in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions.*" Paragraph 3.1.4 of EN-1 further states that the Secretary of State should "give substantial weight to the contribution which projects would make towards satisfying this need".
- 5.2.15 In particular, NPS EN-1 sets out that electricity meets a significant proportion of overall energy demand and reliance upon it is likely to increase in the period leading up to 2050. When combined with the UK Government's legal obligation to reduce the UK's greenhouse gas emissions by at least 68% (from 1990 levels), an urgent need for new NSIPs to deliver electricity is established (paragraph 3.3.61). The revised targets as presented within the sixth carbon budget, are to achieve net zero by 2050, with ~78% reduction to be achieved by 2035.
- 5.2.16 The fundamental importance of and need to urgently deliver VE is therefore clear and demonstrable. It flows from the important and urgent requirement to deliver significant volumes of renewable energy generating capacity to meet the UK's legally binding net zero by 2050 commitment in response to the latest climate science and, in turn, from the size of the contribution expected from offshore wind, as confirmed by the government's commitment of 50 GW of offshore wind by 2030.
- 5.2.17 The need for significant quantities of offshore wind is already well-established in the relevant National Policy Statements (NPS) (EN-1 and EN-3) which pre-date the more recent commitments. Since the NPSs were first published in 2011 there have been significant developments to UK energy and climate policy. Recent enhancements of existing UK government policy on climate change and the development of offshore wind include:
 - The Energy White Paper Powering our Net Zero Future (BEIS, 2020c) presented to Parliament by the SoS in December 2020 that set out measures to support the development of offshore wind. These include funding for manufacturing infrastructure and the Offshore Renewable Energy Catapult project to serve as a leading testing facility for the development of technologies;
 - The reaffirming of the 40 GW by 2030 ambition on 18 November 2020 by the Government's 'Ten Point Plan for a Green Industrial Revolution (BEIS 2020b); and
 - The British Energy Security Strategy (BEIS, 2022d), which sets an even more ambitious target of 50 GW by 2030 – as confirmed in the Planning Statement EN-1.



- 5.2.18 The energy industry has also continued to evolve with the cost of many key technologies falling significantly, which the CCC note is an indication of "...major changes to what is possible...". There is now an even greater urgency for offshore wind generation, particularly large projects like VE which are deliverable in the late-2020s, given announcements made in 2019 relating to nuclear deployment in the UK. Offshore wind is now one of the lowest cost forms of energy and one that can be deployed at scale within relatively short timeframes. It is essential to meet the government's decarbonisation, security of supply and affordability policies.
- 5.2.19 Paragraph 3.3.20 of NPS EN-1 states "Wind and solar are the lowest cost ways of generating electricity, helping reduce costs and providing a clean and secure source of electricity supply (as they are not reliant on fuel for generation). Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar."
- 5.2.20 The deployment of offshore wind, and specifically VE, is needed to make a significant contribution to the following UK Government's national policy aims of decarbonisation:
 - Net-zero and the importance of deploying zero-carbon generation assets at scale;
 - > Security of supply (geographically and technologically diverse supplies); and
 - > Affordability.
- 5.2.21 Wind generation is economically and technically preferential, to the GB electricity consumer for the following reasons:
 - Decarbonisation is a UK legal requirement and is of global significance. It cannot be allowed to fail, and urgent actions are required in the UK and abroad, to keep decarbonisation on track to limit global warming;
 - > Wind generation is an essential element of the delivery plan for the urgent decarbonisation of the GB electricity sector. This is important not only to reduce power-related emissions, but also to provide a timely next-step contribution to a future generation portfolio which is capable of supporting the decarbonisation of transport and heat sectors, through electrification;
 - As part of a diverse generation mix, wind generation contributes to improve the stability of capacity utilisations among renewable generators. By being connected at the transmission system level, large-scale offshore wind generation can and will play an important role in the resilience of the GB electricity system from an adequacy and system operation perspective;
 - Internationally, and importantly, GB is leading in this regard, offshore wind generation assets are becoming bigger and cheaper, each subsequent project providing a real-life demonstration that size and scale works for new offshore wind and providing benefits to consumers in the process. Other conventional low-carbon generation (e.g., tidal, nuclear or conventional carbon with CCUS) remain important contributors to achieving the 2050 Net-Zero obligation, but their contributions in the important 2020s is likely to be low; and
 - > Offshore wind is already highly competitive against other forms of conventional and low-carbon generation, both in GB and more widely.
- 5.2.22 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 CCC'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.
- 5.2.23 VE can make a large, meaningful, and timely contribution to decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, thereby addressing all important aspects of the UK's legal obligations and existing and emerging UK government policy. The case for VE is urgent and important.

5.3 THE NEED TO REDUCE GREENHOUSE GAS EMISSIONS

- 5.3.1 Within the Intergovernmental Panel on Climate Change (IPCC) report, the 2007 Fourth Assessment Report², predictions are made that a continuation of global emission trends, including emissions of greenhouse gases such as carbon dioxide, could lead average global temperatures to rise by up to 6°C by the end of this century. The potential impacts associated with such a global temperature rise include (DECC, 2014):
 - > Increased frequency of extreme weather events such as floods and drought;
 - > Reduced food supplies;
 - > Impacts on human health;
 - Increased poverty; and
 - > Ecosystem impacts, including species extinction.
- 5.3.2 The UK Committee on UK CCC (2017 carbon budget) reported that 2016 was the hottest year on record, which represented the fifth time in the 21st century a new record high annual temperature had been set (along with 2005, 2010, 2014, and 2015). The UK CCC, in its 2021 status report noted that the 2010s was the hottest decade on record globally; 2020 was then recorded as the second warmest year on record (Met Office, 2021), and 2021 the fifth warmest on record.
- 5.3.3 A commitment by the UK was made during COP26 in Glasgow in 2021 to pursue efforts to limit the global temperature increase to within 1.5°C of the pre-industrial average temperature.

² https://www.ipcc.ch/assessment-report/ar4/



- 5.3.4 Power sector emissions fell 17% in 2015 to 50% below 1990 levels. This follows an average annual decrease of 5% in the years between 2009 and 2014. This reduction is largely due to an increase in renewable and nuclear generation, equating to almost half of the UK's electricity demand in 2015 (CCC, 2016a). In order to achieve necessary ongoing reductions in emissions, the CCC recommended that the UK government should set out an intention to support 1-2GW of offshore wind per year, provided costs continue to fall, with a view to phasing out subsidies in the 2020s (CCC, 2015a).
- 5.3.5 The EU and UK legislation that has been put in place to secure a reduction in emissions is outlined in Volume 6, Part 1, Chapter 2: Policy and Legislation.

5.4 FUTURE INCREASES IN DEMAND

- 5.4.1 NPS EN-1 (paragraph 3.3.3) anticipates that large parts of the country's heat and transportation demand will be electrified, meaning total electricity consumption (measured in terawatt hours over a year) could double by 2050, depending on the choice of how electricity is supplied.
- 5.4.2 This increase in electricity demand is uncertain, but is likely to be considerably higher than today, particularly now that the UK Government has legislated for net zero emissions. This translates into very significant need for large-scale renewable energy projects. The role of offshore wind in delivering this additional capacity of low carbon energy is highlighted by the CCC reports which recognise that the sector is now maturing and showing very significant cost reductions.
- 5.4.3 Furthermore, to significantly decarbonise the power sector by 2030, NPS EN-1 indicates that it is necessary to bring forward renewable energy projects as soon as possible (NPS EN-1, paragraph 3.3.58).
- 5.4.4 EN-3 of NPS make reference to the Government's ambition to deploy up to 50GW of offshore wind capacity (including up to 5GW floating wind) by 2030, with an expectation that there will be a need for substantially more installed offshore capacity beyond this to achieve net zero carbon emissions by 2050 (paragraph 2.8.1). It is noted that meet this objective, the Government considers that all s that all offshore wind developments are likely to need to maximise their capacity within the technological, environmental, and other constraints of the development.

5.5 ROLE OF OFFSHORE WIND

5.5.1 The role of offshore wind is key in achieving the UK Government targets for 2030 and 2050. The offshore wind industry also presents an opportunity to utilise and further develop the UK's maritime engineering skills as other industries decline (such as shipbuilding and North Sea oil) in order to secure supply chain and other employment opportunities in the UK. The importance of maximising opportunities for the involvement of local businesses and communities in offshore wind has been highlighted as a key success factor for the sector in the UK (The Crown Estate, 2014).



- 5.5.2 In 2019, the offshore wind sector deal noted that the share of offshore wind in UK energy generation had increased from 0.8% in 2010 to 6.2% in 2017, reaching 10% in 2020. In March 2020, one year on from the sector deal, there was 9.8GW of installed OWF capacity, which was anticipated to reach 19.5GW by the mid-2020s (at the time of writing the offshore capacity is 13.6GW) (Renewable UK, 2023³). The UK Government has since committed to a target of 50GW of installed OWF capacity by 2030 (UK Government, 2022).
- 5.5.3 The role of OWF, and VE in particular, in delivering both clean energy (to meet government targets) and significant economic benefits is therefore a material consideration in the planning balance for the proposed Project.

5.6 LOCAL SUPPORT FOR THE BENEFITS OF OFFSHORE WIND

- 5.6.1 In addition to the Regional and National policy, goals and targets for renewable energy, local policy support is also a driver for renewable energy development. The relevant local development plans are the Tendring District Local Plan 2013-3033 and the Everyone's Essex Plan 2021-2025.
- 5.6.2 The Tendring District Local Plan recognises the commitment to tackling the causes and effects of global climate change through the need to deliver renewable energy and places to deliver renewable energy on all forms of development, as stated below:

"The Council will consider all renewable energy scheme with regard to the scale, impact, and energy generation. The policy also requires development proposals to demonstrate how renewable energy solutions have been incorporated in existing and new buildings, facilitating the retro-fitting of renewable energy installations."

5.6.3 In terms of the Essex County Councils 'Everyone's Essex Plan 2021-2025, it is also a priority to meet net zero targets and the county is committed support the delivery of schemes that meet this objective within its own boundaries and on the national scales, as stated below:

"We will work across the council and the county to hit our net zero targets, by ensuring that the council significantly reduces its carbon footprint, whilst also supporting an acceleration in the progress towards sustainable housing and energy, and active and alternative forms of travel across the county."

5.6.4 Considering the above, VE is an opportunity to help meet national and regional goals and targets, and also to support the Local Development Plan's visions not only related to climate change but also in terms of economic benefits.

5.7 APPORTIONING WEIGHT TO THE NEED ESTABLISHED IN THE PLANNING BALANCE & DECISION MAKING

5.7.1 All applications seeking development consent for energy NSIPs should be assessed by the SoS on the basis there is a demonstrated need for those types of infrastructure and that the scale and urgency of that need is as described in NPS EN-1 (Section 3.2) and summarised above. Furthermore, substantial weight should be given to the contribution which projects would make towards satisfying that need (NPS EN-1, paragraph 3.2.8).

³ https://www.renewableuk.com/page/UKWEDhome



- 5.7.2 VE would make a substantial contribution towards the delivery of renewable energy in line with the need to significantly decarbonise the power section by 2030 and should therefore be ascribed substantial weight in the balance of considerations and the presumption in favour of such developments.
- 5.7.3 VE includes up to 79 WTGs, across two separate sea bed areas in the southern North Sea and create enough energy each year to power hundreds of thousands of homes. VE will create job opportunities, support the UK Government's ambitions for up to 50GW of electricity generated from offshore wind by 2030, and will help meet the objectives of the UK Energy Security Strategy.
- 5.7.4 The principle of need for VE is therefore established.
- 5.7.5 This Section and the Planning Statement has demonstrated 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.



6 OVERALL POLICY CASE FOR VE

6.1 INTRODUCTION

- 6.1.1 EN-1, EN-3 and EN-5 were revised in 2023 and formally designated in January 2024. One of the more significant changes to the revision was the Government's prioritisation on the need for offshore wind. Part 3 of NPS EN-1 establishes an indisputable and urgent policy need for all types of energy infrastructure in order to achieve energy security and dramatically reduce carbon emissions (NPS EN-1, paragraph 3.1.1).
- 6.1.2 It is not therefore necessary, when determining applications for offshore wind, to demonstrate a specific need for the principle of offshore wind development. Part 3 also explains that it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts. These effects will be minimised by the application of policy set out in Parts 4 and 5 of NPS 1 and Part 2 of EN-3 and EN-5. (NPS EN-1, paragraph 3.1.2).
- 6.1.3 Given the level and urgency of need for offshore wind development, 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.
- 6.1.4 In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account:
 - > its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits; and
 - > its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy.
- 6.1.5 In order to assist the SoS in judging compliance with the relevant NPSs and with weighing the impacts and benefits, Table 6.1 below summarises relevant information from the DCO Application to identify the benefits and impacts of VE. Where any residual impacts are identified, a further justification is given as to the weight that the SoS should give to the benefits. This table follows the assessment principles within Part 4 and 5 of EN-1 and should be read in conjunction with the accompanying Policy Compliance Document (Document Reference 9.2) which demonstrates how the Applicant has complied with relevant planning policy. In addition, the table considers other environmental, social and economic benefits and adverse impacts, at national, regional and local levels, such as marine plans, and other material considerations.

Table 6.1: Weighing Benefits and Adverse Impacts

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
NPS EN-1 – Part 4	Assessment Principles				
Section 4.2: The Critical National Priority for Low Carbon Infrastructure	Offshore wind has been defined by Government as being a CNP. The Government has highlighted that there is an urgent need for CNP Infrastructure to achieving energy objectives, together with the national security, economic, commercial, and net zero benefits. Paragraph 3.3.63 of EN-1 states that: <i>"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 <i>impacts not capable of being addressed by</i> <i>application of the mitigation</i> <i>hierarchy. Government</i> <i>strongly supports the</i> <i>delivery of CNP</i> <i>Infrastructure and it should</i> <i>be progressed as quickly as</i> <i>possible."</i> The Applicant has followed the Assessment Principles outlined within Section 4.2 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.</i>	The benefits in relation to CNP is discussed below. VE will help the Government achieve its commitment to reduce GHG emissions by 78 per cent by 2035 whilst meeting a 40-60 per cent increase in demand (EN-1 paragraph 3.3.57). VE will help address the urgent need for new electricity infrastructure and help towards the UK decarbonising its economy (EN-1 paragraph 3.3.58). VE will: > provide security of supply (by reducing reliance on imported oil and gas, avoiding concentration risk and not relying on one fuel or generation type); > provide an affordable, reliable system (through the deployment of technologies with complementary characteristics); and > help ensure the system is net zero consistent (by remaining in line with Government carbon budgets and maintaining the options required to	The adverse impacts in relation to CNP are discussed below. VE has submitted a number of derogation cases (Volume 5, Report 5: Habitats Regulations Assessment Derogation Case), both conceded and without prejudice, with details of proposed compensation measures for consideration by the Competent Authority, should a conclusion of AoEI be reached. The Applicant is conceding a significant effect upon Lesser Black-Backed Gull (LBBG) in relation to the Alde Ore Estuary SPA. Appropriate compensation measures have been developed and put forward within the Application to compensate for any impacts.	In most cases, non- traffic and non-MCZ mitigation measures have been identified and adopted as part of the evolution of the project design and specific to each topic. This has included project design measures, compliance with elements of good practice and use of standard protocols. In line with Paragraph 4.2.11 of EN-1, the Applicant has applied the mitigation hierarchy and demonstrated where it has been applied. Volume 9, Document 31: Schedule of Mitigation and Monitoring lists all measures proposed on a topic-by-topic basis. They are grouped by document relationships and signposts where the commitments are made in the ES, how they are secured within the draft Development Consent Order (DCO) & Deemed Marine Licence (dML) and associated documents.	Non-HRA and m The Applicant ha demonstrated wit subsequent topic Table 6.1 that the non-HRA or nor residual impacts after the mitigatic hierarchy has be (EN-1 Paragraph Therefore, the Pl "should be progra quickly as possib with EN-1 Paragraph Therefore, the Pl "should be progra quickly as possib with EN-1 Paragraph Therefore, the Pl "should be progra quickly as possib with EN-1 Paragraph (Volume 5, Repo Conservation Zon Assessment) sup DCO and conclue VE construction, and maintenance decommissioning within the offshor array areas will m the achievement conservation obje either MCZ. In relation to HRA cumulative residu have been assess the RIAA (Report Appropriate Asses (Volume 5, Report Appropriate Asses) the RIAA (Report Appropriate Asses) (Volume 5, Report Assessment). In relation to Les backed gull. Corr will need to be pr

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Relevant DCO Applicant Documents

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dual impacts essed within ort to Inform sessment port 4: Report opriate

esser blackompensation provided. All mitigation and monitoring within the Habitats Regulations Derogation (HRA):

- > Volume 5, Report
 4.1: HRA Site
 Integrity Matrices;
- Volume 5, Report
 4.2: HRA Screening
 Report; and
- Volume 5, Report
 4.3: HRA Screening
 Matrices.

