DBS Offshore Wind

RWE Renewables UK Dogger Bank South (West) Limited

RWE Renewables UK Dogger Bank South (East) Limited

Dogger Bank South Offshore Wind Farms

The Applicants' Responses to ExQ1

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Glossary

Term	Definition
Agricultural Land Classification	Agricultural Land Classification is a grading system used to assess and compare the quality of agricultural land in England and Wales. A combination of climate, topography and soil characteristics and their unique interaction determines the grade of the land. The grades range from 1 to 5. Grade 1 being excellent, Grade 2 very good, Grade 3a and 3b good to moderate (no subdivide), Grade 4 poor and Grade 5 very poor.
Allision	The act of striking or collision of a moving vessel against a stationary object.
Array Areas	The DBS East and DBS West offshore Array Areas, where the wind turbines, offshore platforms and array cables would be located. The Array Areas do not include the Offshore Export Cable Corridor or the Inter-Platform Cable Corridor within which no wind turbines are proposed. Each area is referred to separately as an Array Area.
Baseline	The existing conditions as represented by the latest available survey and other data which is used as a benchmark for making comparisons to assess the impact of the Projects.
Biodiversity Net Gain	An approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity, developers are encouraged to provide an increase in appropriate natural habitat and ecological features over and above that being affected to ensure that the current loss of biodiversity through development will be halted and ecological networks can be restored.
Clay	Fine-grained sediment with a typical particle size of less than 0.002mm.
Collision	The act or process of colliding (crashing) between two moving objects.
Collision Risk Model (CRM)	Quantitative means to estimate the number of predicted collisions between seabirds recorded in the Array Areas and rotating wind turbines.
Concurrent Scenario	A potential construction scenario for the Projects where DBS East and DBS West are both constructed at the same time.
Cumulative Effects	The combined effect of the Projects in combination with the effects of a number of different (defined cumulative) schemes, on the same single receptor / resource.

Term	Definition
Cumulative Effects Assessment (CEA)	The assessment of the combined effect of the Projects in combination with the effects of a number of different (defined cumulative) schemes, on the same single receptor/resource.
Cumulative impact	The combined impact of the Projects in combination with the effects of a number of different (defined cumulative) schemes, on the same single receptor / resource.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Dogger Bank South (DBS) Offshore Wind Farms	The collective name for the two Projects, DBS East and DBS West.
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the value, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
Electrical Switching Platform (ESP)	The Electrical Switching Platform (ESP), if required would be located either within one of the Array Areas (alongside an Offshore Converter Platform (OCP)) or the Export Cable Platform Search Area.
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive and EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
Expert Topic Group (ETG)	A forum for targeted engagement with regulators and interested stakeholders through the EPP.
Glacial till	Poorly sorted, non-stratified and unconsolidated sediment carried or deposited by a glacier.
Gravel	Loose, rounded fragments of rock larger than sand but smaller than cobbles. Sediment larger than 2mm (as classified by the Wentworth scale used in sedimentology).
Groundwater	Water stored below the ground in rocks or other geological strata.

Term	Definition
Habitats Regulations	Conservation of Habitats and Species Regulations 2017 and Conservation of Offshore Marine Habitats and Species Regulations 2017.
Habitats Regulations Assessment (HRA)	The process that determines whether or not a plan or project may have an adverse effect on the integrity of a European Site or European Offshore Marine Site.
Haul Road	The track along the Onshore Export Cable Corridor used by traffic to access different sections of the onshore export cable route for construction.
Health	State of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.
Health outcome	Change in health status of an individual, group or population attributable to a planned intervention or series of interventions, regardless of whether such an intervention was intended to change health status.
Heavy Goods Vehicle (HGV)	HGV is the term for any vehicle with a Gross Weight over 3.5 tonnes. This is also used as a proxy for HGVs and buses / coaches recognising the similar size and environmental characteristics of the respective vehicle types.
High Voltage Alternating Current (HVAC)	High voltage alternating current is the bulk transmission of electricity by alternating current (AC), whereby the flow of electric charge periodically reverses direction.
High Voltage Direct Current (HVDC)	High voltage direct current is the bulk transmission of electricity by direct current (DC), whereby the flow of electric charge is in one direction.
Horizontal Directional Drill (HDD)	HDD is a trenchless technique to bring the offshore cables ashore at the landfall and can be used for crossing other obstacles such as roads, railways and watercourses onshore.
Impact	Used to describe a change resulting from an activity via the Projects, i.e. increased suspended sediments / increased noise.
In Isolation Scenario	A potential construction scenario for one Project which includes either the DBS East or DBS West array, associated offshore and onshore cabling and only the eastern Onshore Converter Station within the Onshore Substation Zone and only the northern route of the onward cable route to the proposed Birkhill Wood National Grid Substation.
Jointing Bays	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.

Term	Definition
Landfall	The point on the coastline at which the Offshore Export Cables are brought onshore, connecting to the onshore cables at the Transition Joint Bay (TJB) above mean high water.
Landfall Zone	The generic term applied to the entire landfall area between Mean Low Water Spring (MLWS) and the Transition Joint Bays (TJBs) inclusive of all construction works, including the landfall compounds, Onshore Export Cable Corridor and intertidal working area including the Offshore Export Cables.
Local Authority	The Local Authority is a body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. This includes County Councils, District Councils and the Broads Authority, as set out in Section 43 of the Planning Act 2008. East Riding of Yorkshire Council (ERYC) is the Local Authority for the entirety of the Onshore Development Area.
Main River	Main Rivers are usually large rivers or streams that are designated under the Water Resources Act (1991) and are shown on the statutory Main River Map. They are managed by the Environment Agency, who carry out construction, maintenance and improvement works to manage flood risk.
Mental health	State in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.
Movement	A single trip (i.e. the arrival or departure from site) for the transfer of employees or delivery of goods.
National Policy Statement (NPS)	A document setting out national policy against which proposals for NSIPs will be assessed and decided upon.
Nationally Significant Infrastructure Project (NSIP)	Large scale development including power generating stations which requires development consent under the Planning Act 2008. An offshore wind farm project with a capacity of more than 100 MW constitutes an NSIP.
Offshore Converter Platforms (OCPs)	The OCPs are fixed structures located within the Array Areas that collect the AC power generated by the wind turbines and convert the power to DC, before transmission through the Offshore Export Cables to the Project's Onshore Grid Connection Points.
Offshore Development Area	The Offshore Development Area for ES encompasses both the DBS East and West Array Areas, the Inter-Platform Cable Corridor, the Offshore Export Cable Corridor, plus the associated Construction Buffer Zones.

Term	Definition
Offshore Export Cable Corridor	This is the area which will contain the offshore export cables between the Offshore Converter Platforms and Transition Joint Bays at the landfall.
Offshore Export Cables	The cables which would bring electricity from the offshore platforms to the Transition Joint Bays (TJBs).
Offshore Fisheries Liaison Officer (OFLO)	Responsible for providing liaison between fishing vessels and offshore Project vessels. Role typically performed by someone with local knowledge and fisheries experience to encourage co-operation between all parties, and to manage any areas of conflict and/or dispute.
Onshore Converter Stations	A compound containing electrical equipment required to transform HVDC and stabilise electricity generated by the Projects so that it can be connected to the electricity transmission network as HVAC. There will be one Onshore Converter Station for each Project.
Onshore Development Area	The Onshore Development Area for ES is the boundary within which all onshore infrastructure required for the Projects would be located including Landfall Zone, Onshore Export Cable Corridor, accesses, Temporary Construction Compounds and Onshore Converter Stations.
Onshore Export Cable Corridor	This is the area which includes cable trenches, haul roads, spoil storage areas, and limits of deviation for micro-siting. For assessment purposes, the cable corridor does not include the Onshore Converter Stations, Transition Joint Bays or temporary access routes; but includes Temporary Construction Compounds (purely for the cable route).
Onshore Export Cables	Onshore Export Cables take the electric from the Transition Joint Bay to the Onshore Converter Stations.
Onshore Grid Connection Points	The Onshore Grid Connection Points is the location where the electricity produced by the Projects would be transferred to the national grid. There are two Onshore Grid Connection Points, one for each Project, which will be located in the same place.
Onshore Substation Zone	Parcel of land within the Onshore Development Area where the Onshore Converter Station infrastructure (including the haul roads, Temporary Construction Compounds and associated cable routeing) would be located.
Onward Cable Connection	Area of 400kV HVAC onshore export cable from the Onshore Converter Stations to the Proposed Birkhill Wood National Grid Substation.
Order Limits	The limits within which the Projects may be carried.