Lesser black-backed gull (LBBG) compensatory measures:

- > Volume 5, Report 5.3: LBBG Compensation: Evidence, Site Selection and Roadmap;
- Volume 5, Report
 5.6: Lesser Black
 Backed Gull
 Implementation and
 Monitoring Plans;
- Volume 5, Report 5: Habitats Regulations Assessment 'Without Prejudice' Derogation Case;
- Report to Inform Appropriate Assessment (Volume 5, Report 4: Report to Inform Appropriate Assessment);
- Volume 5, Report 6: Marine Conservation

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
		deliver for a wide range of demand, decarbonisation and technology scenarios, including where there are difficulties with delivering any technology) (EN-1 paragraph 3.3.59).			 This compensation has been agreed in advance with Natural England and is outlined in more detail within: Volume 5, Report 5.3: LBBG Compensation: Evidence, Site Selection and Roadmap; and Volume 5, Report 5.6: Lesser Black Backed Gull Implementation and Monitoring Plans. The Applicant accordingly submits that with the application of the compensatory measures for the conceded HRA effect, there is no residual unacceptable HRA impact which would prevent consent being granted. The Project qualifies as CNP Infrastructure and therefore in line with EN-1 (Paragraph 4.1.7), it is likely that the need case presented within the previous sections and Table 6.1 will outweigh the residual effects. There is no exceptional case and therefore the SoS should give less weight to those residual effects against the benefits of the proposed development, particularly as suitable compensation has been proposed. 	Zone Assessment; and > The accompanying ES Chapters.



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
Section 4.3: Environmental Effects/ Considerations	All proposals for projects that are subject to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) must be accompanied by an Environmental Statement (ES) describing the aspects of the environment likely to be significantly affected by the Project. The Applicant has assessed the likely worst-case environmental, social and economic effects of the proposed development to ensure that the impacts of the Project as it may be constructed have been properly assessed. In addition, the accumulation of, and interrelationship between, effects has been considered in Volume 6, Part 4, Chapter 3: Inter- relationships. This chapter of the Environmental Statement (ES) summarises the assessment of inter- related effects across the physical, biological and human environments during the construction, operation and decommissioning phases of the project. All ES chapters include a consideration of inter- related effects and as noted above, many of the individual topic chapters address elements of inter- related effects by their	The benefits in relation to environmental effects/ considerations are discussed below. The Applicant has considered the potential beneficial effects, within each ES chapter and set out information on the likely significant environmental, social and economic effects of the development. The benefits are outlined below within each relevant ES chapter and assessment principles within Table 6.1. Chapter 4: Site Selection and Consideration of Alternatives identifies where alternatives are considered to either not be commercially viable or physically/ technically unsuitable to the extent that they carry significant risk to the implementation of VE. The siting of a proposed extension to the GOWF project is necessarily spatially limited. It is not feasible to site an extension to the west, due to the presence of Greater Gabbard Offshore Wind Farm. The site selection process and alternatives considered have been through a process of detailed analysis of environmental, social, and engineering constraints and key feasible alternatives have been	The adverse impacts in relation to environmental effects/ considerations are discussed below. The Applicant has considered the potential adverse impacts, within each ES chapter and set out information on the likely significant environmental, social and economic effects of the development, and shown how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy. The adverse impacts are outlined below within each relevant ES chapter and assessment principles within Table 6.1. The RIAA (Report to Inform Appropriate Assessment (Volume 5, Report 4: Report to Inform Appropriate Assessment) concludes that, 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	In most cases, mitigation measures have already been identified and adopted as part of the evolution of the project design and specific to each topic. This has included project design measures, compliance with elements of good practice and use of standard protocols. Volume 9, Document 31: Schedule of Mitigation and Monitoring lists all measures proposed on a topic-by-topic basis. They are grouped by document relationships and signposts where the commitments are made in the ES, how they are secured within the draft Development Consent Order (DCO) & Deemed Marine Licence (dML) and associated documents.	Compensation m have been propo- compensate for in Lesser Black Bac as discussed in V Report 5.3: LBBC Compensation: E Site Selection an Roadmap; and V Report 5.6: Lesse Backed Gull Impl and Monitoring P The Applicant ac submits that with application of the compensatory me the conceded HR there is no resid unacceptable HI which would prev consent being gra The Project qua CNP Infrastructor therefore in line (Paragraph 4.1.7) submitted that t case presented previous section Table 6.1 will out the residual effe is no exceptional and therefore the should give less those residual effe is no exceptional and therefore the should give less those residual effe



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Relevant DCO Applicant Documents

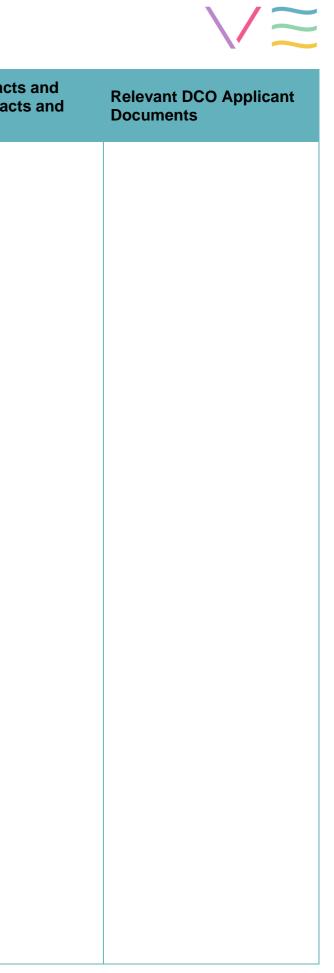
measures bosed to r impacts on acked Gulls Volume 5, ЗG Evidence, and Volume 5, ser Black plementation Plans. accordingly th the ne measures for IRA effect, idual HRA impact event granted. alifies as cture and ne with EN-1 I.7), it is the need d within the ons and outweigh fects. There nal case the SoS ss weight to effects nefits of the elopment, suitable has been

The ES has covered the environmental, social and economic effects arising construction, operation and decommissioning of the Project.

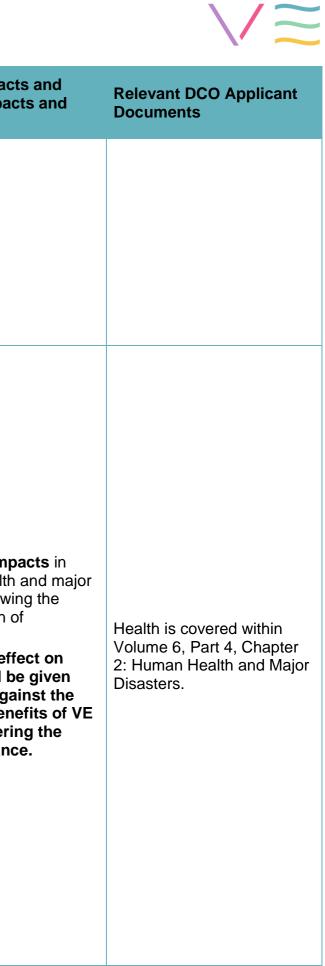
Report to Inform Appropriate Assessment (Volume 5, Report 4: Report to Inform Appropriate Assessment).

Offshore Co-ordination Document (Document 9.29). Onshore Co-ordination Document (Document Reference 9.30).

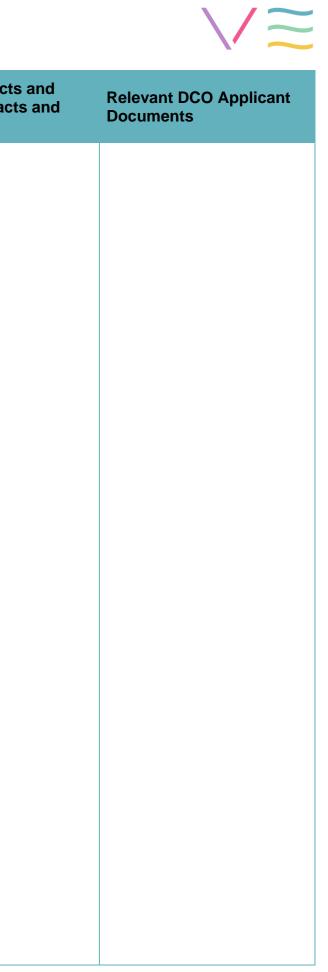
Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
	nature. This holistic approach ensures that the EIA is comprehensive and assessed all relevant potentially significant effects upon all relevant receptors. Overall, the inter-related effects assessment for VE has not identified any significant effects that are not already identified in the topic-specific chapters. The assessment has not identified any inter-related effects that are predicted to lead to effects of greater significance compared to those identified in isolation. The Applicant has followed the Assessment Principles outlined within Section 4.3 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	taken forward for consultation through the Scoping process, EPP, or through statutory consultation meetings, as outlined in Volume 6, Part 1, Chapter 4: Site Selection and Consideration of Alternatives. There is no alternative layout within the identified site which could be reasonably proposed which would minimise any harm and VE is therefore compliant. Being an extension project there are certain benefits including an existing detailed knowledge of site characteristics, construction and operational considerations and relationships with local stakeholders which may enable VE to be brought forward earlier and more efficiently than other non- extension OWF. In accordance with the provisions of NPS EN-5 to seek to develop co- ordination solutions for onshore grid connections. VE has been working with North Falls on a co- ordinated solution to reduce the overall environmental and community impacts of the proposals. The Project includes almost fully overlapping, or combined Onshore ECCs and a co- located site for the OnSS to	black-backed gull feature (collision risk during the O&M phase).		



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
		the west of Little Bromley. It is proposed the two projects ducts will be installed adjacent to each other within the corridor. The level of co-ordination between the two projects has led to a higher degree of understanding and interactions with the North Falls proposals.			
Section 4.4: Health	 Section 4.4 of EN-1 highlights that energy infrastructure has the potential to impact on the health and well-being ("health") of the population. It advises that there are certain direct and indirect impacts that may be caused by energy infrastructure topics. The Applicant has assessed health in line with Section 4.4. Volume 6, Part 4, Chapter 2: Human Health and Major Disasters assesses the potential impact of Five Estuaries Offshore Wind Farm Project on Human Health and Major Disaster receptors. Specifically, this Chapter considers the potential impact to human health from the onshore infrastructure during the construction, operation and maintenance, and decommissioning phases. The Applicant has followed the Assessment Principles outlined within Section 4.4 and the accompanying 	The benefits in relation to health are discussed below. As outlined within EN-1 (Paragraph 4.4.1), access to energy is clearly beneficial to society and to our health as a whole. VE would make a substantial contribution towards the delivery of renewable energy in line with the need to significantly decarbonise the power sector by 2030. VE would also provide affordable energy supplies supporting the UK in reducing in GHG emissions. Paragraph 2.12.14 of the Health Chapter considers wider societal issues and advises that the key health outcomes relevant to this determinant of health are reducing premature deaths, heart attacks, asthma exacerbations, and hospitalisations for cardiovascular or respiratory issues. There would be direct and indirect employment	In relation to adverse impacts to health, the conclusion of the assessment for population health is that impacts would be minor, short term and related to construction.	An overview of mitigation that is relevant to health is set out in Table 2.15 of Volume 6, Part 4, Chapter 2: Human Health and Major Disasters. This outlines relevant mitigation set out in other ES chapters where there is an overlap. A number of mitigation measures have been proposed across the different topic chapters which apply to human health and major disasters, including the use of a Construction Traffic Management Plan and Code of Construction Practice to reduce the impacts of the works on human health.	No residual imparelation to health disasters, followir implementation o mitigation. As such, the effect health should be little weight agais substantial benering planning balance when considering the statement of the statement



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
	Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	opportunities both during construction and during operation. Construction jobs would be short- to medium- term but include upskilling that would have longer term benefits. Operational jobs could provide many years of benefit to those employed and their dependants. The majority of the jobs are expected to be drawn from the regional level, providing benefits to those employed as well as their dependents. When considering the deprivation IMD domain rankings, employment in Tendring is considered to be the 22nd most deprived (within top 7% of most deprived) (out of 317 local authorities) which further indicates the local population would benefit from employment opportunities. Long term regional benefits to upskilling and employment, will be enhanced by Employment, Skills and Education Strategy (Volume 9, Report 9.27) which will be secured as part of the DCO. VE will increase national energy security which will result in positive health impacts by lessening the level of pollution emitted into the atmosphere from fossil fuels which are experienced on the international level. In			



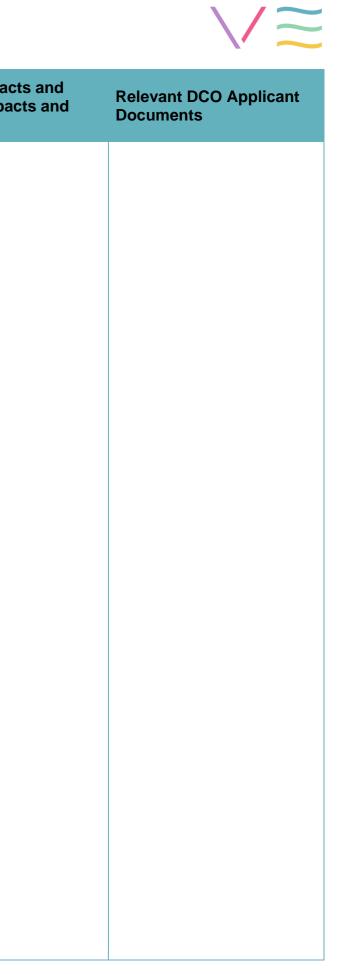
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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
		addition, VE will help alleviate low to medium income groups out of fuel poverty through the provision of affordable energy. This proclamation is outlined within Volume 6, Part 4, Chapter 1: Climate Change, which confirms that VE will assist the UK in reducing GHG emissions and the trajectory to net zero by 2050. The chapter also states that VE will be of a beneficial significance. The conclusion of the cumulative effects is that no significant cumulative health impacts are anticipated and there is the potential for positive impacts when VE is taken into account with other relevant development projects.				
Section 4.5: Marine Considerations	In line with EN-1 (Paragraph 4.5.8-4.5.9), The Applicant has taken account of Marine Plans. A Marine assessment is included within the Policy Compliance Table (Document Reference 9.1). Licensable marine activities of relevance to VE include constructing and maintenance works in the sea or on the seabed and the deposition of any substance or object in the sea or on or under the seabed (such as the disposal of dredged material).	The benefits in relation to marine considerations are discussed below. VE is in line with a number of high-level marine objectives within the UK MPS, and will: > Promote sustainable economic development; > Enable the UK's move towards a low- carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects;	In relation to adverse impacts to marine considerations the conclusion of the Marine Assessment within Policy Compliance Table (Document Reference 9.1) considers relevant marine policy and demonstrates that there are no conflicts with the Marine Plans.	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. In relation to marine considerations, the SoS should refer to Section 1.1,	No residual impacts in relation to marine considerations. The proposals meet the high-level marine objectives, plan vision, and all relevant policies. However, should the SOS disagree with these conclusions then the Applicant is confident that in line with Paragraph 4.5.12 of EN-1, the NPS prevails for purposes of decision making. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when	 The offshore ES chapters and supporting documents which relate to marine considerations and mitigation are as follows: > Volume 9, Report 3: Offshore Project Design Principles > Volume 9, Report 9: Cable Burial Risk Assessment > Volume 9, Report 16: Outline Fisheries Liaison and Co- Existence Plan > Volume 9, Report 17: Outline Offshore

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	The VE DCO application includes Deemed Marine License(s), which will include powers to undertake marine works. The potential effects on the marine environment from the application have been assessed in accordance with the UK Marine Policy Statement (MPS), the Marine and Coastal Access Act 2009 and East offshore, the East inshore and the South East Inshore marine plans and policies. The Applicant has followed the Assessment Principles outlined within Section 4.5 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	 Ensure a sustainable marine environment that promotes healthy, functioning marine ecosystems and protects marine habitats, species and heritage assets; and Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issue. In addition, being an extension project there are certain benefits including an existing detailed knowledge of site characteristics, construction and operational considerations. Overall, the Project location has been dictated by the requirement to site the proposed extension next to the GOWF. The Project is therefore spatially limited but has avoided less favourable locations and considered other uses as well as environmental constraints based on existing knowledge. 		Offshore Schedule of Mitigation of Volume 9, Document 31: Schedule of Mitigation and Monitoring. In relation to Offshore Monitoring Commitments, the SoS should refer to: Volume 9, Document 32: Offshore in Principle Monitoring Plan.	considering the planning balance.	 Operations and Maintenance Plan Volume 9, Report 18: Outline Project Environmental Management Plan Volume 9, Report 18.1 : Working in Proximity to Wildlife in the Marine Environment Volume 9, Report 19: Outline Marine Written Scheme of Investigation (Offshore) Volume 6, Part 2, Chapter 2: Marine Geology, Oceanography and Physical processes Volume 6, Part 2, Chapter 3: Marine Water and Sediment Quality Volume 6, Part 2, Chapter 4: Offshore Ornithology Volume 6, Part 2, Chapter 5: Benthic and Intertidal Ecology Volume 6, Part 2, Chapter 5: Benthic and Intertidal Ecology Volume 6, Part 2, Chapter 6: Fish and Shellfish Ecology Volume 6, Part 2, Chapter 7: Marine Mammal Ecology Volume 6, Part 2, Chapter 8: Commercial Fisheries

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
						 > Volume 6, Part 2, Chapter 9: Shipping and Navigation > Volume 6, Part 2, Chapter 11: Offshore Archaeology and Cultural Heritage > Volume 6, Part 2, Chapter 12: Infrastructure and Other Marine Users > Volume 6, Part 2, Chapter 13: Military and Civil Aviation > MCZ assessment (document reference 5.6)
Section 4.6: Environmental and Biodiversity Net Gain	The overarching aim of Section 4.6 is to ensure energy NSIP proposals, whether onshore or offshore, seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible. Part 6 of the Environment Act also sets out provisions for 'Biodiversity gain as condition of planning permission'. Once enacted, amendments to the Planning Act 2008 will from November 2025 require NSIPs to deliver biodiversity net gain. DEFRA Policy Paper (23 Feb 2023) Nationally Significant Infrastructure: action plan for reforms to the planning process states in Section	The benefits in relation to environmental and biodiversity net gain are discussed below. In accordance with Paragraph 4.6.1 of EN-1 VE will leave the natural environment in a measurably better state than beforehand. VE has considered opportunities for enhancements and it is envisaged that this would be the subject of a DCO Requirement, and that the project will seek a minimum of 10% BNG.	There are no adverse impacts in relation to Environmental and biodiversity net gain. More specific environmental considerations are considered throughout Table 6.1.	To account for potential changes to the detailed scheme design and in order to comply with the BNG statutory requirements for NSIPs (anticipated in November in 2025), the BNG Metric will be re-run post-DCO consent, and the BNG Final Design Report shall be prepared including any required statutory documents. It is envisaged that this would be the subject of a DCO Requirement, and that the project will seek a minimum of 10% BNG. Deliverables are anticipated to be the same as above, i.e. impacts, baseline and post- development plans along with a Statutory Metric spreadsheet. The detailed LEMP, to be produced post-consent, will	No residual impacts in relation to environmental and biodiversity net gain. Paragraph 4.6.1 of EN-1 emphasises that achieving biodiversity net gain is not currently an obligation on applicants. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE and environmental and biodiversity net gain when considering the planning balance.	Volume 6, Part 6, Annex 4.18: Five Estuaries Offshore Wind Farm Onshore Biodiversity Net Gain Indicative Design Stage Report

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impa- benefits
	 4.7 that: "We will incorporate biodiversity net gain (BNG) requirements for all (terrestrial) NSIP projects from November 2025 and develop an approach for marine net gain (MNG). The biodiversity net gain requirement for NSIPs is to achieve at least 10% measurable net gain on all terrestrial and intertidal development, which is to be secured for at least 30 years. Defra is developing a draft biodiversity gain statement, which will set out the detail of the biodiversity net gain requirement for NSIPs. Defra plans to consult on this draft statement in early 2023". The Applicant has followed the Assessment Principles outlined within Section 4.6 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance. 			include the final requirements for monitoring of areas within the Order Limits against the BNG objectives set out in the Metric assessment, and any associated management actions. It is envisaged that monitoring and management requirements for off-site areas (if needed) would be dealt with separately. In accordance with the mitigation hierarchy BNG should ideally be delivered on-site, near to where negative impacts occur, wherever possible. Providing BNG on-site may also enable BNG to be constructively added to other mitigation proposals, such as habitat-based mitigation for protected species. However, land ownership constraints may limit the scope to provide sufficient enhancement to meet a 10% net gain target within the Order Limits. Discussions with several owners/ organisation within Essex are ongoing in respect of potential offset locations, in the event that 10% gain cannot be achieved within the Order Limits. Some possible locations were identified in early 2023, and have already been subject to baseline habitat survey to enable further work to	



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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
				establish their potential feasibility to be completed. Offset areas located off-site would also be subject to a minimum 30-year monitoring and management plan. If net gain cannot be delivered on or off-site, it may alternatively be achieved through the purchase of 'open market' biodiversity units, e.g. from a habitat bank or statutory biodiversity credits, or a combination of both sources. The option of buying statutory biodiversity credits is available as a last resort, where developers can demonstrate that they are unable to achieve BNG through the available on- site and off-site options.		
Section 4.7: Criteria for Good Design for Energy Infrastructure	The overarching aim of Section 4.7 of EN-1 is to ensure that design is considered from a very early stage of a proposal. The Section highlights that certain factors such as visual appearance, structure, or piece of infrastructure, and how it relates to the landscape it sits within, is considered to be an important factor in good design. However, there is an acknowledgement that high quality and inclusive design goes far beyond aesthetic considerations. It stresses that "the functionality of an	The benefits in relation to Criteria for good design for Energy Infrastructure are discussed below. The Applicant is constrained in its ability to apply a site selection process that would avoid all impacts, as a result of the 2017 Extensions round criteria. Notwithstanding this, the Applicant has sought, through consultation and iterative design, to minimise all environmental impacts as far as is practicable, whilst retaining an economically viable project.	The adverse impacts in relation to Criteria for good design for Energy Infrastructure are discussed below. There will be onshore and offshore landscape and visual impacts from VE. These impacts are unavoidable. However, VE has undertaken a design process that goes as far as practicable to develop a design that seeks to minimise harm/ change to the receiving environment, and this is reflected in the iterative process that has	Each ES chapter addresses embedded mitigation that has already been incorporated into the project design. Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated	There will be onshore and offshore landscape and visual impacts from VE. These impacts are unavoidable. The majority of the wind turbine generators will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising additional visual impact. The design has been based on a Rochdale Envelope Approach, which has defined a maximum design scenario for assessment, as	 A full description of the site selection process is provided in: > Volume 6, Part 1, Chapter 4: Site Selection and Alternatives. > Volume 6, Part 3, Chapter 2: Onshore Landscape and Visual Impact Assessment. > Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual Assessment. > Design Principles Document (see

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Rele Doc
	object – be it a building or other type of infrastructure – including fitness for purpose and sustainability, is equally important.". The Applicant has followed the Assessment Principles outlined within Section 4.7 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	The Project design and location has been based on early engagement with key stakeholders, the public and a range of environmental and technical appraisals. VE as presented is sustainable and both functional as well as well designed. Further design considerations of relevance to the onshore design are set out in the onshore Design Principles Document see Volume 6, Document 9.4: Onshore Substation Design Statement). With regards offshore design, VE is being designed in so far as reasonably practicable to apply good design, siting WTGs in an area that seeks to reduce visual effects, whilst also complying with the necessary safety requirements with respect to safe navigation and operation of Search and Rescue procedures. Further design refinements, such as reducing WTG height or altering colour are not considered feasible due to the flexibility needed due to uncertainty in technological advances (as recognised in NPS EN-3) or due to other considerations such as operational safety which requires the WTGs to be appropriately marked and painted to comply with	been applied to VE throughout the pre- application process.	documents. Mitigation measures include good project design, such as careful routing onshore to avoid major tourism, recreation assets, key areas of sensitivity. In addition, careful routing onshore has minimise the number of main river crossings and the Applicant has committed to use trenchless techniques to cross them, such as horizontal directional drilling where feasible. In relation to design considerations, the SoS should refer to Section 1.1, Offshore Schedule of Mitigation and Monitoring and Section 2.1, Onshore Schedule of Mitigation within of Volume 9, Document 31: Schedule of Mitigation. Design mitigation considerations of relevance to the onshore design are set out in the onshore Design Principles Document (see Volume 6, Document 9.4: Onshore Substation Design Statement). Offshore design principles can be found within Volume 6, Document 9.3: Offshore Design Principles.	agreed through stakeholder consultation. In considering the DCO Application, the SoS should factor in that VE qualifies as CNP Infrastructure and therefore in line with EN-1 (Paragraph 4.1.7), it is likely that the need case presented within the previous sections and Table 6.1 will outweigh the residual effects. There is no exceptional case and therefore the SoS should give less weight to those residual effects against the benefits of the proposed development, particularly as the appearance and siting of WTGs are constrained. As such, the effect on good design should be given little weight against the substantial benefits of VE when considering the planning balance.	



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Volume 6, Document 9.4: Onshore Substation Design Statement).

 Offshore design principles can be found within Volume 6, Document 9.3: Offshore Design Principles.

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
		navigational safety requirements.			
Section 4.10: Climate Change Adaptation and Resilience	Section 4.10 emphasises that the Government must accelerate efforts to end our contribution to climate change by reaching Net Zero greenhouse gas emissions. However, it stresses that adaptation is also necessary to manage the impacts of current and future climate change. If new energy infrastructure is not sufficiently resilient against the possible impacts of climate change. If proposals are not resilient against climate change then EN-1 is clear that the requirements within Part 3 of the NPS cannot be met. The Applicant has ensured that each topic-specific chapter of the ES includes a climate change section and description. In addition, as outlined within Volume 6, Part 4, Chapter 1: Climate Change, the impacts and future climate change projections have been accounted for. The Applicant has followed the Assessment Principles outlined within Section 4.10 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	The benefits in relation to climate change are discussed below. As outlined in Volume 6, Part 4, Chapter 1: Climate Change, the operational phase of VE would enable the use of renewable electricity which would result in a positive greenhouse gas impact, resulting in a significant beneficial effect. There are benefits of the electricity generated across the lifetime of VE which is anticipated to displace UK marginal electricity, expected to be derived from gas for years.	There are no adverse impacts in relation to climate change.	Each ES chapter addresses embedded mitigation that has already been incorporated into the project design to factor in climate change adaptation. Measures or commitments have been identified and adopted as part of the evolution of the project design, relating to specific topics. These include project design measures, compliance with elements of good practice and use of standard protocols which also address risks posed by future climate change. Example measures include avoidance, so far as possible, of flood risk zones, and commitment to use trenchless techniques to cross sea defence structures, main rivers, non- main and ordinary watercourses to reduce the impact, and development of a Cable Specification and Installation Plan post consent to set out appropriate cable burial depth in accordance with industry good practice, minimising the risk of cable exposure and ensure that cable crossings are appropriately designed to mitigate environmental effects. Table 1.19: 'Summary of effects for climate change'	No residual imparelation to climate have been identif However, there we significant posit from the reduction emissions via clear production, which help to meet UK a for Net Zero and secure sources o In line with Parag of EN-1, the SoS give appropriate the benefits of c change when co the planning bal

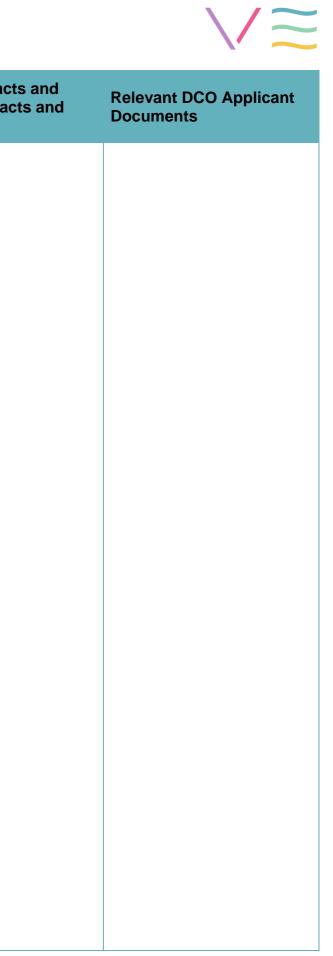
cts and Relevant DCO Applicant Documents acts and **pacts** in ate change ntified. will be a sitive impact Each topic-specific chapter of the ES includes a climate tion in carbon lean energy change section and ich will also description. ambitions In addition, Volume 6, Part d low cost, 4, Chapter 1: Climate of energy. Change should be referred agraph 4.6.3 o**S should** to. ate weight to f climate considering alance.

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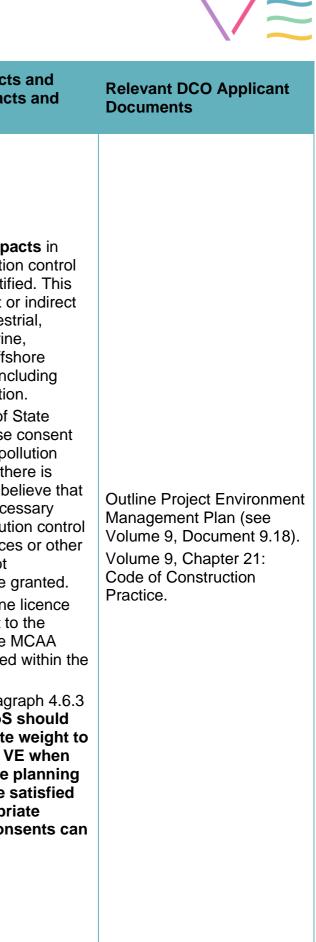
Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
				within Chapter Volume 6, Part 4, Chapter 1 does not propose any additional mitigation measures during construction, operation and decommissioning.	
Section 4.11: Network Connection	Section 4.11 highlights the Governments desire for Applicants to adopt a coordinated approach to the development of the grid network to facilitate the UK's net zero energy generation development and transmission. In accordance with Section 4.11, The Applicant has submitted a Co-ordination Document (Document 9.30) which gives full details of the coordinated approach. The Applicant has followed the Assessment Principles outlined within Section 4.11 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	The benefits in relation to network connection are discussed below. In line with Paragraph 4.11.7 of EN-1, EN-3 (Paragraph 2.8.34 – 2.8.3 and EN-5, VE would provide a secure, local and clean source of low-cost energy to the UK. That energy would be delivered to the UK through a standalone electricity grid connection onshore. However, VE has and will continue to co-ordinate with neighbouring projects. This has included sharing survey data with the proposed North Falls Offshore Wind Farm Project, coordinating designs with regards to Onshore Export Cable Corridor, the number of electricity export cables, co- located area for each project's substation, and siting of other onshore infrastructure and construction methods. Co- ordination discussions are also ongoing with National Grids Norwich to Tilbury Reinforcement project on interactions of two projects, including construction activities at its proposed East Anglia Connection	There are no adverse impacts in relation to network connection. The ES chapters acknowledge that there are multiple scenarios and are clear on which has been assumed to be worst case for the purposes of the assessment.	No mitigation is required.	No residual imp relation to netwo connection have identified. In line with Parag of EN-1, the Sos give appropriate the benefits of N coordinated app when considering planning balance

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pacts in ork been agraph 4.6.3 S should te weight to VE's oproach ing the ice.	Offshore Co-ordination Document (Document 9.29). Onshore Co-ordination Document (Document Reference 9.30). Each ES chapter has considered how different construction scenarios set out in the Co-ordination (Document 9.30) affect the assessments.

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
		 Node Substation. Coordinated activities and/ or shared information to date have included export cable corridor definition to ensure that the number of cables crossing the intertidal/ coastal zone are minimised. The shared 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. In order to realise these benefits during construction, the two projects need reach their decision points on whether to proceed with the projects (also known as their Financial Investment Decisions (FIDs)) within three years of each other. The shorter the gap between the projects' FIDs, the more coordination in construction can be achieved. 			
		coordination with North Falls will progress. However, the Applicant has sought to identify suitable options for VE's onshore infrastructure that can accommodate either the			
		Application alone or co- location with North Falls.			



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts Weighing impact benefits
Section 4.12: Pollution Control and Other Environmental Regulatory Regimes	Section 4.12 of EN-1 provides information on pollution controls and the need to obtain additional consents to ensure that potential releases can be adequately regulated under the pollution control framework and that pollution when the proposed development is added would not make that development unacceptable, particularly in relation to statutory environmental quality limits. In accordance with this section, the Applicant has submitted an Outline Project Environment Management Plan (see Volume 9, Document 9.18) and Volume 9, Chapter 21: Code of Construction Practice which consider pollution control and other environmental regulatory regimes. The Applicant has followed the Assessment Principles outlined within Section 4.12 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	There are no benefits in relation to pollution control and other environmental regulatory regimes, however the SoS should be satisfied that all relevant licences can be sought to ensure pollution is controlled.	There are no adverse impacts in relation to pollution control that's have been identified.	An outline Project Environment Management Plan is being submitted with the Development Consent Order (DCO) Application (see Volume 9, Document 9.18), which will detail best practice and embedded mitigation measures that will ensure good pollution control practice. The Project Environmental Management Plan (PEMP) has been produced to be submitted as part of the DCO application in line with dML conditions. The PEMP will include the following scope. The licensed activities for each stage of construction of the authorised development must not commence until the following (insofar as relevant to that activity or stage of activity) has been submitted to and approved in writing by the MMO, in consultation with, where relevant, Trinity House, the MCA, UK Hydrographic Office and relevant SNCB: > marine pollution contingency plan to address the risks, methods and procedures to deal with and report any spills and collision incidents of the authorised development in relation to all	No residual imparelation to pollution have been identificapplies to direct on impacts on terrest freshwater, marine onshore, and offstenvironments, incompacts and vibration The Secretary of S should not refuse on the basis of polimpacts unless the good reason to be any relevant nece operational polluti permits or licence consents will not subsequently be g A deemed marine for VE pursuant to provisions of the N 2009 are included draft DCO. In line with Paragr of EN-1, the SoS give appropriate the benefits of Vi considering the p balance and be s that the appropriate the applied.