Term	Definition
Ordinary watercourse	Rivers which are not Main Rivers are called 'ordinary watercourses'. Lead local flood authorities, district councils and internal drainage boards carry out flood risk management work on ordinary watercourses.
Outline Onshore Written Scheme of Investigation (WSI)	Project specific document forming the agreement between the Applicants, the appointed archaeologists, contractors and the relevant stakeholders landward of MHWS. The document sets out the methods to mitigate the effects on all the known and potential archaeological receptors within the Hornsea Four onshore Order Limits.
Planning Inspectorate (PINS)	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects (NSIPs).
Population health	The health outcomes of a group of individuals, including the distribution of such outcomes within the group.
Preliminary Environmental Information Report (PEIR)	Defined in the EIA Regulations as information referred to in part 1, Schedule 4 (information for inclusion in environmental statements) which has been compiled by the applicants and is reasonably required to assess the environmental effects of the development.
Project Change Request 1	The changes to the DCO application for the Projects set out in **Project Change Request 1 - Offshore & Intertidal Work**s [AS-141] which was accepted into Examination on 21st January 2025.
Project Change Request 2	The changes to the DCO application for the Projects set out in **Project Change Request 2 - Onshore Substation Zone** [AS-152] which was accepted into Examination on 21st January 2025.
Projects Design Envelope	A concept that ensures the EIA is based on assessing the realistic worst case scenario where flexibility or a range of options is sought as part of the consent application.
Ramsar Site	Wetlands of international importance, designated under the Ramsar Convention.
Receptor	A distinct part of the environment on which effects could occur and can be the subject of specific assessments. Examples of Receptors include species (or groups) of animals, plants, people (often categorised further such as 'residential' or those using areas for amenity or recreation), watercourses etc.
Relevant Highway Authorities	The term relevant highway authorities for the Projects includes all highway authorities within the traffic and transport study area, namely, East Riding of Yorkshire Council, Hull City Council and National Highways.

Term	Definition
Sand	Sediment particles, mainly of quartz with a diameter of between 0.063mm and 2mm. Sand is generally classified as fine, medium or coarse.
Scoping Opinion	The report adopted by the Planning Inspectorate on behalf of the Secretary of State.
Scoping Report	The report that was produced in order to request a Scoping Opinion from the Secretary of State.
Scour protection	Protective materials to avoid sediment erosion from the base of the wind turbine foundations and offshore substation platform foundations due to water flow.
Sequential Scenario	A potential construction scenario for the Projects where DBS East and DBS West are constructed with a lag between the commencement of construction activities. Either Project could be built first.
Setting	The NPPF identifies setting as that which encompasses an asset's surroundings in which it is experienced. The extent of setting is not fixed and can contribute both positively and negatively to the heritage significance of an asset.
Special Area of Conservation (SAC)	Strictly protected sites designated pursuant to Article 3 of the Habitats Directive (via the Habitats Regulations) for habitats listed on Annex I and species listed on Annex II of the Directive
Special Protection Area (SPA)	Strictly protected sites designated pursuant to Article 4 of the Birds Directive (via the Habitats Regulations) for species listed on Annex I of the Directive and for regularly occurring migratory species
Statutory Consultation	The statutory consultation ran in two periods. The first period ran between 6th June and 17th July 2023, with a second period running between 4th August and 15th September 2023 to gather responses from third-parties missed during the initial consultation period. The PEIR was presented as part of this consultation.
Surface water flooding	Surface water flooding occurs when rainwater does not drain away through normal drainage systems or soak into the ground, but lies on or flows over the ground instead.
Temporary Construction Compound (TCC)	An area set aside to facilitate construction of the Projects. These will be located adjacent to the Onshore Export Cable Corridor and within the Onshore Substation Zone, with access to the highway.

Term	Definition
The Applicants	The Applicants for the Projects are RWE Renewables UK Dogger Bank South (East) Limited and RWE Renewables UK Dogger Bank South (West) Limited. The Applicants are themselves jointly owned by the RWE Group of companies (51% stake) and Masdar (49% stake).
The Projects	DBS East and DBS West (collectively referred to as the Dogger Bank South Offshore Wind Farms).
Vehicle (HGV, Traffic) trips	A vehicle movement (i.e. the arrival or departure from site) for the transfer of employees or delivery of goods.
Wind turbine	Power generating device that is driven by the kinetic energy of the wind.

Acronyms

Term	Definition
ACOW	Arboricultural Clerk of Works
ADR	Alternative Dispute Resolution
AEoI	Adverse Effects on Integrity
AEP	Annual Energy Production
AEZ	Archaeological Exclusion Zone
AIS	Air Insulated Switchgear
ALC	Agricultural Land Classification
ALO	Agricultural Liaison Officer
ANS	Artificial Nesting Structure
AONB	Areas of Outstanding Natural Beauty
AoO	Advice on Operations
AoS	Area of Search
AP	Annual Probability
AQMA	Air Quality Management Area
BAS	Burial Assessment Study
BHP	Billiton Petroleum Great Britian Limited
BNG	Biodiversity Net Gain
BoCC	Birds of Conservation Concern
BoR	Book of Reference
BRAG	Blue, Red, Amber, Green
BTO	British Trust for Ornithology
CA	Compulsory Acquisition

Term	Definition
CAA	Civil Aviation Authority
CAH	Compulsory Acquisition Hearing
CBRA	Cable Burial Risk Assessment
CBS	Cement Bound Sand
CEA	Cumulative Effects Assessment
CfD	Contract for Difference
CFWG	Commercial Fisheries Working Group
CIB	Clean Industry Bonus
CNP	Critical National Priority
CO_2e	Carbon Dioxide Equivalent
COWSC	Collaboration on Offshore Wind Strategic Compensation
CSS	Countryside Stewardship Scheme
CTMP	Construction Traffic Management Plan
DAS	Design and Access Statement
DBA	DBA Projco
DBB	DBB Projco
DBS	Dogger Bank South
DCLG	Department for Communities and Local Government
DCO	Development Consent Order
Defra	Department for Farming and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
DML	Deemed Marine Licence
DMP	Dust Management Plans

Term	Definition
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EATM	Environmental Assessment of Traffic and Movement
ECR	Export Cable Route
EIA	Environmental Impact Assessment
EMP	Ecological Management Plan
EPS	European Protected Species
EPUK	Environmental Protection UK
ERLP	East Riding Local Plan 2012-2029 (2016)
ERYC	East Riding of Yorkshire Council
ES	Environmental Statement
ESDAL	Electronic Service Delivery for Abnormal Loads
ESO	Electricity System Operator
ESP	Electrical Switching Platform
ESQCR	Electricity Safety, Quality and Continuity Regulations
ETG	Expert Topic Group
ExA	Examining Authority
FFC	Flamborough and Filey Coast
FID	Final Investment Decision
GBS	Gravity Base Structure
GHG	Greenhouse Gas
GIS	Gas Insulated Switchgear
GLVIA3	Guidelines for Landscape and Visual Impact Assessment Third Edition (2013)

Term	Definition
GVA	Gross Value Added
GW	Gigawatt
HAA	Heavy Anti-Aircraft
HAP	Humber Archaeology Partnership
HAT	Highest Astronomical Tide
HCC	Hull City Council
HDD	Horizontal Directional Drilling
HGV	Heavy Goods Vehicle
HLC	Historic Landscape Character
HND	Holistic Network Design
HPAI	Highly Pathogenic Avian Influenza
HRA	Habitats Regulations Assessment
HV	High Voltage
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IAQM	Institute of Air Quality Management
IDB	Internal Drainage Board
IEMA	Institute of Environmental Management and Assessment
IHLS	International Herring Larval Survey
ILA	Important Landscape Area
IoS	Isles of Scilly
IP	Interested Party
IPMP	In Principle Monitoring Plan

Term	Definition
IRZ	Impact Risk Zone
ISH	Issue Specific Hearing
ITT	Invitation to Tender
JNCC	Joint Nature Conservation Committee
km	Kilometres
KP	Kilometre Point
KSIMP	Kittiwake Strategic Implementation and Monitoring Plan
kV	Kilovolt
LAQMTG	Local Air Quality Management Technical Guidance
LGS	Local Geological Site
LHA	Local Highway Authority
LIR	Local Impact Report
LLFA	Lead Local Flood Authority
LMP	Landscape Management Plan
LNRS	Local Nature Recovery Strategy
LSE	Likely Significant Effect
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
m	Metre
MAFF	Ministry of Agriculture, Food and Fisheries
MarESA	Marine Evidence-based Sensitivity Assessment
MCA	Maritime and Coastguard Agency
MCZ	Marine Conservation Zone

Term	Definition
MCZA	Marine Conservation Zone Area
MHWS	Mean High Water Springs
MMO	Marine Management Organisation
MoD	Ministry of Defence
MoU	Memorandum of Understanding
MRA	Mineral Resource Assessment
MRF	Marine Recovery Fund
MRFO	Marine Recovery Fund Operator
MSA	Mineral Safeguard Area
MSL	Mean Sea Level
MW	Mega Watt
NAS	Noise Abatement System
NE	Natural England
NESO	National Energy System Operator
NFFO	National Federation of Fishermen's Organisations
NGET	National Grid Electricity Transmission
NGT	National Gas Transmission
NH	National Highways
NHLE	National Heritage List of England
NIS	Nonindigenous Species
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NPSA	National Protective Security Authority

Term	Definition
NRA	Navigational Risk Assessment
NRMM	Non-Road Mobile Machinery
NSIP	Nationally Significant Infrastructure Project
NSSS	North Sea Sandeel Survey
NZNSS	Net Zero North Sea Storage Limited
O&M	Operations and Maintenance
OCoCP	Outline Code of Construction Practice
OCTMP	Outline Construction Traffic Management Plan
ODOW	Outer Dowsing Offshore Windfarm
OEMP	Outline Ecological Management Plan
OFLO	Offshore Fisheries Liaison Officer
OHID	Office for Health Improvement and Disparities
OLMP	Outline Landscape Management Plan
OMMMP	Outline Marine Mammal Mitigation Protocol
OWF	Offshore Wind Farm
OWSI	Outline Written Scheme of Investigation
PA2008	The Planning Act 2008
PAM	Passive Acoustic Monitoring
PEIR	Preliminary Environmental Information Report
PEXA	Practice and Exercise Area
PINS	The Planning Inspectorate
PPA	Planning Performance Agreement
PPG	Planning Practice Guidance

Term	Definition
PQQ	Pre-Qualification Questionnaire
PRoW	Public Right of Way
PVA	Population Viability Analysis
R	Receptor
RIAA	Report to Inform Appropriate Assessment
RIGS	Regionally Important Geological Site
RR	Relevant Representation
RSPB	Royal Society for the Protection of Birds
s	Section
SAC	Special Area of Conservation
SACO	Supplementary Advice on Conservation Objectives
SAR	Search and Rescue
SEP and DEP	Sheringham Shoal Extension Project and the Dudgeon Extension Project
SES	Skills and Employment Strategy
SF6	Sulphur Hexafluoride
SFRA	Strategic Flood Risk Assessment
SIP	Site Integrity Plan
SNCBs	Statutory Nature Conservation Bodies
SNS	Southern North Sea
SoCG	Statement of Common Ground
SoR	Statement of Reasons
SoS	Secretary of State
SPA	Special Protection Area

Term	Definition
SSC	Suspended Sediment Concentration
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TCC	Temporary Construction Compound
TCPA	Town and Country Planning
TJB	Transition Joint Bay
TMCo	Traffic Management Co-ordinator
TP	Temporary Possession
TTS	Temporary Threshold Shift
UCI	Upper Confidence Interval
UK	United Kingdom
UKCoS	UK Chamber of Shipping
UKHSA	UK Health Security Agency
UXO	Unexploded Ordnance
VMS	Vessel Monitoring System
WMS	Written Ministerial Statement
WQ	Written Question
WR	Written Representation
WSI	Written Scheme of Investigation
WWII	World War Two

1 Introduction

This document presents the Applicants' responses to the Examining Authority's Written Questions issues on 28th February 2025 [PD-014], and to the additional Written Questions in Annex A of the Examining Authority's Rule 17 letter of 3 March 2025 [PD-016].

This document includes appendices where this permits information to be displayed more clearly in response to questions.

Where new information has been produced, this is presented in technical notes, and with updates to chapters, separately to this document.

1.1 Broad, General and Cross-topic Questions

Table 1-1 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Broad, General and Cross-topic Questions

I.D.	Written Question	Applicants' Response
BGC.1.1	**Neighbourhood Plans** Can you confirm whether there are any relevant made or emerging neighbourhood plans that the Examining Authority (ExA) should be aware of? If there are can you: 1 Provide details, confirm their status and, if they are emerging, the expected timescales for their completion? 2 Provide a copy of the made plan or a copy of the latest draft? 3 Indicate what weight you consider the ExA should give these documents?	1 The Applicants are aware of the Bishop Burton Parish Council's desire to prepare a Neighbourhood Development Plan. A proportion of the Onshore Export Cable around Burton Bushes falls within the proposed Bishop Burton Neighbourhood Area. 2 The Applicants understand that a draft version of the Bishop Burton Neighbourhood Plan was submitted to East Riding of Yorkshire Council (ERYC) in March 2024 but as far as the Applicants are aware has not yet been approved by ERYC. Furthermore, the proposed draft plan has not yet been made public and the Applicants have not had the opportunity to review it. The Onshore Development Area does not fall within any other Neighbourhood Development Plan areas within ERYC or Hull City Council (HCC). 3 National Policy Statements are the primary consideration in the planning hierarchy, as per the Planning Act 2008, Section 104, so consequently an unpublished neighbourhood plan should have very limited weight (if any) in the planning balance. The Applicants suggest ERYC would be able to further expand on the response to this question.
BGC.1.2	**Central Government policy and guidance** In addition to the Written Ministerial Statement (WMS) on the Marine Environment (January 2025) are you aware of any updates or changes to Government policy or guidance relevant to the determination of this application that has occurred since it was submitted? If yes, what are these changes and what are the implications, if any, for the application? For example, please provide a table setting out any changes to the updated National Planning Policy Framework (NPPF) published in December 2024 that have implications for the Proposed Development and if the Proposed Development would comply with the updated NPPF.	Government policy remains strongly focussed on offshore wind deployment and its contribution to improved energy security and net zero ambitions. At 3GW, the Dogger Bank South projects would make a substantial contribution to the UK's electricity generation while helping to reduce carbon emissions in line with government targets. In addition to the Written Ministerial Statement[1] from Defra published on 29th January 2025, other recently released guidance of relevance to the Application are as follows: • NPPF (2025[2]) • JNCC, Natural England and Cefas position on the use of quieter piling methods and noise abatement systems when installing offshore wind turbine foundations[3], published in January 2025; and • Marine environment: unexploded ordnance clearance Joint Position Statement[4], published in January 2025 While National Policy Statements comprise the primary policy tests for NSIPs, the Applicants acknowledge that the NPPF can be an important and a relevant consideration. The Applicants reviewed the previous version of the NPPF (2023) in section 1.14 (Table 1-6) of the **Policy Compliance Assessment Tables** [APP-227]. Table 1-6 captures the requirements set out in the NPPF (2023), how it is anticipated that the Projects will meet the NPPF's requirements, and how the Projects are in accordance with the NPPF policies. The Applicants have reviewed the amendments in NPPF (2025) and reassessed how the Projects meet the NPPF requirements and are in accordance with the NPPF polices (see **Appendix A**). The vast majority of policies with applicability to the Projects are unchanged between versions, and the Applicants do not consider that the revisions have implications for the Projects. Regarding the position paper on noise abatement systems (NAS), the paper recommends that quieter installation methods and / or NAS are considered early in the project design process to reduce the risk of delay to licence applications, mitigation plans and site integrity plans that may be required. In line with this policy, the **In Principle**