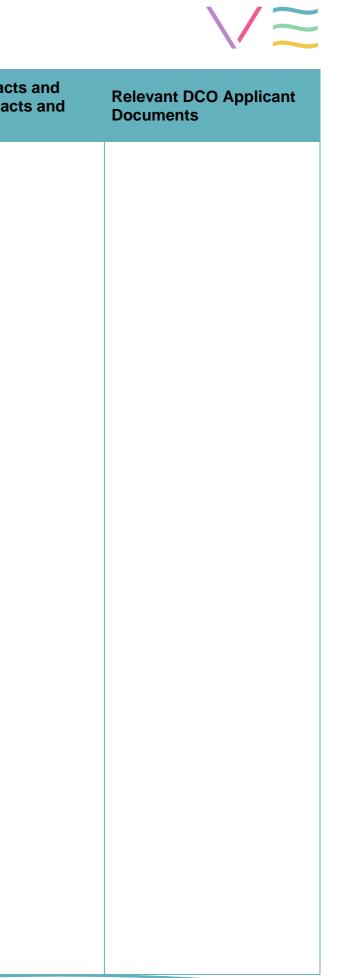


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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
				 activities carried out; a chemical risk register to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance; a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised; waste management and disposal arrangements; and a vessel management plan, in accordance with the outline vessel management plan. 		
Section 4.15: Common Law Nuisance and Statutory Nuisance	Section 4.15 of EN-1 discusses the possible sources of nuisance under Section 79(1) of the EPA 1990 and how they may be mitigated or limited. Nuisances include: > air quality and dust; > odour; > artificial light; and > noise and vibration. In accordance with the requirements of EN-1, both onshore and offshore nuisances throughout construction, operation and	There are no benefits to consider in relation to common law nuisance and statutory nuisance.	Air Quality Potential air quality impacts have been considered within Chapter 10: Air Quality of the environmental statement (Volume 6, Part 3, Chapter 10). This assessment considers impacts throughout all phases of development, including construction, Operation and Maintenance (O&M) and decommissioning phase. <i>Construction</i> The assessment has considered impacts that	Air Quality Construction Section 4.4 of the Code of Construction Practice (Application Document 9.21) provides specific mitigation measures which will be applied to minimise air quality impacts associated with construction activities. These principally relate to the suppression of dust generated from construction activities, and controlling emissions from NRMM. Implementation of the air	No residual impacts in relation to statutory nuisances have been identified. Under article 9(2) of the draft development consent order (Application Document 3.1), compliance with the controls and measures relating to noise, vibration, dust or artificial lighting in the Code of Construction Practice (Application Document 9.21) will be sufficient (but not necessary) to show that any alleged nuisance could	Code of Construction Practice (Application Document 9.21). Chapter 10: Air Quality of the Environmental Statement (Volume 6, Part 3, Chapter 10). Chapter 2: Landscape and Visual Impact Assessment of the Environmental Statement (Volume 6, Part 3, Chapter 2). Volume 6, Part 4, Chapter 2: Human Health and Major Disasters. Chapter 9: Airborne Noise

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	decommissioning have been considered where relevant the ES. A Statutory Nuisance Statement (Document Reference Number 5.7) has been prepared to comply with Regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations), which provides that any application for a development consent order (DCO) should be accompanied by a statement setting out whether the proposal could cause a statutory nuisance pursuant to Section 79(1) EPA, and with the policy requirements set out in EN- 1. If such a nuisance could occur, the statement must set out how the applicant proposes to mitigate or limit the effects. This Statement provides an explanation of matters set out in Section 79(1) of the EPA in respect of statutory nuisances, the potential implications of the Scheme, and proposals for mitigating or limiting any such potential statutory nuisances identified. The Applicant has followed the Assessment Principles outlined within Section 4.15 and the accompanying		 could lead to potential significant air quality effects arising from: emissions of air pollutants and dust from temporary construction activities; emissions of air pollutants from VE generated road traffic; emissions of air pollutants from Non-Road Mobile Machinery (NRMM) on site; and emissions of air pollutants from offshore activities on onshore receptors. Operation In relation to air quality, operational activities will be minimal and infrequent; these are unlikely to cause an air quality impact. 	quality controls included in the Code of Construction Practice is secured through requirement 8 (Code of construction practice) of the draft development consent order (Application Document 3.1). <i>Operation</i> No mitigation required.	not reasonably be avoided. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE's coordinated approach when considering the planning balance.	and Vibration of the Environmental Statement (Volume 6, Part 3, Chapter 9).
			Noise and vibration The potential impacts and mitigation in respect of noise and vibration have been assessed as part of Chapter 9: Airborne noise and vibration of the environmental statement (Volume 6, Part 3, Chapter 9). Construction > noise and vibration during the construction of the landfall;	Noise and vibration Construction Section 4.3 of the Code of Construction Practice (Application Document 9.21) provides specific mitigation measures which will be applied in respect of noise. Further, Section 3.2 of the Code of Construction Practice (Application Document 9.21) provides for restrictions on construction working hours. Construction works will be		

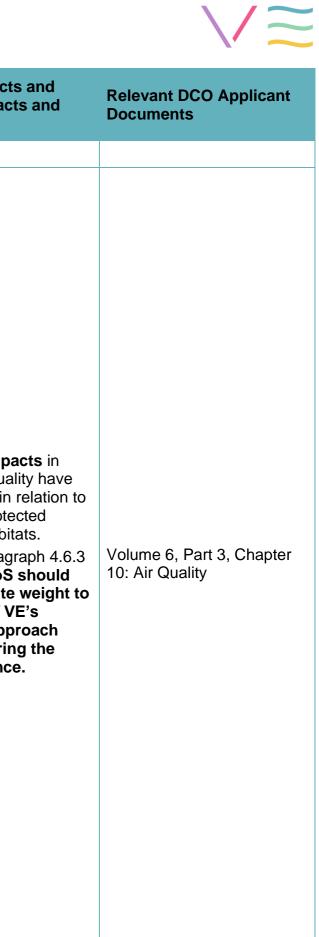


Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impa Weighing impa benefits
	Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.		 > noise and vibration during the construction of the onshore export cable corridor; > noise and vibration during the construction of the onshore substation; > noise and vibration during the road improvements to the A120 Junction and Bentley Road; and > noise from construction vehicles using the road network. Operational noise from the onshore substation has the potential, cumulatively with operational noise from the onshore substations forming part of the proposed North Falls Offshore Wind Farm and the East Anglia Connection Node substation forming part of the Norwich to Tilbury project, to have significant effects at numerous noise sensitive receptors. 	undertaken in accordance with best practicable means (as defined in Section 72 of the Control of Pollution Act 1974) to minimise noise and vibration effects. Compliance with the noise and vibration mitigation measures included in the Code of Construction Practice is secured through requirement 8 (Code of construction practice) of the draft development consent order (Application Document 3.1). Operation Requirement 17 (Control of noise during the operational stage) of the draft development consent order provides a noise rating level for the standard operation of the onshore substation which cannot be exceeded.	
			Artificial Lighting	Artificial Lighting	
			The potential impacts in relation to lighting have been assessed as part of Chapter 2: Landscape and Visual Impact Assessment of the environmental statement (Volume 6, Part 3, Chapter 2). Impacts that could lead to potential	Construction Section 3.9 of the Code of Construction Practice (Application Document 9.21) provides specific mitigation measures which will be applied in respect of artificial lighting. Where dark hours lighting is	



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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
			significant artificial lighting effects. Construction Artificial lighting of construction works, especially during the winter months and for activities which require continuous working during night time may impact on nearby sensitive receptors. Operational Chapter 2: Landscape and visual impact assessment of the environmental statement (Volume 6, Part 3, Chapter 2) concludes that although there will be lighting associated with the onshore substation during the operational phase, this will be limited in extent and usage, and of a low intensity such that it will not give rise to any likely significant effects.	required, the lighting will be designed to minimise light spillage as far as possible, while providing the necessary levels of light for safety requirements. While a lower level of lighting would remain overnight for security purposes, this would be motion activated. Operational No mitigation required.		
Section 4.16 Security Considerations	Section 4.16 relates to security considerations and the need for DCO applications for infrastructure covered by EN-1 to consider national security considerations. The Applicant has followed the Assessment Principles outlined within Section 4.16 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	There are no benefits to consider in relation to security considerations.	The adverse impacts in relation to security considerations are discussed below. VE has the potential to generate clutter on radar displays and thus have an effect on the safe and efficient provision of en- route air traffic control services for civil aviation.	Mitigation options are available as outlined in Volume 6, Part 2, Chapter 13: Military and Civil Aviation. Once mitigation has been implemented, there will be no significant effects on any of the stated infrastructure or services.	No residual impacts in relation to security considerations have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning balance.	Volume 6, Part 2, Chapter 13: Military and Civil Aviation.

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts Weighing impacts benefits
NPS EN-1 – Part 5	5 Generic Impacts				
Section 5.2 Air Quality and Emissions	Section 5.2 of EN-1 advises that energy infrastructure development can have adverse effects on air quality during construction, operation and decommissioning phases. In line with the assessment principles set up within Paragraph 5.2.8 to 5.2.14. Volume 6, Part 3, Chapter 10: Air Quality has considered the potential air quality effects on onshore receptors arising from activities associated with VE. Consideration has been given to potential worst- case effects arising from construction, operational and decommissioning activities based upon available information. Worst-case parameters have been adopted to provide a robust assessment. The Applicant has followed the Assessment Principles outlined within Section 5.2 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	The benefits in relation to air quality are discussed below. Climate change is generally predicted to result in more frequent and extreme localised weather events within Essex. There is an increased potential for some events to create a worsening of air pollution. This section assesses the following aspects: > The effect of climate change on the local area in which the proposed development will take place; and > The likely impacts of climate change and the project in- combination on the receiving environment. The information provided in this section will be drawn up to and summarised in Volume 6, Part 4, Chapter 1: Climate Change. As outlined in Volume 6, Part 4, Chapter 1: Climate Change, the operational phase of VE would enable the use of renewable electricity which would result in a positive greenhouse gas impact, resulting in a significant beneficial effect.	The adverse impacts in relation to air quality and emissions are discussed below. Potential air quality impacts have been considered within Chapter 10: Air Quality of the environmental statement (Volume 6, Part 3, Chapter 10). This assessment considers impacts throughout all phases of development, including construction, Operation and Maintenance (O&M) and decommissioning phase. Construction The assessment has considered impacts that could lead to potential significant air quality effects arising from: > emissions of air pollutants and dust from temporary construction activities; > emissions of air pollutants from VE generated road traffic; > emissions of air pollutants from Non- Road Mobile Machinery (NRMM) on site; and > emissions of air pollutants from offshore activities on onshore receptors.	Section 4.4 of the Code of Construction Practice (Application Document 9.21) provides specific mitigation measures which will be applied to minimise air quality impacts associated with construction activities. These principally relate to the suppression of dust generated from construction activities, and controlling emissions from NRMM. Implementation of the air quality controls included in the Code of Construction Practice is secured through requirement 8 (Code of construction practice) of the draft development consent order (Application Document 3.1).	No residual impa relation to air quali been identified in r health or on protec species and habita In line with Paragra of EN-1, the SoS s give appropriate the benefits of VE coordinated appr when considering planning balance



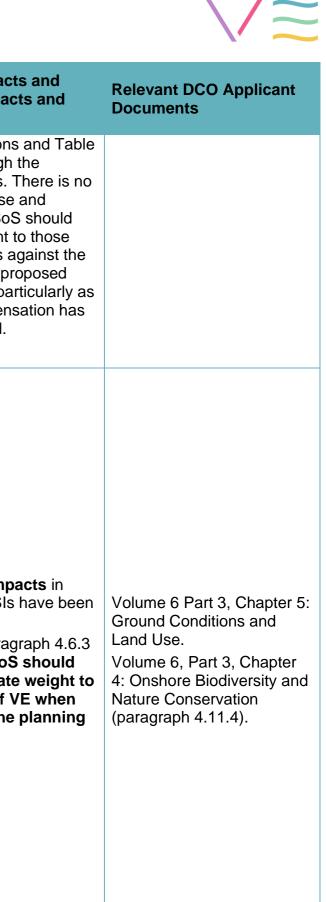
Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
			Operation In relation to air quality, operational activities will be minimal and infrequent; these are unlikely to cause an air quality impact.		
Section 5.3 Greenhouse Gas Emissions	Section 5.3 of EN-1 emphasises the importance of significant levels of energy infrastructure development being brought forward to ensure the decarbonisation of the UK economy (Paragraph 5.3.1). The Applicant has followed the Assessment Principles outlined within Section 5.3 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	The benefits in relation to Greenhouse Gas Emissions are discussed below. As outlined in Volume 6, Part 4, Chapter 1: Climate Change, the operational phase of VE would enable the use of renewable electricity which would result in a positive greenhouse gas impact, resulting in a significant beneficial effect. There are benefits of the electricity generated across the lifetime of VE which is anticipated to displace UK marginal electricity, expected to be derived from gas for years.	There are no adverse impacts in relation to Greenhouse Gas Emissions.	Each ES chapter addresses embedded mitigation that has already been incorporated into the project design to factor in climate change adaptation. Measures or commitments have been identified and adopted as part of the evolution of the project design, relating to specific topics. These include project design measures, compliance with elements of good practice and use of standard protocols which also address risks posed by future climate change. Example measures include avoidance, so far as possible, of flood risk zones, and commitment to use trenchless techniques to cross sea defence structures, main rivers, non- main and ordinary watercourses to reduce the impact, and development of a Cable Specification and Installation Plan post consent to set out appropriate cable burial depth in accordance with industry good practice, minimising the risk of cable exposure and ensure that cable crossings are appropriately designed to	No residual imparelation to climate have been identif Overall, it is consistent of the end of the end of the climate Change of the end of the However, there we significant positive from the reduction emissions via cle production, which help to meet UK a for Net Zero and secure sources of In line with Parago of EN-1, the SoS give appropriate the benefits of considering the balance.

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
Section 5.4 - Bi	iodiversity and Geological Cons	ervation		mitigate environmental effects. Table 1.19: 'Summary of effects for climate change' within Chapter Volume 6, Part 4, Chapter 1 does not propose any additional mitigation measures during construction, operation and decommissioning.	
Habitats Regulations	Paragraph 5.4.4 sets out sites for which an HRA will assess the implications of a plan or project, including Special Areas of Conservation and Special Protection Areas. VE is subject to HRA to determine its potential effects on European Designated Sites and Species. The Applicant has followed the Assessment Principles outlined within Section 5.4 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance. There are a number of designated sites that have been considered in Volume 5, Report 4: Report to Inform Appropriate Assessment.	There are no benefits to consider in relation to Habitats Regulations to consider.	The adverse impacts in relation to Habitats Regulations are considered below. The RIAA concludes that, VE, in-combination with other plans and projects, would have no AEol 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).	Compensatory measures regarding Habitat Regulations are set out in the following documents: > Volume 5, Report 5.1: Benthic Compensation Strategy Roadmap > Volume 5, Report 5.2: Outline Benthic In-Principle Monitoring Plan > Volume 5, Report 5.3: Lesser Black- Backed Gull Compensation – Evidence, Site Selection and Roadmap > Volume 5, Report 5.4: Kittiwake – Evidence, Site Selection and Roadmap > Volume 5, Report 5.4: Kittiwake – Evidence, Site Selection and Roadmap > Volume 5, Report 5.5: Guillemot and Razorbill – Evidence, Site Selection and Roadmap > Volume 5, Report 5.5: Guillemot and Roadmap > Volume 5, Report Site Selection and Roadmap	It has been demo Volume 5, Repor Derogation Case are no alternative and that there are imperative reaso overriding public VE. Both these te required to be me development con granted. Moreover, the po objectives VE will to outweigh any a impacts. In addition, as dis there are delivera appropriate comp measures which discussed in the the left and have produced in line Government's cu emerging advice strategic measur by DEFRA. The Project quali CNP Infrastructu therefore in line v (paragraph 4.1.7) that the need cas presented within

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
				 Backed Gull Implementation and Monitoring Plans Volume 5, Report 5.7: Kittiwake Implementation and Monitoring Plans Volume 5, Report 5, Annex 5.8: Guillemot and Razorbill Implementation and Monitoring Plans 	previous sections 6.1 will outweigh residual effects. exceptional case therefore the Sos give less weight residual effects a benefits of the pr development, pa suitable compens been proposed.
Sites of Special Scientific Interest (SSSIs)	Paragraph 5.4.8 advises that development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits (including need) of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs. The Applicant has followed the Assessment Principles outlined within Section 5.4 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance. There are some SSSIs	There are no benefits to consider in relation to SSSIs.	No adverse impacts have been identified in relation to SSSIs.	Mitigation measures include good project design, compliance with elements of good practice and use of standard protocols. This included careful routing onshore to avoid key areas of sensitivity. Licences will be required where temporary works effect habitat used by protected species. The Code of Construction Practice includes a number of measures to minimise the impact to ecology during construction. An Outline Landscape and Ecological Management Plan details proposed mitigation, compensation and biodiversity enhancement measures.	No residual imp relation to SSSIs identified. In line with Parag of EN-1, the SoS give appropriate the benefits of A considering the balance.