[1] https://questions-statements.parliament.uk/written-statements/detail/2025-01-29/hcws394
[2] https://www.gov.uk/government/publications/national-planning-policy-framework--2
[3] https://hub.jncc.gov.uk/assets/e1d38ce8-9bc6-4fb5-b867-f7f595caa25a
[4] https://www.gov.uk/government/publications/marine-environment-unexploded-ordnance-clearance-joint-position-statement/marine-environment-unexploded-ordnance-clearance-joint-position-statement

I.D.	Written Question	Applicants' Response
		Site Integrity Plan (SIP) for the Southern North Sea (SNS) Special Area of Conservation (SAC) (Revision 3) [REP2-049] and **Outline Marine Mammal Mitigation Protocol (Revision 3)** [REP2-047] were updated at Deadline 2 to state that the Projects will utilise best endeavours to deliver noise reductions, where applicable, through the use of primary and/ or secondary noise reduction based on the final project design. The unexploded ordnance clearance (UXO) position paper sets out the collective position of the UK government, devolved governments and associated bodies on the use of low noise methods of clearing UXOs within the UK marine environment, in relation to commercial marine developments, and states that low noise methods of clearance should be the default method used to clear any type of UXO in the marine environment. Following the publication of this paper, the **Outline Marine Mammal Mitigation Protocol (Revision 3)** [REP2-047] was updated at Deadline 2 and **Appendix 11-6 Unexploded Ordnance Clearance Information and Assessment (Revision 3)** [document reference: 7.11.11.6] has been submitted at Deadline 3 to incorporate updates to align with this latest guidance.
BGC.1.3	**Clean Power 2030 Action Plan** What implications does the publication of the Clean Power 2030 Action Plan (Department for Energy Security and Net Zero (DESNZ), 2024) have for the Proposed Development? For example, page 66 suggests that there will be a change to the grid connection process and that updated grid connection offers will be provided by the end of 2025 – what implications could this have for the grid connection for the Proposed Development, and do you consider that this is sufficiently secured?	The Clean Power 2030 Action Plan reiterates the government's ambition to deliver 43-50GW of offshore wind energy by 2030. The Dogger Bank South offshore wind farms could generate 3GW of clean power, which would achieve 16-24% of the gap identified on page 72 of the Plan. The implication of the Plan is to reinforce the Critical National Priority status of offshore renewable generation applied by the Overarching National Policy Statement for Energy (EN-1) (2024). National Grid made a grid connection offer to Dogger Bank South on 28 June 2024 which gives the project confidence that connection is sufficiently secured. The changes to the grid connection process suggested in the Clean Power 2030 Action Plan are to "remove slow-moving or stalled projects from the queue and prioritise based on readiness". The Applicants are comfortable that the Dogger Bank South projects are sufficiently progressed and able to evidence land rights to apply for a connection queue position from the National Energy System Operator in Q2 2025 when the queue is reordered.
BGC.1.4	**Strategic Spatial Energy Plan** Does the Government's Notice to commission a Strategic Spatial Energy Plan (DESNZ, October 2024) has any implications for the Proposed Development? If so, what are these and would it affect any of the conclusions reached in the Environmental Statement (ES)?	The National Energy System Operator has been commissioned to create a Strategic Spatial Energy Plan "*Taking into account current and planned infrastructure, including that required for existing leasing rounds*". As the Dogger Bank South projects are proposed within an existing Crown Estate leasing round location, the Plan should take into account the needs of the Project s. Further, the Applicants understand that the Strategic Spatial Action Plan is scoped to connect projects during 2035-2050, beyond the connection date of the Dogger Bank South projects. As such, the Applicants do not believe that the Plan would have any implications for the Proposed Development. Further, it seems unlikely that the commissioned Plan would be completed during the consenting period of the Dogger Bank South project s.
BGC.1.5	**Marine Plans** Can you provide a plan identifying the areas covered by the East Inshore and East Offshore Marine Plans (noting that terrestrial and landfall related policies have been scoped out of assessment) and the North East Inshore and North East Offshore Marine Plans, in relation to the Order Limits and the Proposed Development?	The Applicants direct the ExA to the requested plan presented in **Appendix B**.
BGC.1.6	**Updates on development** Can you provide an update on any planning applications that have been submitted, or consents that have been granted, since the application was submitted that could either affect the Proposed	No response is required. Question directed to East Riding of Yorkshire Council and Hull City Council.

I.D.	Written Question	Applicants' Response
	Development or be affected by the Proposed Development and whether these could affect the conclusions reached in the ES?	
BGC.1.7	**Birkhill Wood National Grid Substation** 1. Is there any update on the status of the proposals for the proposed Birkhill Wood National Grid Substation? When is this likely to come forwards as a planning application and when is its projected construction and operation? 2. Does the takeover by the new publicly owned National Energy System Operator in October 2024 from National Grid have any implications for the Proposed Development? 3. Would the grid connection offer [AS-152] from National Grid provide sufficient capacity to receive the maximum potential generating capacity from the Proposed Development?	1 The Applicants are in regular communication with National Grid. The Wanlass Beck 400 kV Substation (formerly referred to as Creyke Beck 400kV Extension) planning application has been submitted to the East Riding of Yorkshire Council. Following feedback on this planning application National Grid are updating the Birkhill Wood Town and Country Planning (TCPA) application and expect to submit to the East Riding of Yorkshire Council in Q2 2025.National Grid have also included the Birkhill Wood planning application in their statutory consultation material including the Preliminary Information Report (PEIR) for the North Humber to High Marnham DCO. Based on the TCPA consenting approach, the Birkhill Wood substation would be operational in 2029. If the substation is to be consented as part of the North Humber to High Marnham DCO, construction is proposed to start in 2028 and the substation and overhead line would be fully operational from 2031. 2 The transfer of functions from the Energy System Operator as part of National Grid, to the National Energy System Operator (NESO) does not have any implications for the Proposed Development. 3 The Grid connection offer for the Projects from the NESO is for up to 2.9GW (1450MW per Project). The Applicants consider this to be sufficient for the potential generating capacity of the Projects.
BGC.1.8	**Other consents and permits** Other Consents and Licences [REP1-023] confirms that other consents, licences and permits would be required for the Proposed Development. Can you: 1. Provide an update on progress with obtaining these consents, licences and permits? 2. Include a section providing an update on these consents, licences and permits in any emerging Statements of Common Ground (SoCG) that are being drafted with the relevant consenting authorities?	There is no update on obtaining the consents, licences and permits listed in section 2 and 3 of the **Other Consents and Licences document** [REP1-023]. With the exception of the HRA and Marine Conservation Zone Area (MCZA) these would all be applied for after DCO consent is granted, if required. Therefore, it is not proposed to include an update in the SoCG's. Reference to the Habitat Regulations Assessment (HRA) has been included in the **MMO SoCG** [REP1-032], however they have deferred comment to Natural England. The Applicants have not entered into a SoCG with Natural England, comments relating to the HRA and European Protected Species (EPS) licence have been addressed through the written representation and will be ongoing during the examination. Greater reference to the MCZA will also be added to the update of the **MMO SoCG** to be submitted at Deadline 4.
BGC.1.9	**Operational period** The assessments in the ES assume an operational period of 30 to 32 years for the Proposed Development before it is to be decommissioned. Should this period of time be specified and secured as a requirement of the draft Development Consent Order (DCO)? If not, might this allow for a longer operation period to occur and what implications would this have for the assessments and conclusions of the ES?	The Applicants do not think that it is appropriate to specify the operational lifetime of the Projects in the **Draft DCO (Revision 6)** [document reference 3.1]. The operational period of 30 to 32 years in the ES is an estimate to enable the assessment of the environmental effects of the Projects pursuant to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. The operational lifetime of a wind farm is generally not fixed and is driven by fatigue, operational maintenance and expected life of the turbines. In order to maximise the contribution of the Projects to the Government's legal targets to achieve net zero and ensure the ongoing provision of low carbon renewable generating capacity, it is important to retain flexibility in the operational period. Furthermore, the Applicants would highlight that the lifetime of the Projects is already controlled through the requirements of the Energy Act 2004, which require the Applicants to submit a decommissioning programme to the Secretary of State prior to commencement of the Projects' offshore works (which is secured through requirement 7 of the **Draft DCO (Revision 6**) [document reference 3.1]). The decommissioning programme would include details of the measures to be taken for decommissioning the Projects and the times at which, or the periods within which, those measures will have to be taken. That programme must be approved by the Secretary of State who is therefore able to retain control over the operational lifetime of the Projects. The ES assesses the realistic worst case scenario and as detailed above and in **Chapter 5 Project Description (Revision 3)** [REP1-009] is based on the indicative design of 30-32 years, although this might be extended further as technology advances. The Applicants consider if this were

I.D.	Written Question	Applicants' Response
		to be extended to allow a longer operational period this would not alter the outcomes of the assessments, and the relevant mitigation would still be in place ensuring the levels of impact are acceptable.
BGC.1.10	**Cumulative effects** The ExA notes the information provided in the Cumulative Effects Assessment Screening [APP-101] and in each topic area of the ES regarding cumulative effects. Can you provide a table that presents an assessment of cumulative impacts including the likely significant effects of the Proposed Development with third party developments, including a summary of likely residual cumulative effects that have been assessed as significant in Environmental Impact Assessment (EIA) terms after embedded and applied mitigation, and identify those without any further mitigation or monitoring proposals (and explain why)? Can you provide a plan to identify the cumulative developments considered in the ES, with reference to the Order Limits? The ExA directs the Applicants to the recent submission to the Mona Offshore Wind Farm (OWF) as an example. This is listed as [REP3-063] within the Mona OWF examination library.	The Applicants acknowledge the Examining Authority's request and thank them for providing an example. The Applicants will submit such a document at Deadline 4. **Appendix 6-1 Onshore Cumulative Effects Assessment (CEA) Methodology** [APP-077] has been updated to show the geographical extents for those schemes located in the vicinity of the Order Limits near to the and capture any changes in order limits for other schemes which have been included in the onshore cumulative effects assessment long list of schemes. Revision 2 of Appendix 6-1 has been submitted for Deadline 3. This will assist the ExA in identifying those schemes which have been considered in the onshore CEA. The figure has also been provided at a larger scale in order for ease of reading. The update to Figure 6-1-1 also assists in the Applicants' response to ExQ1 LVI.1.22 and TT.1.16 in identifying those schemes located near to the Onshore Substation Zone.
BGC.1.11	**Approach to Cumulative Effects Assessment (CEA)** In many subject areas in the ES, it is assumed that other projects will mitigate their own impacts through secured measures to reach a conclusion that there would be no significant cumulative impacts, without any further consideration of the interaction with the Proposed Development. Can you justify this approach to CEA, and corresponding mitigation?	Within EIA, it is expected that a project would assess and mitigate their impacts through secured measures to ensure there are no residual significant impacts as far as reasonably practicable. Where a topic assessed for Dogger Bank South would result in residual significant impacts, this would have a greater likelihood of a potential cumulative significant impact with another project. Within each topic residual significant impacts are considered when identifying the potential for cumulative significant impacts. Other factors such as the construction programmes of the Projects and other projects have been considered in identifying potential cumulative impacts. The residual impacts for each environmental topic form the basis for identifying cumulative impacts with other projects. Where residual impacts are not significant the likelihood of cumulative significant impacts with other projects is low. This has been considered in turn within each topic of the ES. This approach is in line with the Planning Inspectorate '*Advice Note Seventeen: Cumulative Effects Assessment*' (PINS, 2019[5]), which provides guidance on a stages process that can be used for cumulative effects assessments for Nationally Significant Infrastructure Projects.
BGC.1.12	**Change Request 2** Whilst noting your response to ERYC on this matter [AS-152, pages 58 and 59], can you provide further justification as to why the construction period would remain unchanged, given that Change Request 2 results in the proposed converter stations being approximately half the size of those previously proposed?	Regarding the reduction in the size of the Onshore Substation Zone and Onshore Converter Station area, the reduction in scale of the works at the Onshore Substation Zone, would not have a significant impact on the overall indicative project construction program proposed in the DCO. The construction period is dependent on the onshore and offshore construction. Supply and delivery of key components to site is not accelerated by the reduced footprint, and is subject to manufacturing, transport, and supply chain constraints. Some elements of work cannot be completed until these items are installed and hence precludes a compressed program. In addition, only once the offshore elements are complete can the construction works at the Onshore Substation Zone be fully commissioned and finalised. The final phase of the works is the reinstatement, and removal of all the temporary facilities once sufficient commissioning is completed. This is anticipated to take up to 6 years in a sequential construction scenario, as detailed in Section 5.8 and Table 5-33 of **Chapter 5 Project Description (Revision 3)** [REP1-009].
BGC.1.13	**Onshore Substation Zone** The application documentation makes many references to the Onshore Substation Zone which is defined as, 'Parcel of land within the Onshore Development Area where the onshore convertor	The term 'Onshore Substation Zone' was used throughout the site selection process and in the Preliminary Environmental Information Report (PEIR) during statutory consultation, when both High Voltage Alternating Current (HVAC) and High Voltage Direct Current (HVDC) transmission system options were being considered as part of the design. This is detailed in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. When the

[5] PINS (2019). Advice Note Seventeen: Cumulative Effects Assessment. [Online] Available at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/ [Accessed March 2025].

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	station infrastructure (including haul roads, temporary construction compounds and associated cable routing) would be located'. However, the application does not include proposals for a substation, this being the subject of a separate application by National Grid. To minimise potential confusion could you use 'onshore convertor station zone' when referring to this area and amend your documentation as necessary?	HVAC option was removed from the final design and a HVDC option, which required Onshore Converter Stations rather than HVAC substations was selected, the decision was made to use the same terminology to avoid confusion with stakeholders and members of the public. The electrical equipment present at the Onshore Converter Stations is very similar to what lay people would expect at a substation, so the Applicants consider that use of this term aids understanding. The term Onshore Substation Zone is used through the application and is clearly defined, thus the Applicants do not propose to make this update. The National Grid substation is also described as the '*Proposed Birkhill Wood National Grid Substation*' throughout the application documents, to avoid any confusion with the term Substation Zone.

1.2 Air Quality and Health

Table 1-2 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Air Quality and Health