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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	area which have been considered in Volume 6 Part 3, Chapter 5: Ground Conditions and Land Use and Volume 6, Part 3, Chapter 4: Onshore Biodiversity and Nature Conservation. Holland Haven Marshes SSSI falls within the Order Limits at landfall and onshore ECC. However, there will be no loss of habitat within any SSSI site as a result of VE.					
	Paragraph 5.4.9 advises that if a proposal is likely to have significant impacts on an MCZ, an MCZ Assessment should be undertaken as per the requirements under Section 126 of the Marine and Coastal Access Act 2009.				No residual impacts in relation to MCZ have been identified. A MCZ assessment (Volume 5, Report 6: Marine Conservation Zone Assessment) supports the DCO and concludes that the VE construction, operation	
Marine Conservation Zones	The Applicant has followed the Assessment Principles outlined within Section 5.4 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance. A MCZ assessment has been undertaken as part of the application (document reference 5.6).	There are no benefits to consider in relation to MCZ.	There are no adverse impacts in relation to MCZ.	No mitigation is required.	and maintenance and decommissioning activities within the offshore ECC and array areas will not hinder the achievement of the conservation objectives of either MCZ. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning balance.	A MCZ assessment has been undertaken as part of the application (document reference 5.6).
Regional and Local Sites	Paragraph 5.4.12 discusses the importance of sites of regional and local biodiversity and geological interest, which make an important contribution to ecological networks and	There are no benefits to consider in relation to regional and local sites.	No adverse impacts have been identified in relation to regional and local sites.	Where the boundary of VE is in very close proximity to the LGS control of working areas marking out of the boundary of the Order Limits would be employed to avoid disturbance outside	No residual impacts in relation to Regional and Local Sites have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to	Volume 6 Part 3, Chapter 5: Ground Conditions and Land Use. Volume 6, Part 3, Chapter 4: Onshore Biodiversity and Nature Conservation.

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts Weighing impacts benefits
	 nature's recovery. It also advises that they can also provide wider benefits including public access (where agreed), climate mitigation and helping to tackle air pollution. The Applicant has followed the Assessment Principles outlined within Section 5.4 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance. Local Nature Reserves and Local Wildlife Sites have been considered as part of the assessment in Volume 6, Part 3, Chapter 4: Onshore Biodiversity and Nature Conservation. and Volume 6 Part 3, Chapter 5: Ground Conditions and Land Use. There will be no loss of habitat within any Regional or Local Site as a result of VE. 			of the area from construction plant and activities. The controls which would be adopted at site in accordance and standard construction practice (as shown in Table 5.13 within Volume 6 Part 3, Chapter 5: Ground Conditions and Land Use).	the benefits of VI considering the p balance.
Ancient woodland, ancient trees, veteran trees and other irreplaceable habitats	recreate or replace once destroyed, taking into	There are no benefits to consider in relation to Ancient woodland, ancient trees, veteran trees and other irreplaceable habitats.	The adverse impacts in relation to ancient woodland, ancient trees, veteran trees and other irreplaceable habitats are discussed below. Volume 6, Part 3, Chapter 4: Onshore Biodiversity shows that all direct impacts to ancient woodland will be avoided and veteran trees. Other irreplaceable habitats are considered in Volume 5, Annex 5.4 Report to Inform	Mitigation and compensation, along with proposals for biodiversity enhancement including Ancient woodland, ancient trees, veteran trees and other irreplaceable habitats are included in Volume 9, Annex 9.22: Outline Landscape and Ecological Management Plan.	No residual impar relation to Ancient woodland, ancient veteran trees and irreplaceable habit been identified. In line with Paragra of EN-1, the SoS s give appropriate the benefits of VE considering the p balance.

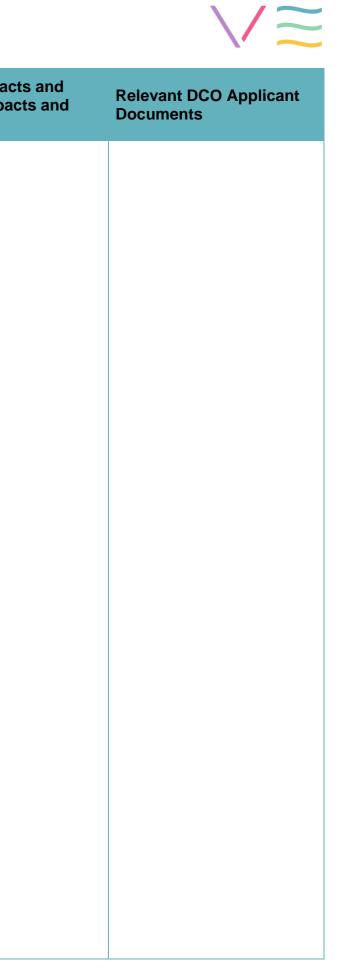
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ets and cts and	Relevant DCO Applicant Documents
VE when planning	
pacts in nt nt trees, d other bitats have graph 4.6.3 S should e weight to VE when e planning	Volume 6, Part 3, Chapter 4: Onshore Biodiversity Volume 5, Annex 5.4 Report to Inform Appropriate Assessment (RIAA) Volume 9, Annex 9.22: Outline Landscape and Ecological Management Plan

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	its longevity as woodland. The Applicant has followed the Assessment Principles outlined within Section 5.4 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance. Ancient woodland, ancient trees, veteran trees and other irreplaceable habitats have been considered within volume 6, Part 3, Chapter 4: Onshore Biodiversity and Nature Conservation which shows that VE avoids direct interaction with the ancient woodland and veteran trees as a result of the robust approach to site selection.		Appropriate Assessment (RIAA) and no significant impacts are identified.			
Protection and enhancement of habitats and species	Paragraph 5.4.16 of EN-1 recognises that there are many individual species that receive statutory protection under a range of legislative provisions. In addition, other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales, as well as for their continued benefit for climate mitigation and adaptation and thereby requiring conservation action. The Applicant has followed the Assessment Principles outlined within Section 5.4 and the accompanying Policy Compliance	The benefits in relation to the protection and enhancement of habitats and species are discussed below. As shown in the OLEMP (Volume 9, Report 9.22: Outline Landscape and Ecological Management Plan), VE will enhance biodiversity through delivery of an overall biodiversity net gain.	The adverse impacts in relation to protection and enhancement of habitats and species are discussed below. The assessment of Onshore Biodiversity and Nature Conservation has considered a number of impacts including those from temporary habitat loss and disturbance, the potential spread of invasive species and any impacts from accidental pollution incidents. The assessment has used the outputs of species-specific ecology surveys. These include surveys of plants, invertebrates, great crested	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. For onshore biodiversity, mitigation measures include good project design, compliance with elements of good practice and use of	No residual impacts in relation to protection and enhancement of onshore or offshore habitats and species have been identified in a majority of cases. Although additional mitigation/ compensation for the permanent loss of arable habitat supporting skylark and corn bunting at the OnSS is not possible within the Order Limits due to a lack of potentially suitable land available. The requirement for landscaping at the substation is considered to outweigh the requirement for management of arable	Volume 6, Part 3, Chapter 4: Onshore Biodiversity Outline Landscape and Ecology Management Plan included in Volume 9 Volume 6, Part 2, Chapter 4: Offshore Ornithology Volume 6, Part 2, Chapter 5: Benthic and Intertidal Ecology Volume 6, Part 2, Chapter 6: Fish and Shellfish Ecology Volume 6, Part 2, Chapter 7: Marine Mammal Ecology

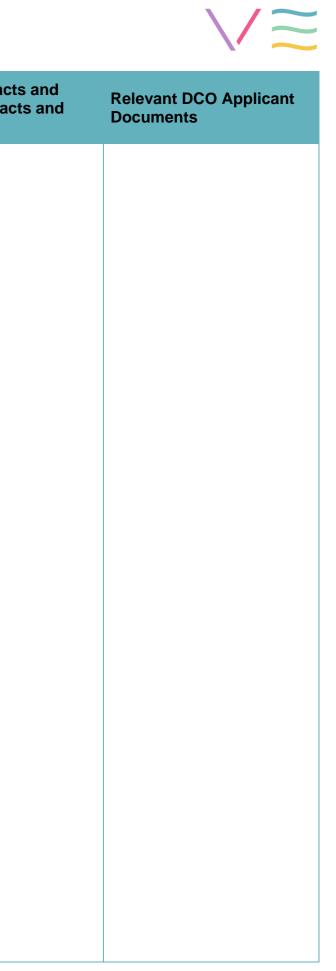
Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	Document (Document Reference 9.2) should be referred to for full details regarding compliance. The Applicant has identified species and habitats as being of importance for the conservation of biodiversity and ensured their protection.		newts, reptiles, bats, badgers, water voles, dormouse and over wintering and breeding birds. In particular, proposed landscaping and habitat creation at the OnSS (as shown in the OLEMP (Volume 9, Report 9.22: Outline Landscape and Ecological Management Plan) would lead to the loss of arable habitat. Whilst the proposed landscaping and habitat creation should benefit many bird species, it would result in the loss of species such as skylark and corn bunting, which favour open arable habitat. The assessment for Offshore Ornithology has considered several possible environmental impacts including the impacts of disturbance and displacement during construction and decommissioning and the impacts of birds colliding with the turbines during the operation of the windfarm. The assessment for Benthic and Intertidal Ecology has considered several possible environmental impacts including the impacts of disturbance and displacement for Benthic and Intertidal Ecology has considered several possible environmental impacts including the impacts of temporary habitat loss and increases in suspended sediment concentrations from construction activities, long term habitat loss/ change and temporary	standard protocols. This included careful routing onshore to avoid key areas of sensitivity. Licences will be required where temporary works effect habitat used by protected species. The Code of Construction Practice includes a number of measures to minimise the impact to ecology during construction. An Outline Landscape and Ecological Management Plan details proposed mitigation, compensation and biodiversity enhancement measures. For Offshore Ornithology mitigation includes the use of larger more widely spaced wind turbine generators with higher clearance above the sea level than previous developments. This will reduce the likelihood of birds colliding with the wind turbine generators. Mitigation also included implementation of a best practice protocols for minimising disturbance to designated bird features within the Outer Thames Estuary Special Protection Area. For Benthic and Intertidal Ecology this includes a Project Environmental Management Plan to ensure good practice is followed to avoid release of	fields to benefit skylark and corn bunting and the proposed habitat creation would benefit a range of other bird species. The presence of high grade agricultural land throughout much of the ECC (see Volume 6, Part 3, Chapter 5: Ground Conditions and Land Use) also limits the potential for management for these species, as it would require taking small areas of the best and most versatile land out of production. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning balance.	



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impac benefits
			disturbances from maintenance activities, as well as impacts arising during the operation and decommissioning phases. The export cable corridor overlaps with 1.26 km ² of the Margate and Long Sands Special Area of Conservation within the northern top of the site, however it is considered that any impact to the site will be limited. The assessment for Fish and Shellfish Ecology has considered several possible environmental effects including the impact of underwater noise and vibration and increased suspended sediment concentrations during the construction, operation and maintenance phases. Similar impacts have also been considered during the decommissioning phase. The assessment for marine mammal ecology has considered several possible environmental effects including the impacts from underwater noise associated with piling activities or the disposal of unexploded ordnance during the construction phase. Impacts during operation and maintenance and decommissioning could include disturbance and collision risk from vessels.	any contaminants and ensure appropriate environmental management measures are applied during construction and operation. A Cable Specification and Installation Plan will set out appropriate cable burial depth in accordance with industry good practice, minimising the risk of cable exposure and thus the need for additional cable protection. For Benthic and Intertidal Ecology this includes a Project Environmental Management Plan to ensure good practice is followed to avoid release of any contaminants and ensure appropriate environmental management measures are applied during construction and operation. A Cable Specification and Installation Plan will set out appropriate cable burial depth in accordance with industry good practice, minimising the risk of cable exposure and thus the need for additional cable protection. For Fish and Shellfish Ecology, mitigation includes adhering to a piling Marine Mammal Mitigation Protocol (MMMP), which will be implemented during construction. Whilst this is specifically for marine	



Topic Overview Compliance	v and VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impac benefits
			 mammals it also acts to reduce the impacts of underwater noise on fish and shellfish. A Project Environmental Management Plan will also be implemented to ensure the to ensure good practice is followed to avoid release of any contaminants and ensure appropriate environmental management measures are applied during construction and operation and a Cable Specification and Installation Plan which will set out appropriate cable burial depth in accordance with industry good practice, minimising the risk of cable exposure and thus the need for additional cable protection. Furthermore, additional mitigation includes adhering to a seasonal piling restriction, between 6 November until 1 January, during the peak Downs herring spawning period. The production and implementation of a Marine Mammal Mitigation Protocol (MMMP) will minimise the impacts of piling and unexploded ordnance clearance (if required). This will sit alongside a Working in Proximity to Wildlife Plan to reduce the risk of disturbance from ships, boats and other vessels and the risk of them 	



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
				colliding with marine mammals.	
Section 5.5: Civil and Military Aviation and Defence Interests	Section 5.5 highlights how all aerodromes, covering civil and military activities, as well as aviation technical sites, meteorological radars and other types of defence interests (both onshore and offshore) can be affected by new energy development with particular reference to windfarms. The Section discusses the measures that should be addressed in order for an application to be suitable. There is a strong appreciation within this section that windfarms are an integral part of the Government's plan to achieve Net Zero, as well as delivering affordable clean energy to consumers. The government has an ambition to deliver up to 50GW of offshore wind by 2030 and the Committee on Climate Change's 6th Carbon Budget (CB6) views offshore wind as the backbone of electricity generation across all its scenarios. The Offshore Wind Sector Deal confirmed that government will work collaboratively with the energy sector and wider stakeholders to address strategic deployment issues including aviation and surveillance systems including radar (Paragraph	There are no benefits to consider in relation to Civil and Military Aviation and Defence Interests.	The adverse impacts in relation to air quality and emissions are discussed below. The assessment for Military and Civil Aviation has considered several possible effects including the wind turbines causing interference on civil and military radar systems, where air traffic controllers and air defence controllers might be unable to provide an effective surveillance service due to interference on radar displays. Furthermore, the wind turbines could act as aviation obstacles due to their size and number.	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. In particular, mitigation measures ensuring aviation lighting is fitted to all structures as appropriate in line with statutory guidance and regulator feedback, and that accurate positions of the turbines and other infrastructure are supplied to the relevant search and rescue authorities. In addition to this, additional mitigation will also be implemented if necessary, in agreement with the Ministry of Defence, to minimise the interference to military radar.	No residual imparelation to Civil and Aviation and Defendence Interests. In line with Parago of EN-1, the Sos give appropriate the benefits of V considering the balance.