I.D.	Written Question	Applicants' Response
Air Quality		
AQ.1.1	**Air quality assessment baseline** ES Chapter 26 [APP-208, table 26-9] confirms that baseline data from the Councils are from 2018 to 2022. Is this information representative of the current air quality baseline, given it was predominantly gathered during the COVID19 pandemic when air quality data could have been disproportionately affected? Is there newer air quality information available that should be utilised for air quality modelling?	**Chapter 26 Air Quality** [APP-208], paragraph 172 states that: '*Monitoring data from 2020 and 2021 should be treated with caution as the Covid-19 pandemic had a significant impact on traffic levels as well as upon levels of data capture.*' **Chapter 26 Air Quality** [APP-208], paragraph 163 states that: '*The latest version of Defra's air quality assessment tools, including the background pollutant maps, are based on assumptions prior to the Covid-19 pandemic. As such, the tools do not reflect any short or long-term changes to emissions which may have occurred as a result of behavioural change during the pandemic.*' **Chapter 24 Traffic and Transport** [APP-195] Table 24-7confirms that traffic count data used to inform the traffic assessment was obtained from surveys undertaken in 2022 and 2023, i.e. after the Covid-19 pandemic travel restrictions had been lifted. **Chapter 24 Traffic and Transport** [APP-195] Table 24-8 confirms that additional traffic data used to inform the traffic assessment was obtained from either 2019 or 2022, i.e. outside of Covid-19 pandemic travel restrictions. As demonstrated above, the data sources used in the air quality modelling assessment were all based on periods and assumptions outside of Covid-19 pandemic travel restrictions. Therefore, the air quality assessment is not influenced by the impact of Covid-19 pandemic travel restrictions. In addition, the air quality modelling methodology used was agreed with East Riding of Yorkshire Council (ERYC) and Hull City Council (HCC). This included the use of 2022 monitoring data for the purpose of model verification as described on page 20 of **Appendix 26-1 Air Quality Consultation Responses** [APP-210]. In relation to the second part of the question, **Chapter 26 Air Quality** [APP-208] used the most recently published air quality data available at the time when the assessment was undertaken. While newer air quality information and tools are available from ERYC, HCC and the Department of Environment Food and Rural Affairs (Defra), these were all released subsequent to the assessment being undertaken. Therefore, they do not need to be considered further in the context of **Chapter 26 Air Quality** [APP-208].
AQ.1.2	**Air quality assessment baseline** ES Chapter 26 [APP-208, paragraph 107] states that, '*East Riding of Yorkshire Council undertakes monitoring of NO_2, PM_{10} and $PM_{2.5}$ within the study area at one roadside continuous monitoring site (Bev_Zephyr)…*'. Within the same paragraph it also states, '*East Riding of Yorkshire Council does not undertake monitoring of PM10 or PM2.5.107*'. Clarify if ERYC does undertake monitoring of PM10 and PM2.5 and, if so, at what valid data capture level you consider that the data would be reliable for model validation?	ERYC does undertake monitoring of PM10 and PM2.5 at the continuous monitoring site Bev_Zephyr, as presented in Table 26-25, **Chapter 26 Air Quality** [APP-208]. Defra's Local Air Quality Management Technical Guidance 2022 (LAQM TG(22)) paragraph 7.567 states that: '*Where only short-term monitoring is available for model verification, annualisation of any short-term datasets should be undertaken through the processes and examples described in Section 2 of Chapter 7.*' TG22 paragraphs 7.184 and 7.185 suggest that if PM10 or PM2.5 data capture is below 75%, then it is necessary to annualise the respective data. **Chapter 26 Air Quality** [APP-208], paragraph 107 states that the Bev_Zephyr monitoring site had 73% data capture in 2022. Therefore, annualisation of this data would be required. TG22 box 7-9 states that data from two to four nearby, long-term, continuous monitoring sites of urban background, suburban or rural type, with at least 85% data capture is required to undertake annualisation. There is only one

I.D.	Written Question	Applicants' Response
		monitoring location that fits this description. As such, it was not possible to undertake annualisation of the Bev_Zephyr data and therefore it was not possible to use this location for model verification. Therefore, as described in paragraph 110 of **Chapter 26 Air Quality** [APP-208]: *'Due to the absence of sufficient monitoring data for PM10 and PM2.5 within East Riding of Yorkshire Council to undertake model verification, the derived NOx adjustment factor has been applied to the modelled PM10 and PM2.5 concentrations to provide a conservative assessment (in accordance with guidance in LAQM TG (22)'.*
AQ.1.3	**Air quality assessment methodology** The Applicants: ES Chapter 24 [APP-195] confirms that traffic modelling of junctions 1 to 13 within Hull would be carried out post-determination of the application to allow for baseline conditions to be consolidated following major highway improvements to the A63 Castle Street. Can you clarify the following: 1. How has this been accounted for in the air quality assessment? 2. If further modelling of junctions 1 to 13 was carried out as proposed post-determination, would further air quality modelling also be undertaken? If not, why not? If so, how would this be secured? 3. How would mitigation be captured if required? ES Chapter 26 [APP-208] confirms that the A63 Castle Street improvements in Hull and the A164 and Jocks Lodge Improvement Scheme were considered as part of the cumulative air quality effects assessment . Therefore, can the cumulative assessment be considered reliable if more traffic (and potentially air quality) modelling would be required post-determination?	1. **Chapter 26 Air Quality** [APP-208], paragraph 88 states that: *'traffic data does not include any changes to baseline traffic flows as a result of the A63 Castle Street improvements in Hull, nor the A164 and Jocks Lodge Improvement Scheme which are under construction and will be operational prior to construction of the Projects.'* The traffic modelling for the Environmental Statement (ES) considers worst-case traffic numbers. Traffic modelling post-determination would assign the same construction routes as assessed at ES stage. Therefore, the traffic modelling post-determination would be no worse than what is presented in the ES. **Chapter 26 Air Quality** [APP-208], paragraph 89 states that: *'A63 Castle Street improvements in Hull and the A164 and Jocks Lodge Improvement Scheme, have otherwise been considered as part of the cumulative effects assessment discussed in section 26.7.'* **Chapter 26 Air Quality** [APP-208], section 26.7.1.3 qualitatively considers cumulative impacts in relation to construction road vehicle exhaust emissions upon both human and ecological receptors. In relation to human receptors, given that traffic related to the Projects is temporary and short-term, coupled with baseline air quality conditions being well within the relevant objective (i.e. less than 75%), it was concluded that the associated cumulative effect is considered to be not significant. In relation to ecological receptors, the ES that accompanied the A63 Castle Street Improvement, Hull concluded that the scheme is certain to be insignificant in terms of air quality in relation to effects on ecological sites (the ES assessed the Humber Estuary Special Area of Conservation (SAC), Special Protection Area, Ramsar, Site of Special Scientific Interest). The **Report to Inform Appropriate Assessment Habitats Regulations Assessment Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] paragraph 159 concludes that, subject to natural change, the qualifying features of the Humber Estuary SAC will be maintained in the long term. Furthermore, the purpose of the A63 Castle Street improvements is to relieve congestion and improve traffic conditions and therefore improve air quality. It is considered that the assessment presented in **Chapter 26 Air Quality** [APP-208] is representative of reasonable worst case. 2. It is not anticipated that further air quality modelling would be undertaken due to the conclusions reached and discussed in point 1 above. 3. Mitigation in relation to road traffic is captured in the **Outline Construction Traffic Management Plan (Revision 2)** [AS-020] and the outline **Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025]. It is considered that further junction modelling post-determination will not change the outcome of the assessment presented in **Chapter 26 Air Quality** [APP-208], therefore additional mitigation measures are not considered to be required.