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	 5.5.4). Volume 6, Part 2, Chapter 13: Military and Civil Aviation assesses the potential impact of Five Estuaries Offshore Wind Farm Project on Military and Civil Aviation. Specifically, this chapter is concerned with the effects of the wind turbine generators upon civil and military radar systems and the potential of the turbines to act as obstacles to aviation. The Applicant has followed the Assessment Principles outlined within Section 5.5 and the accompanying Policy Compliance Document (Document Reference 9.1) should be referred to for full details regarding compliance. 					
Section 5.6: Coastal Change	Section 5.6 provides an overview of the government approach to coastal change and outlines that where infrastructure projects are on the coast, coastal change is a key consideration and is a vital element of climate change adaptation. The Applicant has followed the Assessment Principles outlined within Section 5.6 and the accompanying Policy Compliance Document (Document Reference 9.1) should be referred to for full details regarding compliance.	The benefits in relation to coastal change are discussed below. Climate change is generally predicted to result in more frequent and extreme localised weather events that will enhance and accelerate coastal change including erosion of the coast. As outlined in Volume 6, Part 4, Chapter 1: Climate Change, the operational phase of VE would enable the use of renewable electricity which would result in a positive greenhouse gas impact, resulting in a significant	The adverse impacts in relation to flood and emissions are discussed below. Potential impacts relating to coastal change have been considered within Volume 6, Part 2, Chapter 2: Marine Geology, Oceanography and Physical Processes. The assessment for Marine Geology, Oceanography and Physical Processes has considered several possible environmental effects including potential changes to suspended sediment concentrations and impacts to sandbanks during construction and	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. Mitigation for coastal change is outlined within Volume 6, Part 2, Chapter 2: Marine Geology,	No residual impacts in relation to Coastal Change have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning balance.	 Volume 6, Part 1, Chapter 4: Site Selection and Consideration of Alternatives. Volume 6, Part 2, Chapter 1: Site Selection and Consideration of Alternatives. Volume 6, Pat 2, Chapter 2: Marine Geology, Oceanography and Physical Processes. Volume 6, Part 3, Chapter 1: Climate Change. Volume 6, Part 5, Annex 2.1: Physical Processes Baseline Technical Report. Volume 9, Document 9.12: Cable Specification and

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impac benefits
		beneficial effect.	 decommissioning activities, and potential changes to wave and tidal processes and the potential of scour of seabed sediments during the operation and maintenance phase. The assessment has considered impacts that could lead to potential significant air quality effects arising from: Construction Potential changes to suspended sediment concentrations (SSC), bed levels and sediment type arising from construction related activities including dredging, drilling and cable installation; Potential morphological impacts to sandbanks and designated areas of seabed; and Potential impacts to landfall morphology. Destinations (SSC), bed levels and sediment type arising from construction related activities including dredging, drilling and cable installation; Potential morphological impacts to sandbanks and designated areas of seabed; and Potential impacts to landfall morphology. Operation Potential changes to suspended sediment concentrations (SSC), bed levels and sediment type arising from operation related remedial cable repair activities; Potential changes to the tidal regime; 	Oceanography and Physical Processes and includes Volume 6, Report 9.12: Cable Specification and Installation Plan which sets out measures to minimise adverse impacts on potentially sensitive receptors during cabling operations on the seabed. Volume 9, Report 9.9: Cable Burial Risk Assessment has also been conducted which has enable informed judgements regarding burial depth to be made to optimise the chance of cables remaining buried whilst seeking to limit the amount of sediment disturbance to that which is necessary. Other mitigation set out within Volume 6, Part 2, Chapter 2: Marine Geology, Oceanography and Physical Processes include good project design, compliance with elements of good practice and use of standard protocols. Outside of the above chapter, mitigation includes the iterative Site Selection process detailed with Volume 6, Part 1, Chapter 4: Site Selection and Consideration of Alternatives which has avoided areas most sensitive to coastal change. The CoCP (Volume 9, Report 9.21) includes	

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	Installation Plan.

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
			 > Potential changes to the wave regime; > Potential changes to the sediment transport regime; > Potential for scour of seabed sediments, including that around scour protection structures; > Potential morphological impacts to sandbanks and designated areas of seabed; and > Potential impacts to coastal morphology. Decommissioning > Potential changes to SSC, bed levels and sediment type; and > Potential impacts to landfall morphology. Further to the above, there are a small number of environmentally designated sites within the study area that may be adversely affected. 	several measures to limit coastal change including principles to minimise water within the trench and ensure ongoing drainage of surrounding land.		
Section 5.8: Flood Risk	Section 5.8 sets out the Government approach to creating a nation that is more resilient to future flood and coastal erosion risk. The section highlights the sequential test which provides a method of allowing development to go ahead in situations where suitable sites at lower risk of flooding are not available. The exception test is also	The benefits in relation to Flood Risk are discussed below. The main considerations of climate change on the Hydrology, Hydrogeology and Flood Risk assessment are the potential changes to sea levels, storm surges and rainfall patterns over time. Climate change is generally predicted to result	The adverse impacts in relation to flood and emissions are discussed below. Potential air quality impacts have been considered within Volume 6, Part 3 Chapter 6: Hydrology, Hydrogeology and Flood Risk. The assessment of Hydrology, Hydrogeology and Flood Risk considers	The Code of Construction Practice (Volume 9, Document 9.21) sets out measures to control the impacts of watercourse crossing and crossing beneath flood defences. The Code of Construction Practice also includes measures to prevent pollution and to consider flood response.	No residual impacts in relation to Flood Risk have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning balance.	Volume 6, Part 3, Chapter 6: Hydrology, Hydrogeology and Flood Risk Volume 5, Document 5.3.1: Flood Risk Assessment- Onshore Substation Volume 5, Document 5.3.2: Flood Risk Assessment- Cable Route

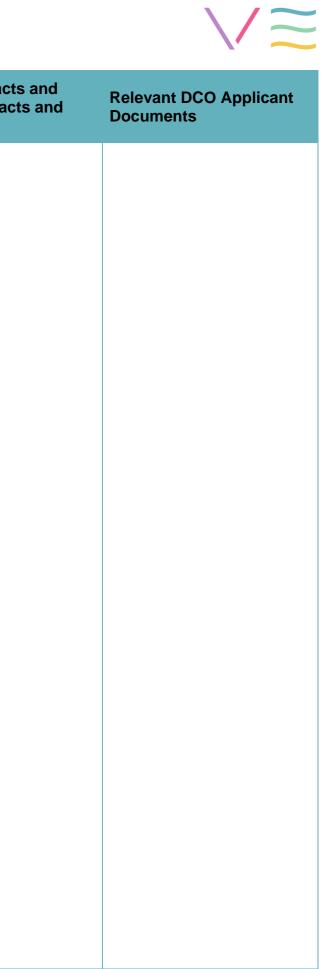
Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
	discussed, which should be applied where the Sequential Test alone cannot deliver an acceptable site. In addition, the Section sets out the requirement that a specific site-specific flood risk assessment should be provided for all energy projects in Flood Zones 2 and 3 in England or Zones B and C in Wales. The Applicant has followed the Assessment Principles outlined within Section 5.8 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	in warmer and wetter winters and hotter and drier summers but also with increased occurrence of extreme weather events and a general increase in sea water levels. As outlined in Volume 6, Part 4, Chapter 1: Climate Change, the operational phase of VE would enable the use of renewable electricity which would result in a positive greenhouse gas impact, resulting in a significant beneficial effect.	<pre>potential impacts to the water quality of water courses and groundwater, and if the Project could affect the risk of flooding in the local area across construction, operation and maintenance, and decommissioning. The assessment has considered impacts that could lead to potential significant air quality effects arising from: <i>Construction</i> > Increase in flood risk or change in water quality. <i>Operation</i> > Increase in flood risk; and > Routine maintenance works affecting surface watercourses. <i>Decommissioning</i> > Change to flood risk; and > Works affecting surface watercourses. Further to the above, there are a small number of environmentally designated sites within the study area that may be adversely affected.</pre>	An outline surface water drainage scheme has been provided as part of the Flood Risk Assessment- Onshore Substation (Application Document 5.3.1). Other measures set out within Volume 6, Part 3 Chapter 6: Hydrology, Hydrogeology and Flood Risk include good project design, compliance with elements of good practice and use of standard protocols.	
Section 5.9 Historic Environment	Section 5.9 sets out the importance and significance of the historic environment and highlights that the construction, operation and	The benefits in relation to the Historic Environment are discussed below. Written Scheme of Investigations (see	The adverse impacts in relation to the historic environment are discussed below. The assessment for	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter	No residual imp relation to the His Environment hav identified. In line with Parag

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pacts in listoric ive been	Volume 6, Part 2, Chapter 11: Offshore Archaeology and Cultural Heritage Volume 6, Part 3, Chapter
agraph 4.6.3	7: Onshore Archaeology

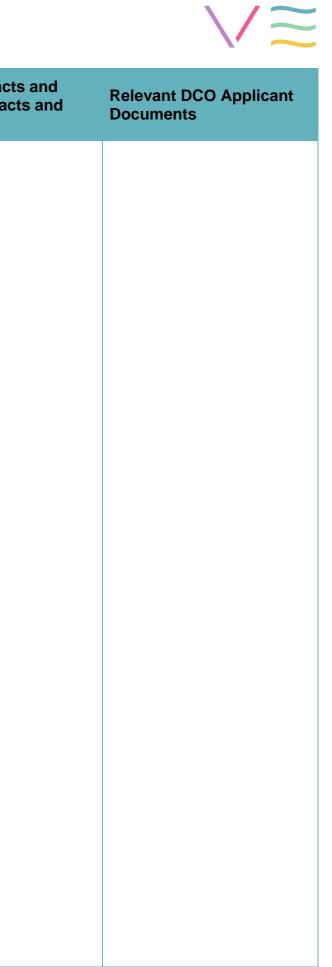
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decommissioning of infrastructure has th potential to result in impacts on the histo environment above, below the surface of ground. The Applicant has for the Assessment Prin outlined within Secti and the accompany Policy Compliance Document (Docume Reference 9.2) shou referred to for full de regarding compliance	e and 9.23) for both onshore adverse and offshore will be secured through the DCO which will at and make positive contributions the to knowledge and enhancement of understanding of the historic environment can be realised through data gathering, interpretation and publication. The works will contribute to current research frameworks in the region and will be further	 offshore marine archaeology has been considered within Volume 6, Part 2, Chapter 11: Offshore Archaeology and Cultural Heritage. The chapter considers the effects of the construction, operation and decommissioning activities particularly through direct impacts to archaeological material which could be present in the area. Construction Direct impact of sediment removal containing undisturbed archaeological contexts during seabed preparation ahead of construction activities leading to the total or partial loss of marine heritage receptors; Direct impact by penetration, compression, and disturbance of piling foundations leading to the total or partial loss of marine heritage receptors; Direct impact by penetration, compression, and disturbance of piling foundations leading to the total or partial loss of marine heritage receptors; Direct impact by penetration, compression, and disturbance of piling foundations leading to the total or partial loss of marine heritage receptors; Direct impact by penetration, compression, and disturbance of stratigraphic contexts containing archaeological material from the combined weight of the WTG and 	lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. Mitigation for the offshore historic environment is outlined within Volume 6, Part 2, Chapter 11: Offshore Archaeology includes the introduction of archaeological exclusion zones to be considered in routing/ layout activities in order to avoid/ preserve identified marine heritage receptors. Additionally, a Written Scheme of Investigation has been produced (document reference 9.19). Mitigation for the onshore historic environment is outlined within Volume 6, Part 3, Chapter 7: Onshore Archaeology and Cultural Heritage a Written Scheme of Investigation has been produced (document reference 9.23) to ensure that any heritage assets or deposits of geoarchaeological/ paleoenvironmental interest are identified and recorded.	of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning balance.	and Cultural Heritage Volume 9, Report 9.19: Outline Written Scheme of Investigation (Offshore) Volume 9, Report 9.23: Outline Written Scheme of Investigation (Onshore)



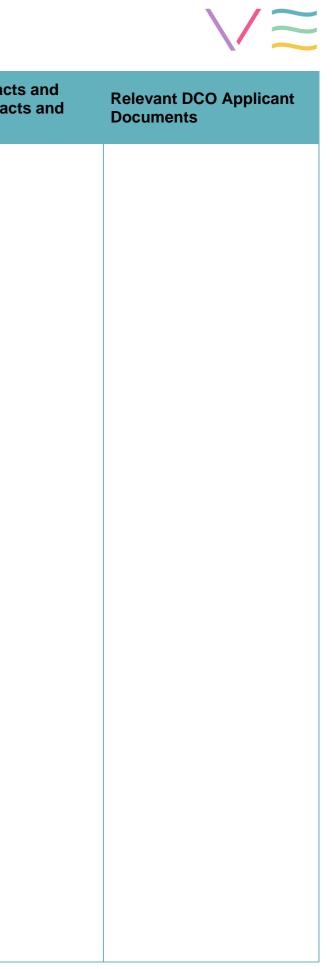
Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
			 associated foundations leading to total or partial loss of marine heritage receptors; Direct impact by penetration, compression, and disturbance of cable laying operations leading to total or partial loss of marine heritage receptors; Direct impact by penetration, compression, and disturbance effects of jack-up barges and anchoring of construction vessels during construction activities leading to total or partial loss of marine heritage receptors; Indirect impact causing disturbance of sediment containing potential marine heritage receptors (material and contexts) leading to the exposure of those marine heritage receptors to natural, chemical, or biological processes and indirectly causin or accelerating their loss; and Indirect impacts 		
			causing changes to the Historic Seascape Character		



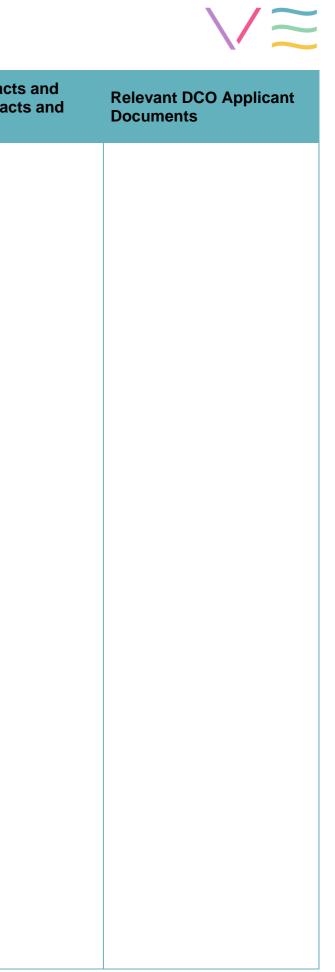
Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
			 as a result of construction and survey vessel activities and the addition of cables, foundations and turbines indirectly leading to changes to the perceived historio use of the seascape during construction activities. Direct impact by penetration, compression, and disturbance effects of maintenance activities at WTG substation foundations and along inter-array cables leading to total or partial loss of marine heritage receptors; Indirect impacts during the operation phase causing disturbance of sediment containing potential marine heritage receptors during maintenance activities leading to the exposure of thos marine heritage receptors to natural, chemical, or biological process, accelerating loss of the same; Direct impact by penetration, 	f	



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
			 compression, and disturbance effects of jack-up barges and anchoring of operation and maintenance vessels during the operation and maintenance phase leading to total or partial loss of marine heritage receptors; Indirect impacts causing scour effects as a result of the presence of WTG substation foundations and the exposure of interarray and export cables or the use of cable protection measures leading to the exposure of those marine heritage receptors to natural, chemical, or biological processes and indirectly causing or accelerating their loss; and Indirect impacts causing changes to the Historic Seascape Character as a result of operation and maintenance vessel activities and the presence of the completed wind farm indirectly leading to changes to the perceived historic 		



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impac benefits
			use of the seascape during the operation phase.		
			Decommissioning		
			 Indirect impacts creating draw-down of sediment into voids left by removed WTG foundations leading to loss of sediment or destabilisation of archaeological sites and contexts indirectly leading to exposing marine heritage receptors within the Array Areas to natural, chemical, or biological processes and causing or accelerating loss of the same; and Indirect impacts causing changes to the Historic Seascape Character as a result of decommissioning activities and the removal of wind farm components indirectly leading to changes to the perceived historic use of the seascape during the decommissioning 		
			phase. The assessment for onshore archaeology has been considered within Volume 6, Part 3, Chapter		



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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
			 7: Onshore Archaeology and Cultural Heritage. The assessment for Archaeology and Cultural Heritage assesses the potential impact to buried archaeological remains during the construction phase and the potential permanent effects arising from the change to the historic landscape as a result of the onshore substation. Construction Disturbance or loss of archaeological assets; and Presence of WTGs and onshore infrastructure construction works (so as to cause loss of contribution of setting to heritage significance of an asset). Presence of operational offshore and onshore infrastructure (so as to cause loss of contribution of setting to heritage significance of an asset). Decommissioning Removal of visible 			
Section 5.10 Landscape and	Section 5.10 provide commentary on how energy projects can have varying	The benefits in relation landscape and visual are discussed below.	infrastructure. The adverse impacts in relation to landscape and visual are discussed below.	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all	Overall, it is predicted that there will be some significant effects upon	Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual Impact

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts Weighing impact benefits
Visual	landscape and visual effects. The Section acknowledges that virtually all significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation. The Applicant has followed the Assessment Principles outlined within Section 5.10 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	An Outline Landscape and Ecological Management Plan (Volume 9, Report 9.22) has been produced which sets out measures to mitigation landscape and visual effects through good design whilst also setting out provision for biodiversity and ecological networks is presented in Volume 9, Report 22: OLEMP. This includes the OnSS, which is located in an area of Grade 1 agricultural land which will benefit planting establishment.	The assessment for offshore landscape and visual effects is considered in Volume 6, Part 2, Chapter 10: Seascape, Landscape and Visual Impact Assessment. A number of impacts have been assessed during all phases of the project (construction, operation and maintenance and decommissioning) including the impact of the array areas upon the seascape character and the characteristics of the designated landscapes, such as the Suffolk Coast and Heaths Area of Area of Outstanding Natural Beauty. 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. The assessment for onshore landscape and visual effects is considered in Volume 6, Part 3, Chapter 2: Onshore Landscape and Visual Impact Assessment. The landscape and visual impact assessment has considered several impacts across all phases of the project (construction, operation and maintenance and decommissioning) including impacts upon agricultural	mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. Regarding offshore landscape and visual mitigation impacts have been mitigated as far as practical by the refinement of the northern array boundary and reduction of the tallest tip height of the turbines from 420m above sea level to 399m above sea level. Regarding onshore landscape and visual impacts, an Outline Landscape and Ecology Management Plan (Volume 9, Document 9.22) has been provided which sets out VE's approach to landscape planted mitigation and screening. Other mitigation includes the iterative Site Selection Process with Chapter 4, Part 1: Site Selection and Consideration of Alternatives which has sought to avoid the most sensitive areas through careful routing of the onshore export cable	landscape receptor these will be local will be gradually re- mitigation measur as planting becom- established and g screen the new su- visually. In line with Parage of EN-1, the SoS give appropriate the benefits of V considering the balance.