I.D.	Written Question	Applicants' Response
		Given the fact that baseline air quality conditions are well within the relevant objective, it is reasonable to conclude that the cumulative assessment is reliable.
AQ.1.4	**Air quality assessment** Where ES Chapter 26 [APP-208] presents the 'worst case scenario' in terms of emissions, is this also the same as 'predicted absolute emissions' required by National Policy Statement (NPS) EN-1 paragraph 5.2.9? If not, can you explain the difference and where in the ES the predicted absolute emissions are provided?	**Chapter 26 Air Quality** [APP-208] Table 26-4references National Policy Statement (NPS) EN-1 paragraph 5.2.9 and refers the reader to **Chapter 26 Air Quality** [APP-208] sections 26.5 (existing environment) and 26.6 (assessment of significance). **Chapter 26 Air Quality** [APP-208], section 26.6 presents *the predicted absolute emissions, concentration change and absolute concentrations as a result of the proposed project*, as required by NPS EN-1 paragraph 5.2.9. The 'worst-case scenario' is defined in **Chapter 26 Air Quality** [APP-208], Table 26-1 and represents the construction scenario which has the potential to result in the highest 'predicted absolute emissions' from road traffic emissions generated by the Proposed Development.
AQ.1.5	**Air quality assessment** Can you signpost where ES Chapter 26 [APP-208] presents absolute concentrations as a result of the Proposed Development after mitigation as required by NPS EN-1 paragraph 5.2.9? If this information is not provided, should it be and would it affect the conclusions reached?	**Chapter 26 Air Quality** [APP-208] presents absolute concentrations as a result of construction road vehicle exhaust emissions associated with the Proposed Development after implementation of embedded mitigation as detailed in Table 24-3 of **Chapter 24 Traffic and Transport** [APP-195]. As presented in **Chapter 26 Air Quality** [APP-208] Table 26-55, no further mitigation is required for construction road vehicle exhaust emissions associated with the Projects because the overall effect is considered to be not significant. Construction dust and fine particulate matter is inherently assessed qualitatively to determine mitigation measures and the overall effect is presented with the identified mitigation in place. Emissions from Non-Road Mobile Machinery (NRMM) are screened qualitatively and suitable controls and management measures are identified to mitigate any emissions.
AQ.1.6	**Air quality assessment** Can you confirm if there would be any eutrophication impacts as a result of the Proposed Development as required by NPS EN-1 paragraph 5.2.9? Can you signpost to where you demonstrate this was considered, and how it was assessed?	The **Response to Natural England's Relevant Representations** [AS-048], Annex A shows that there are potentially significant eutrophication (nitrogen deposition) effects as a result of the Projects in-combination with other plans and projects (but not as a result of the Projects alone). As described in NPS EN-1 paragraph 5.2.4, eutrophication is the excessive enrichment of nutrients in the environment. Eutrophication from air pollution is mostly attributable to emissions of NOx and ammonia. It is characterised in **Chapter 26 Air Quality** [APP-208] as nutrient nitrogen deposition, derived from both NOx and ammonia emissions. Nutrient nitrogen deposition has been assessed using the Joint Nature Conservation Committee (JNCC) guidance on decision-making thresholds for air pollution approach. The JNCC approach method is described in **Chapter 26 Air Quality** [APP-208, section 26.4] and the impacts of nutrient nitrogen deposition are presented in section 26.6 of **Chapter 26 Air Quality** [APP-208]. Nutrient nitrogen deposition is assessed further in **Annex A** of the **Response to Natural England's Relevant Representations** [AS-048]. Predicted impacts of nutrient nitrogen deposition were assessed using Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001), along with a comparison against the JNCC approach used in **Chapter 26 Air Quality** [APP-208]. The potential for significant effects is assessed further in Table 18-20, **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019], where it is concluded that there is a residual moderate adverse effect at Bentley Moor Wood as a result of nitrogen deposition. **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019], paragraph 302 states that: '*It should also be noted that background levels of nitrogen deposition are already in exceedance at Bentley Moor Wood LWS, due to regular baseline traffic movements at locations where the air quality assessment was undertaken.*'

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AQ.1.7	**Air Quality Strategy for England (Department for Environment, Food and Rural Affairs (Defra))** NPS EN-1 paragraph 5.2.12 states that the Secretary of State (SoS) should have regard to the Air Quality Strategy in England, or any successors to this. ES Chapter 26 [APP-208] refers to the 2007 version of the Air Quality Strategy in England in the document references, however the most recent version was published in 2023. What effect do any changes to this updated document have on the conclusions reached in ES Chapter 26? Can you update the application documents as necessary?	**Chapter 26 Air Quality** [APP-208] erroneously makes reference to the Air Quality Strategy 2007 and should in fact reference the Air Quality Strategy: Framework for local authority delivery 2023 (Defra, 25th August 2023). Notwithstanding this, the assessment has considered the objectives and standards as stated in the most recent version of the Air Quality Strategy (2023). Therefore, the conclusions reached in **Chapter 26 Air Quality** [APP-208] remain unchanged.
AQ.1.8	**Air quality effects during construction** **The Applicants:** NPS EN-1 paragraph 5.7.9 states that construction should be undertaken in a way that reduces emissions, such as the use of low emission mobile plant during construction as appropriate, and that consideration should be given to making this mandatory in DCO requirements. Can you signpost where in the outline Code of Construction Practice (oCoCP) [REP1-025] there is a commitment to the use of low emission vehicles or plant? **The Applicants and ERYC:** Should this be a mandatory requirement, and if not, why not?	The **OCoCP (Revision 3)** [REP1-025], page 91 states one of the mitigation measures is to: '*Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable'.* The **OCoCP (Revision 3)** [REP1-025], paragraph 27, also states one of the mitigation measures is that: '*All NRMM should comply with the appropriate NRMM regulations*' Both of these measures contribute to the overarching aim of NPS EN-1 paragraph 5.7.9 which is to reduce emissions. The measures specific to NRMM were developed in accordance with LAQM TG(22). The final construction methodology will not be known until a construction partner is on board which will happen at detailed design stage post-consent. Therefore, it is not possible to commit to low emission mobile plant being mandatory at this stage, without robust supply chain analysis on the associated programme impacts.
AQ.1.9	**Air quality effects during construction** ES Chapter 26 [APP-208, paragraph 229] defines the sensitivity of receptors – can you confirm how many receptors would be affected by effects of PM10? If this is more than 100, would this increase the sensitivity of receptors to human health effects of PM10 to high? If so, how does this affect the findings of the ES?	As mentioned in the question, **Chapter 26 Air Quality** [APP-208], paragraph 229 defines the sensitivity of receptors. Sensitivity is defined for both dust soiling on people and property and for human health effects of PM10. Sensitivity is determined in line with Institute of Air Quality Management (IAQM) guidance on the assessment of dust from demolition and construction (2024), as described in **Appendix 26-2 Construction Dust and Fine Particulate Matter Assessment Methodology** [APP-211], which determines sensitivity by comparing the number of receptors within specified distance bands. The higher the number of receptors and the closer these receptors are to the source, the higher the sensitivity. The assessment approach is to identify the highest sensitivity based on the number of receptors within a distance band in order to determine the reasonable worst-case (i.e. highest) sensitivity. These reasonable worst-case number and distances to compounds/ work areas of receptors that would be affected by the effects of PM10 are the same as those described for dust soiling on people and property. **Chapter 26 Air Quality** [APP-208], paragraph 225 the Landfall Zone, Onshore Export Cable Corridor and the Onshore Converter Stations have been assessed separately, due to the spatial scale of the Projects. **Chapter 26 Air Quality** [APP-208], paragraph 229 considers that the reasonable worst-case sensitivity is not more than 100 receptors that may be affected by effects of PM10 within the distance bands presented and the spatial elements assessed. The highest annual mean background PM10 concentration across the study area is less than 24 µg m^{-3}. Therefore, in line with IAQM guidance as there were less than 100 receptors within the distance bands presented, the sensitivity is low.
AQ.1.10	**Air quality effects during construction** The oCoCP [REP1-025] identifies the likelihood of concrete batching plants at the two proposed main construction compounds. Given these could be sources of substantial amounts of particulate matter, can you signpost to where they have been considered in terms of air quality effects? If they have not been considered, can you explain why not?	**Chapter 26 Air Quality** [APP-208] Table 26-33 assigns the dust emission magnitudes for each construction activity for the Onshore Development Area for Dogger Bank South (DBS) East and DBS West concurrent construction. Under the '*Construction (construction materials)*' construction activity for all locations (which include the Temporary Construction Compounds (TCCs)):