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Relevant DCO Applicant Documents

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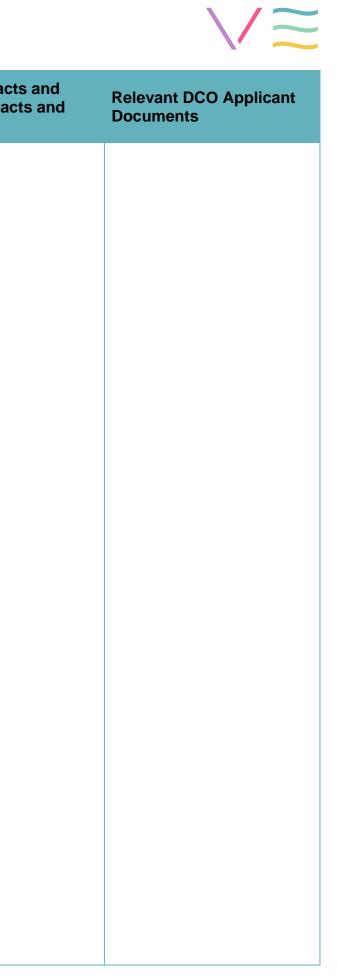
agraph 4.6.3 S should te weight to VE when e planning

Assessment

Volume 6, Part 3, Chapter 2: Onshore Landscape and Visual Impact Assessment Volume 9: Report 9.22: Outline Landscape and Ecology Management Plan

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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
			land and the landscape character and visual amenity associated with the landfall area, onshore export cable corridor and the onshore substation. Adverse impacts across all phases relate to landscape and visual effects in the localities of where the onshore infrastructure elements are located.	corridor and placement of the onshore substation. The use of trenchless crossing techniques such as horizontal directional drilling will also be adopted in a number of locations which further reduces impacts.		
Section 5.11: Land Use, Including Open Space, Green Infrastructure, and Green Belt	Section 5.11 highlights that energy infrastructure projects will have a direct effect on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. The section accepts that in the case of most energy infrastructure, there may be little that can be done to mitigate the direct effects of an energy project on the existing use of the proposed site (assuming that some of that use can still be retained post project construction) applicants should nevertheless seek to minimise these effects and the effects on existing or planned uses near the site by the application of good design principles, including the layout of the project and the protection of soils during construction. The Applicant has followed the Assessment Principles outlined within Section 5.11	There are no benefits that need to be considered in relation to land use. However, VE has been designed to avoid any land uses. In particular, VE does not interact/ overlap with designations like the green belt.	The adverse impacts in relation to the Land Use, Including Open Space, Green Infrastructure, and Green Belt are discussed below. In terms of open space, the statement of reasons (document number 4.3) confirms that VE will have no permanent impact on the land and VE will not result in the loss of the whole or part of areas designated as Safeguarded Open Space. Any impact will be limited to installation of cables under it. As there is no proposed loss of land, VE is not in conflict with this policy. Within the area in which VE is situated, several areas of land are defined as being safeguarded for 'Sand and Gravel (including Silica Sand)'. These areas are shown on the Essex County Council Mineral Policies Map1. The VE project overlies three main areas of safeguarded minerals.	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. For Ground Conditions and Land Use, the Code of Construction Practice (Volume 9, Report 9.21) includes measures to control the potential impacts to ground conditions and land use. Regarding green infrastructure, an Outline Landscape and Ecological Management Plan (Volume 9, Report 9.22) has been prepared which incorporates measures which promote and	No residual impacts in relation to Land Use, Including Open Space, Green Infrastructure, and Green Belt have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE's coordinated approach when considering the planning balance. Volume 6 Part 3, Chapter 5: Ground Conditions and Land Use.	Volume 6, Part 1, Chapter: Site Selection and Consideration of Alternatives. Volume 6 Part 3, Chapter 5: Ground Conditions and Land Use. Volume 9, Report 9.21: Code of Construction Practice. Volume 9, Report 5 Mineral Resource Assessment.

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
	and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.			 enhance green infrastructure and provide an overall net gain in biodiversity. Other relevant mitigation includes the iterative site selection process that is described within Volume 6, Part 1, Chapter: Site Selection and Consideration of Alternatives. The chapter describes how VE has undergone an extensive site selection process which has involved incorporating environmental considerations in collaboration with the engineering design requirements. In addition, land take will be reduced as far as practicable and reinstatement of land to its original use will be undertaken as far as practical following the completion of the construction works. With regards to Mineral Safeguarding Areas. A desk based Minerals Resource Assessment (Volume 9, Report 5 Mineral Resource Assessment) has been completed to consider the potential for sterilisation of sand and gravel within the DCO Limits. The assessment concludes that VE is long lived but temporary in nature, with the potential to sterilise mineral for the life of the 	



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impac benefits
				Project only. Therefore, the proposed development will not permanently sterilise the potential mineral resources, which will be available for exploitation following decommissioning and removal of the proposed development.	
Section 5.12: Noise and Vibration	Section 5.12 of EN-1 highlights how excessive noise can have detrimental effects on both humans as well as wildlife and biodiversity. The Applicant has followed the Assessment Principles outlined within Section 5.12 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	There are no benefits to consider in relation to noise and vibration.	The adverse impacts in relation to noise and vibration are discussed below. The potential impacts on and mitigation in respect of noise and vibration on humans has been assessed as part of Chapter 9: Airborne noise and vibration of the environmental statement (Volume 6, Part 3, Chapter 9). Construction > noise and vibration during the construction of the landfall; > noise and vibration during the construction of the onshore export cable corridor; > noise and vibration during the construction of the onshore substation; > noise and vibration during the construction of the onshore substation; > noise and vibration during the road improvements to the A120 Junction and Bentley Road; and > noise from construction vehicles	Section 4.3 of the Code of Construction Practice (Application Document 9.21) provides specific mitigation measures which will be applied in respect of noise. Further, Section 3.2 of the Code of Construction Practice provides for restrictions on construction working hours. Construction works will be undertaken in accordance with best practicable means (as defined in Section 72 of the Control of Pollution Act 1974) to minimise noise and vibration effects. Compliance with the noise and vibration mitigation measures included in the Code of Construction Practice is secured through requirement 8 (Code of construction practice) of the draft development consent order (Application Document 3.1). Operation Requirement 17 (Control of noise during the operational stage) of the draft development consent order provides a noise rating level	No residual imp relation to noise vibration. In line with Parago of EN-1, the Sos give appropriate the benefits of V considering the balance.

icts and Relevant DCO Applicant Documents acts and Chapter 9: Airborne noise and vibration of the environmental statement (Volume 6, Part 3, Chapter npacts in 9). e and Volume 6, Part 4, Chapter 2: Human Health and Major ragraph 4.6.3 **oS should** Disasters. Volume 6, Part 3, Chapter 4: Onshore Biodiversity and ate weight to f VE when Nature Conservation. ne planning Volume 6, Part 2, Chapter 7: Marine Mammal Ecology. Volume 6, Part 2, Chapter 6: Fish and Shellfish Ecology.

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impac benefits
			using the road network. Operation Operational noise from the onshore substation has the potential, cumulatively with operational noise from the onshore substation forming part of the proposed North Falls Offshore Wind Farm and the East Anglia Connection Node substation forming part of the Norwich to Tilbury project, to have significant effects at numerous noise sensitive receptors. Details in respect of sound levels generated by the operation of the OnSS are included in Volume 6, Part 3, Chapter 9: Airborne Noise and Vibration. No adverse impacts to ecological receptors have been identified. With regards to biodiversity, the assessments for Fish and Shellfish Ecology and Marine Mammal Ecology, have identified the impact of underwater noise and vibration during the construction, operation and maintenance phases. Similar impacts have also been considered during the decommissioning phase.	for the standard operation of the onshore substation which cannot be exceeded. With regards to biodiversity mitigation For Fish and Shellfish Ecology, mitigation includes adhering to a piling Marine Mammal Mitigation Protocol (MMMP), which will be implemented during construction. Whilst this is specifically for marine mammals it also acts to reduce the impacts of underwater noise on fish and shellfish.	
Section 5.13: Socio-Economic Impacts	Section 5.13 of EN-1 highlights that the construction, operation and decommissioning of energy infrastructure may have	The benefits in relation to Socio-Economic Impacts are discussed below. VE contributes to securing sustainable economic	Adverse impacts in relation to Socio-Economic impacts are discussed below. In the short term, there are	The Applicant has also proposed several measures that would have positive socioeconomic, recreation and tourism impacts. For	No residual imp relation to Socio- Impacts have be identified. VE has been ass

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pacts in p-Economic een	Volume 6, Part 3, Chapter 3 Socioeconomics, Tourism and Recreation Outline, Skills Employment
sessed as	Strategy (Document

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	socio-economic impacts at local and regional levels. The Applicant has followed the Assessment Principles outlined within Section 5.13 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.	growth in regeneration areas and areas that already benefit from strong local economies through integration with terrestrial planning and engagement with coastal communities. VE will create significant jobs as well as training opportunities.	potential limited-duration adverse effects predicted for the local tourism economy which are associated with the construction phase, and which reduce following completion of construction.	example, in relation to the creation of jobs, the Applicant has committed to the creation and implementation of an Outline Skills and Employment Strategy as a means of aiding in the development of skills locally as a result of the Application. An Outline Skills and Employment Strategy (Document Reference 9.27) has been produced to be submitted as part of the DCO application. The scope of the outline Skills and Employment Strategy is to provide the basis for a final Skills and Employment Strategy to underpin the construction and subsequent operation of VE. This document sets out the approach that will be adopted by the Applicant, with the aim of promoting skill and employment opportunities for local economic benefit within Tendring and Essex. Based on engagement undertaken to date, a key ambition of the Applicant is to focus on providing sustainable careers, rather than just jobs.	having an overall positive impact in relation to Socio- Economic Impacts. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE and the significant benefits of socio economic impacts when considering the planning balance.	Reference 9.27)
Section 5.14: Traffic and Transport	Section 5.14 establishes that the transport of materials, goods and personnel to and from a development during all project phases can have a	The benefits in relation to Traffic and Transport Impacts are discussed below. VE will secure several measures that advocate	Adverse impacts in relation to Traffic and Transport are discussed below. The potential impacts and mitigation in respect to	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed	No residual impacts in relation to Traffic and Transport have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should	Volume 6, Part 3, Chapter 8: Traffic and Transport Outline Construction Traffic Management Plan (Volume 9, Report 9.24) An Outline Public Access

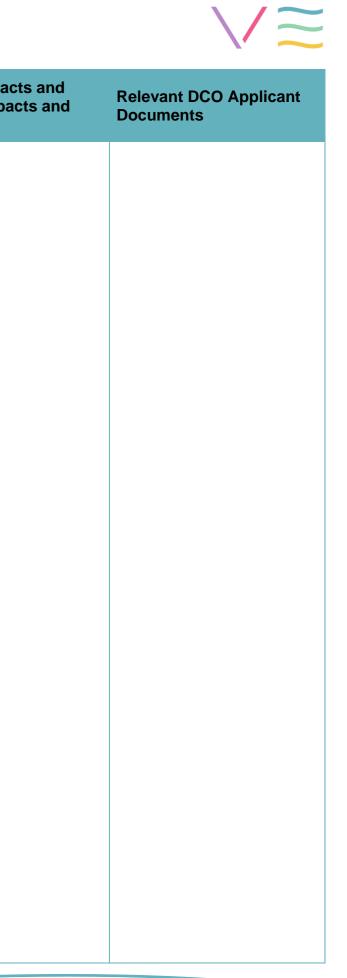


Topic Topic Over Compliance		VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
surrounding infrastructur potentially of transport ne required, the out the expec- demand ma measures s implemente identifying of reducing the by consolida provide opp shared mob The section were an NS to substanti the surround infrastructur of State sho the applicar mitigate the including du construction development enhancing a and shared provision ar Volume 6, F 8: Traffic an assesses th impacts from vehicle mov particularly construction to driver del severance. which have include the abnormal lo impacts upo public rights	the transport of the VE will be a most efficient v to limit the rele greenhouse ga most efficient v to limit the rele greenhouse ga most efficient v to limit the rele greenhouse ga most efficient v to limit the rele greenhouse ga and ortunities like a need to travel ating trips and ortunities for ility. also states that IP may give rise al impacts on ding transport re, the Secretary puld ensure that at has sought to se impacts, ming the a phase of the at and by active, public transport ad accessibility. Part 3, Chapter of Transport re potential in the increase in rements, during the a period leading ay and Other impacts been assessed delivery of ads to site, on users of	and will ensure equired for done in the ways/ routesbeen assessed as part of Volume 6, Part 3, Chapter 8: Traffic and Transport. The assessment for Traff and Transport assesses to 	 f parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO and associated documents. Mitigation measures include good project design, compliance with elements of good practice and use of standard protocols. This included selecting construction HGV access routes where possible seek to reduce the impact of traffic upon local communities by avoiding minor roads. A haul road will be used within the working corridor to remove as much HGV traffic from the local highway network as possible and minimise the number of HGV construction access points. Y; bas committed to using trenchless techniques, such as horizontal directional drilling, to cross under the majority of roads and avoid 	give appropriate weight to the significant benefits of VE when considering the planning balance.	Management Plan (Volume 9, Report 9.25) Outline Workforce Travel Plan (Volume 9, Report 9.26)



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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	road safety. The Applicant has followed the Assessment Principles outlined within Section 5.14 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.			Outline Public Access Management Plan (Volume 9, Report 9.25) has been prepared to describe how we will maintain access for communities to public rights of way, this may include diverting public rights of way at relevant places and times. Finally, an Outline Workforce Travel Plan (Volume 9, Report 9.26) has been produced to ensure movements associated with construction personnel are done in the most sustainable manner possible, which minimise traffic numbers on the highway. Final versions in accordance with the outlines, will be produced when the Contractors are appointed and provided to the local planning authority for approval.		
Section 5.15: Resource and Waste Management	Section 5.15 highlights the government policy on hazardous and non- hazardous waste which is to protect human health and the environment by producing less waste and by using it as a resource wherever possible. Where this is not possible and disposal is required as a last resort, waste management regulation ensures that waste is disposed of in a way that is least damaging to the environment and to human	The benefits in relation to Resource and Waste Impacts are discussed below. VE is supportive a national ambition of transition to net zero and increasing national supply from renewable resources. As a result, VE will contribute to a reduced reliance on fossil fuels, conserving this resource.	The adverse impacts in relation to the historic environment are discussed below. The assessment for offshore marine archaeology has been considered within Volume 6, Part 3, Chapter 5: Ground Conditions and Land Use . The assessment for Ground Conditions and Land Use has considered several possible impacts upon soil during the construction, and the loss of agricultural land during operation.	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. For Ground Conditions and	No residual impacts in relation to Resource and Waste Management have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning balance.	Volume 6 Part 3, Chapter 5: Ground Conditions and Land Use

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impa benefits
	 health. The Section sets out the expectation that applicants must demonstrate that development proposals are in line with Defra's policy position on the role of energy from waste in treating residual waste. The section also outlines that the Secretary of State must be satisfied that: any such waste will be properly managed, both onsite and off-site; the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area; and adequate steps have been taken to minimise the volume of waste arisings sent for recovery or disposal, except where that is the best overall environmental outcome. 		 Decommissioning impacts are similar to construction impacts and include potential risks to soil quality. Construction Short term risks to construction workers during construction of landfall, OnSS and onshore cable routes; Risks to offsite human receptors, such as occupants of residential properties bordering landfall, OnSS and onshore cable routes; Construction phase impacts upon soil/land quality; Sterilisation of mineral deposits; and Risk to environmental designations. Operation Direct loss of agricultural land during operation of underground cables; Loss of agricultural land services laid in direct contact with contaminated soils and groundwater; and Ingress and accumulation of hazardous ground gases. 	Land Use, the Code of Construction Practice (Volume 9, Report 9.21) includes measures to prevent pollution incidents and to manage soil effectively during stripping, handling and reinstating. It sets out what the Project should do in the event of encountering unexpected, contaminated material during construction. The Code of Construction Practice also includes a commitment to prepare a Pollution Prevention and Emergency Incident Response Plan (PPEIRP) to be held on all construction sites to follow in the event of an environmental emergency and the principles of a soil management plan to ensure protection of soils.	

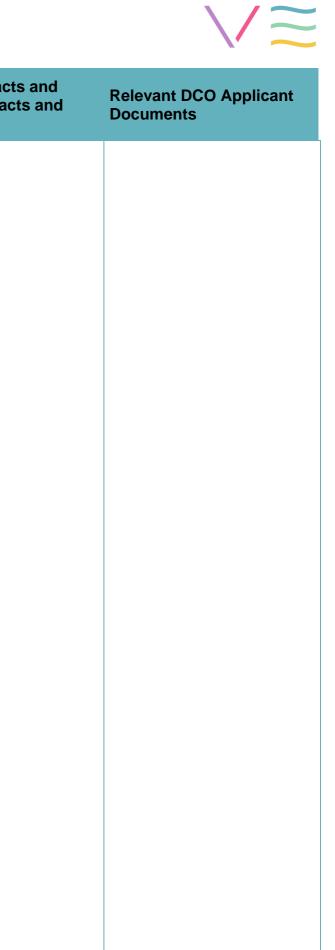


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Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits	Relevant DCO Applicant Documents
	Ground Conditions and Land Use assesses the potential impact of the Five Estuaries Offshore Wind Project on Ground Conditions and Land Use. Ground conditions and land use refers to the type of land which is found within the study area i.e. its geological conditions and what the land is currently used for, such as agricultural land. It also includes information on groundwater levels and if the land is contaminated or not. The study area for the Ground Conditions and Land Use assessment includes all onshore elements of Five Estuaries Offshore Wind Farm Project. The Applicant has followed the Assessment Principles outlined within Section 5.15 and the accompanying Policy Compliance Document (Document Reference 9.2) should be referred to for full details regarding compliance.		 Short term risks to construction workers during decommissioning of Onshore ECC and associated Infrastructure; and Risks to offsite human receptors, such as occupants of residential properties bordering the associated infrastructure with the project. 			
Section 5.16: Water Quality and Resources	Section 5.16 highlights that infrastructure development can have adverse effects on the water environment, including groundwater, inland surface water, transitional waters277, coastal and marine waters. The Section sets out the expectation that where a	The benefits in relation to Water Quality and Resources are discussed below. Climate change is generally predicted to result in increased occurrence of extreme weather events, which can cause harm to	The adverse impacts in relation to Water Quality and Resources are discussed below. The assessment for Marine Water and Sediment Quality has been considered within Volume 6, Part 2, Chapter 3: Marine Water and Sediment Quality which	Volume 9, Document 31: Schedule of Mitigation and Monitoring summarises, all mitigation proposed in the ES for VE. The Chapter lists measures proposed and signposts to relevant parts within the Documents, ES Chapters and supporting documents where the	No residual impacts in relation to Water Quality and Resources have been identified. In line with Paragraph 4.6.3 of EN-1, the SoS should give appropriate weight to the benefits of VE when considering the planning	Volume 6, Part 2, Chapter 3: Marine Water and Sediment Quality Volume 6, Part 3, Chapter 6: Hydrology, Hydrogeology and Flood Risk Volume 9, Report 9.12: Cable Specification and Installation Plan

	c Overview and pliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impacts and Weighing impacts and benefits
effect envir shoul asses status propo qualit physi the w how t to the chang and o availa envir ES of Volur 3: Ma Sedir the p Estua Farm Wate Quali Reso withir Chap Hydro Risk, poter water cours and if affect the lo const maint decor	to is likely to have ts on the water onment, the applicant Id undertake an ssment of the existing s of, and impacts of the osed project on, water ty, water resources and ical characteristics of vater environment, and this might change due e impact of climate ge on rainfall patterns consequently water ability across the water onment, as part of the r equivalent. me 6, Part 2, Chapter arine Water and ment Quality assesses otential impact of Five aries Offshore Wind n Project on Marine er and Sediment ity. Water Quality and burces is also assessed n Volume 6, Part 3, oter 6: Hydrology, ogeology and Flood which considers ntial impacts to the r quality of water ses and groundwater, f the Project could t the risk of flooding in ocal area across truction, operation and tenance, and mmissioning. Applicant has followed assessment Principles hed within Section 5.15 he accompanying y Compliance	water quality and resources. The information provided in this section will be drawn upon and summarised in Volume 6, Part 4, Chapter 1: Climate Change. As outlined in Volume 6, Part 4, Chapter 1: Climate Change, the operational phase of VE would enable the use of renewable electricity which would result in a positive greenhouse gas impact, resulting in a significant beneficial effect.	<pre>considers the potential impacts the project may have on the deterioration of water quality due to release of suspended sediments or contaminants as a result of construction activities. Similar impacts are also assessed during the operation and maintenance phase and the decommissioning phase. Construction</pre>	commitments are made. The Chapter also explains how they are secured within the draft DCO & dML and associated documents. Regarding marine water and sediment quality, an Outline Project Environmental Management Plan (Volume 9, Report 9.18) has been prepared to ensure good practice is followed to avoid release of any contaminants and ensure appropriate environmental managements measures are applied during construction and operation. A Cable Specification and Installation Plan (Volume 9, Report 9.12) has also been produced which sets out appropriate cable burial depth in accordance with industry good practice, minimising the risk of cable exposure. In relation to onshore water quality and resources, the Code of Construction Practice (Volume 9, Document 9.21) sets out measures to control the impacts of watercourse crossing and crossing beneath flood defences. The Code of Construction Practice also includes measures to prevent pollution. An outline surface water drainage scheme has been provided as part of the	balance.

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Relevant DCO Applicant Documents
Volume 9, Report 9.18: Outline Project Environmental Management Plan
Volume 9, Document 9.21:Code of Construction Practice

Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impac Weighing impa benefits
	Document (Document Reference 9.2) should be referred to for full details regarding compliance.		or spills of materials or chemicals. Decomissioning Deterioration in water quality due to re- suspension of sediments. The assessment for onshore Water quality and resources has been considered within Volume 6, Part 3, Chapter 6: Hydrology, Hydrogeology and Flood Risk which considers potential impacts to the water quality of water courses and groundwater across construction, operation and maintenance, and decommissioning. Construction Increase in flood risk 	Flood Risk Assessment- Onshore Substation (Application Document 4.3.2). Other measures set out within Volume 6, Part 3 Chapter 6: Hydrology, Hydrogeology and Flood Risk include good project design, compliance with elements of good practice and use of standard protocols.	
			or change in water quality.		
			 Operation Increase in flood risk; and Routine maintenance works affecting surface watercourses. 		
			Decommissioning		
			 Change to flood risk; and Works affecting surface watercourses. Further to the above, there are a small number of environmentally designated sites within the study area that may be adversely 		



Торіс	Topic Overview and Compliance	VE Benefits	VE Adverse Impacts	Mitigation	Residual Impact Weighing impact benefits
			affected.		



Relevant DCO Applicant Documents



7 BALANCE OF CONSIDERATIONS AND OVERALL CONCLUSION

- 7.1.1 This Planning Statement has been prepared to assist the Secretary of State with the determination of the DCO application.
- 7.1.2 The Planning Statement has given an overview of the project description, site selection and consultation process and detailed the planning policy context against which this DCO application should be decided.
- 7.1.3 Section 104 of the Planning Act 2008 makes 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 Section 104 the SoS should start with a presumption in favour of granting consent to applications for energy NSIPs. In short, the presumption is in favour of applications that accord with any relevant NPSs and the key test is to assess, on the balance of probabilities, whether the application is in accordance with the relevant NPSs and should therefore be consented, unless certain specified exceptions apply.
- 7.1.4 The Applicant has set out in detail how it complies with the relevant NPSs in the Policy Compliance Document (Document Reference 9.2) and summarised key points for consideration above in Table 6.1.
- 7.1.5 NPS EN-1 sets out that given the level and urgency of need for energy infrastructure, the decision maker should start with a presumption in favour of granting consent to applications for energy NSIPs unless more specific polices set out in relevant NPSs clearly indicate that consent should be refused, or the adverse impacts will outweigh the benefits. As demonstrated in Section 6, VE has been developed to limit any adverse impacts in line with the NPSs as demonstrated in the policy analysis.
- 7.1.6 The overarching need case for each type of energy infrastructure and the substantial weight which should be given to this need in assessing applications, as set out in paragraphs 3.2.6 to 3.2.8 of EN-1, is the starting point for all assessments of energy infrastructure applications.
- 7.1.7 These paragraphs state:

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

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

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

7.1.8 VE will support the UK in its transition to a low carbon economy, helping meet the ambition of 50GW of offshore wind by 2030 and net zero emissions by the year 2050. The Needs Statement that supports this DCO application (see Volume 6, Part1, Chapter 2: Policy and Legislation) explains in detail the UK's commitment to decarbonisation and should be read alongside this Planning Statement.



- 7.1.9 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.
- 7.1.10 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. Offshore wind has been designated a critical national priority for the UK (EN1) which the policy sets out is strongly supported. This means that these projects are viewed as being essential for achieving the UK's net zero emissions target by 2050 and should be progressed as quickly as possible.
- 7.1.11 This new policy 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.
- 7.1.12 With the energy sector contributing approximately 21% of all Greenhouse Gas in the UK⁴ and the urgent need to replace polluting generating stations, such as coal, the 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 EN-1 therefore provides for a presumption in favour of consent being granted.
- 7.1.13 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.
- 7.1.14 The deployment of offshore wind, and specifically VE, is needed to make a significant contribution to the following UK Government's national policy aims of decarbonisation:
 - > Net-zero and the importance of deploying zero-carbon generation assets at scale;
 - > Security of supply (geographically and technologically diverse supplies); and
 - > Affordability.
- 7.1.15 Wind generation is economically and technically preferential, to the GB electricity consumer for the following reasons:
 - > Decarbonisation is a UK legal requirement and is of global significance. It cannot be allowed to fail, and urgent actions are required in the UK and abroad, to keep decarbonisation on track to limit global warming;
 - > Wind generation is an essential element of the delivery plan for the urgent decarbonisation of the GB electricity sector. This is important not only to reduce power-related emissions, but also to provide a timely next-step contribution to

⁴<u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051408/2</u> 020-final-greenhouse-gas-emissions-statistical-release.pdf



a future generation portfolio which is capable of supporting the decarbonisation of transport and heat sectors, through electrification;

- As part of a diverse generation mix, wind generation contributes to improve the stability of capacity utilisations among renewable generators. By being connected at the transmission system level, large-scale offshore wind generation can and will play an important role in the resilience of the GB electricity system from an adequacy and system operation perspective;
- Internationally, and importantly, GB is leading in this regard, offshore wind generation assets are becoming bigger and cheaper, each subsequent project providing a real-life demonstration that size and scale works for new offshore wind and providing benefits to consumers in the process. Other conventional low-carbon generation (e.g., tidal, nuclear or conventional carbon with CCUS) remain important contributors to achieving the 2050 Net-Zero obligation, but their contributions in the important 2020s is likely to be low; and
- > Offshore wind is already highly competitive against other forms of conventional and low-carbon generation, both in GB and more widely.
- 7.1.16 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 CCC'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.
- 7.1.17 VE can make a large, meaningful, and timely contribution to decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, thereby addressing all important aspects of the UK's legal obligations and existing and emerging UK government policy. The case for VE is urgent and important.
- 7.1.18 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).
- 7.1.19 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.
- 7.1.20 Good design has been considered for the onshore substation through siting, landscaping and the provision of design principles in accordance with Section 4.1 of EN-1.



- 7.1.21 As identified in paragraphs 3.3.65 3.3.83 and Section 4.11 of EN-1, and Section 2.12 of EN-5, a more co-ordinated approach to offshore-onshore transmission is required. This is set out at Table 6.1 and Section 3.3 of the Planning Statement and considered in detail in the co-ordination documents (Offshore Co-ordination Document (Document 9.29) and Onshore Co-ordination Document (Document 9.30)). VE has complied with the obligation under EN-5 to co-ordinate the onshore grid connection works with the North Falls OWF project in order to seek to minimise impacts.
- 7.1.22 The exception to the presumption of consent for non-HRA and non-MCZ residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. However, as has been demonstrated within the ES and Table 6.1 in Section 6 of this Planning Statement, there will be no residual impact in relation to these topics and the Applicant accordingly submits that no negative weight against the presumption in favour should be applied to such factors.
- 7.1.23 As part of its DCO, VE has submitted a number of derogation cases, both conceded and without prejudice, with details of proposed compensation measures for consideration by the Competent Authority, should a conclusion of AoEI be reached.
- 7.1.24 The Applicant is conceding a likely significant effect upon LBBG in relation to the Alde Ore Estuary SPA. Appropriate compensation measures have been developed and put forward within the Application to compensate for any impacts. The Applicant accordingly submits that with the application of the compensatory measures for the conceded HRA effect, there is no residual unacceptable HRA impact which would prevent consent being granted.
- 7.1.25 In addition to the NPSs, the MPS (2011) discusses the importance of offshore wind. The Marine Policy Statement (2011) highlights at Paragraph 3.3.3 that:

"A significant part of the renewable energy required to meet these targets and objectives will come from marine sources. Offshore wind is expected to provide the largest single renewable electricity contribution as we move towards 2020 and beyond."

7.1.26 It goes on to state at 3.3.4 that:

"The potential impact of inward investment in offshore wind, wave, tidal stream and tidal range energy related manufacturing and deployment activity; as well as the impact of associated employment opportunities on the regeneration of local and national economies. All of these activities support the objective of developing the UK's low carbon manufacturing capability."

7.1.27 Furthermore, Paragraph 3.3.40 emphasises the importance of offshore wind by stating:

"The UK has some of the best wind resources in the world and offshore wind will play an important and growing part in meeting our renewable energy and carbon emission targets and improving energy security by 2020, and afterwards towards 2050. Harnessing and connecting offshore wind is currently more technologically challenging and more expensive than harnessing and connecting onshore wind. However, offshore wind has a larger potential, due to a stronger and more consistent



wind source at sea leading to higher power outputs. As the most mature of the offshore renewable energy technologies, it has the potential to have the biggest impact in the medium-term on security of energy supply and carbon emission reductions through its commercial scale output. Expansion of the offshore wind supply is likely to require significant investment in new high-value manufacturing capability with potential to regenerate local and national economies and provide employment."

7.1.28 EN-1 (Paragraph 4.1.12 - 4.1.14) states that:

"Other matters that the Secretary of State may consider both important and relevant to their decision-making may include Development Plan documents or other documents in the Local Development Framework.

Where the project conflicts with a proposal in a draft Development Plan, the Secretary of State should take account of the stage which the Development Plan document in England or Local Development Plan in Wales has reached in deciding what weight to give to the plan for the purposes of determining the planning significance of what is replaced, prevented, or precluded. The closer the Development Plan document in England or Local Development Plan in Wales is to being adopted by the LPA, the greater weight which can be attached to it.

In the event of a conflict between these documents and an NPS, the NPS prevails for the purpose of Secretary of State decision making given the national significance of the infrastructure."

- 7.1.29 A review of both county council and local planning authority Development Plan Documents have been considered and there are no adverse conflicts. In particular, allocations have been considered during the onshore site selection for VE (Volume 6, Part 1, Chapter 4: Site Selection and Alternatives) to avoid conflict with site specific planning allocations.
- 7.1.30 Tendring DC's Proposals Map does designate an area of land affected by the construction works as being 'safeguarded open space'. This area of land is discussed in the Statement of Reasons (Document Reference 4.3), which forms part of the application.
- 7.1.31 VE will have no permanent impact on the land and VE will not result in the loss of the whole or part of areas designated as Safeguarded Open Space. Any impact will be limited to installation of cables under it. As there is no proposed loss of land, VE is not in conflict with this policy.
- 7.1.32 The Essex County Council Minerals Local Plan (MLP, 2014) defines Mineral Safeguarding Areas (MSAs) within the county. Within the area in which VE is situated, several areas of land are defined as being safeguarded for 'Sand and Gravel (including Silica Sand)'. These areas are shown on the Essex County Council Mineral Policies Map. The VE project overlies three main areas of safeguarded minerals. However, as concluded in the accompanying Minerals Resource Assessment (Volume 9, Report 5 Mineral Resource Assessment), VE is long lived but temporary in nature, with the potential to sterilise mineral for the life of the Project only. Therefore, the proposed development will not permanently sterilise the potential mineral resources, which will be available for exploitation following decommissioning and removal of the proposed development.



- 7.1.33 When taking into account the evidence presented in this Planning Statement and Policy Compliance Document (Document Reference 9.2), it is not considered that there are any adverse impacts that outweigh the benefits associated with the Project when any necessary compensatory measures are taken into consideration. It has been demonstrated that VE is in accordance with both national and local planning policy.
- 7.1.34 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 (subsection 4);
 - would not lead to the SoS being in breach of any duty imposed on the SoS by or under any enactment (subsection 5);
 - > would not be unlawful by virtue of any enactment (subsection 6);
 - can be satisfied that the benefits of the proposed development outweigh any adverse impacts (subsection 7);
 - that there is no condition prescribed for deciding the application otherwise than in accordance with the relevant NPSs (subsection 8); and
 - > that under the terms of S104 the Planning Act 2008, consent should be granted.



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