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		'it has been assumed that cement bound sand (CBS) would be used to line the cable trench and pack around the ducts, and this is a potentially dusty construction material.' The **OCoCP (Revision 3)** [REP1-025], paragraph 48 states that: *'The main TCCs would potentially include:* *'[…]* *'•Cement bound sand (CBS) or concrete batching plants.'* **Chapter 26 Air Quality** [APP-208] has assessed CBS. However, as highlighted in the **OCoCP (Revision 3)** [REP1-025], the TCCs may include concrete batching plants instead. Given that CBS has been considered as a potentially dusty construction material, and that concrete batching is a potentially dusty activity, the assessment is relevant for CBS or concrete batching plants. That is to say, CBS and concrete batching are treated the same in the assessment approach and therefore the outcomes of the assessment remain unchanged and are appropriate for concrete batching or CBS.
AQ.1.11	**Air quality effects during construction** The oCoCP [REP1-025] states that bonfires and burning of waste materials would be avoided – should the oCoCP include a stipulation for no bonfires and burning of waste materials to avoid nuisance and adverse effects on air quality?	No response is required. Question directed to ERYC.
AQ.1.12	**Air Quality Management Area (AQMA)** Are you satisfied that the Proposed Development would not result in conflict with any of the objectives of the Hull AQMA No.1?	No response is required. Question directed to HCC.
AQ.1.13	**Cumulative effects** Can you justify why only projects located within 500 meters (m) of the onshore development area were identified as potentially having cumulative effects from construction phase dust and particulate matter [APP-208, paragraph 308]? Are there other projects such as the A164 and Jocks Lodge Improvement Scheme that should be included to assess whether they could contribute dust and particulate matter to the extent that the cumulative effects become significant?	IAQM guidance on the assessment of dust from demolition and construction (2024) states that: *'The potential for significant cumulative effects should also be considered. These are more likely to occur where the dust generating activities from separate developments projects are in close proximity […]* *'For example:* *'[…]* *'receptors located within 250m of multiple development sites.'* **Chapter 26 Air Quality** [APP-208] Table 26-50 states: *'There is potential for cumulative construction dust impacts where projects occur within 500m of each other as dust impacts are considered within a 250m buffer from each project, as detailed in section 26.4.3.1. Therefore, two projects would need to be within 500m of each other for cumulative dust impacts to occur.'* Other projects such as the A164 and Jocks Lodge Improvement Scheme has an associated Construction Environmental Management Plan (CEMP) which outlines minimum requirements for dust management to be undertaken by the contractor and specifies that mitigation needs to be in-line with IAQM guidance, such as: • *'Implement phase specific Dust Management Plans (DMP) approved by the PEM, which documents the mitigation measures to be applied, and the procedures for their implementation and management. These DMPs should detail the name and contact details of person(s) accountable for air quality and dust issues on the site. This may be the environmental manager/engineer or the site manager;*

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		• *'Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. Make the complaints log available to the Local Authority when asked;* • *'Record any exceptional incidents that cause dust and/or air emissions, either on- or off- site, and the action taken to resolve the situation in the logbook;* • *'Plan the site layout so that machinery and dust causing activities are located away from receptors, as far as is possible. Use intelligent screening where possible – e.g. locating site offices between potentially dusty activities and the receptors;'* Other projects such as JBM Peartree Hill Solar Farm have only recently submitted application documents and these are not yet available to view. Planning Practice Guidance (PPG) for air quality (Ministry of Housing, Communities & Local Government, 2019) states that: '*Considerations that may be relevant to determining a planning application include whether the development would:* *'[…]* '•*Give rise to potentially unacceptable impacts (such as dust) during construction for nearby sensitive locations;'* Given the above, it is reasonable to assume that **Chapter 26 Air Quality** [APP-208], paragraph 311 will remain valid: '*It is anticipated that a construction dust assessment would be undertaken and/or best practice mitigation methods will be recommended for the cumulative schemes with insufficient information available, where required. As it is anticipated that cumulative schemes will implement recommended mitigation measures (likely in accordance with the guidance provided by the IAQM (2024)), it is not anticipated that the residual effects from construction phase dust emissions, when combined with those of DBS East and/or DBS West, will be significant.'*
AQ.1.14	**Cumulative effects** **The Applicants:** ES Chapter 26 [APP-208, paragraph 319] confirms that the in-combination increase in traffic flows associated with Dogger Bank South (DBS) East, DBS West and other identified schemes would cumulatively exceed the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK) screening criteria (IAQM and LP, 2017) on road links. It suggests, however, that mitigation would not be required, because traffic associated with DBS East and DBS West would account for only a small proportion of the total traffic generated. Justify your approach with reference to policies that support your stance, noting the requirements of NPS EN-1 paragraph 5.2.12 and Planning Inspectorate (PINS) guidance on cumulative effects assessment[6], which states that, '*as a minimum, applicants are expected to include the mitigation necessary to address impacts associated with their proposed Nationally Significant Infrastructure Project (NSIP). Apportionment of effect and mitigation between projects may be acceptable subject to justification and agreement with relevant consultation bodies. This would need to be evidenced in the Environmental Statement.*' Can you provide details of the likely process contribution, ie modelling of the future air quality scenario with committed development but without the Proposed Development, in comparison to the cumulative future scenario with the Proposed Development.	**Cumulative effects and mitigation** The application of IAQM and Environmental Protection UK (EPUK) screening criteria is a general approach to '*provide more specific guidance as to when an air quality assessment is likely to be required to assess the impacts of the proposed development on the local area.*' That is, to indicate where detailed dispersion modelling may be required. Where the screening criteria are triggered, it does not automatically mean that there will be a significant effect. The IAQM and EPUK (2017) guidance presents a table of impact risk descriptors, in which the lower the annual mean concentration of a pollutant is, the bigger the change in annual mean concentration (when comparing the 'with Proposed Development' scenario against the 'without Proposed Development' scenario) required to trigger a significant effect. **Chapter 26 Air Quality** [APP-208], Tables 26-36, 26-37, 26-39, 26-43, 26-44 and 26-46 show that annual mean concentrations of nitrogen dioxide (NO_2) and particulate matter (PM10 and PM2.5) are predicted to be well within (i.e. less than 75% of) the respective air quality objectives both 'with' and 'without' the Proposed Development in place; with one exception – receptor R1 which is within and less than 87% of the annual mean PM2.5 objective. Therefore, as concluded in **Chapter 26 Air Quality** [APP-208] paragraph 320: '*the risk of exceedance of the air quality Objectives, even with potential change in cumulative traffic, is low.*' Which leads to the overall conclusion in **Chapter 26 Air Quality** [APP-208] paragraph 321:

[6] Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK

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	The Applicants and HCC: Would the cumulative effects result in conflict with any of the objectives of the Hull AQMA No.1?	'*Therefore, it is unlikely that there would be a significant cumulative effect associated with traffic emissions at human receptors and the cumulative impact is considered to be not significant.*' The IAQM and EPUK (2017) guidance states: '*Mitigation measures. In those cases where a significant effect is identified then the measures to be employed to avoid, reduce and, where appropriate, offset this effect should be set out.* ***Even where the effect is judged to be insignificant, consideration should be given to the application of good design and good practice measures, as outlined in Chapter 5.***' PPG for air quality states that: '*Mitigation options will need to be [...] proportionate to the likely impact.*' Furthermore, Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Planning Inspectorate (PINS), 2024) states that: '*The measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant cumulative effects and, where appropriate, any proposed monitoring arrangements should be described in the Environmental Statement.*' **Chapter 26 Air Quality** [APP-208] considered that there would be no significant cumulative effects in relation to construction traffic and human health, therefore further mitigation measures are not proposed. This is also consistent with PPG for air quality, whereby mitigation options are proportionate to the likely impact. The PINS advice (2024) also states that: '*While applicants should make a genuine attempt to assess the effects arising from multiple, individually non-significant effects, the assessment should be proportionate and no longer than necessary to identify and assess likely significant cumulative effects.*' As noted above, **Chapter 26 Air Quality** [APP-208] predicted the annual mean pollutant concentrations to be within or well within the relevant objectives, therefore the consideration of cumulative effects as presented is considered to be proportionate and no longer than necessary to identify and assess likely significant cumulative effects. Notwithstanding the above, it should be noted that, in-line with NPS EN-1 paragraph 5.2.14 (which refers to the mitigations identified in NPS EN-1 section 5.14 Traffic and Transport), appropriate demand management measures have been included in the **oCTMP (Revision 2)** [AS-020] These include measures to reduce vehicle numbers and therefore reduce associated emissions. **Process contribution** In relation to the process contributions, these are presented for human receptors in **Chapter 26 Air Quality** [APP-208], Tables 26-36, 26-37, 26-39, 26-43, 26-44 and 26-46 in the "Change" column. For ecological receptors, the process contributions are presented in **Chapter 26 Air Quality** [APP-208], Tables 26-41 and 26-48 for the JNCC approach and the **Response to Natural England's Relevant Representations** [AS-048] Annex A, Tables 3, 5, 7, 9, 11, 13, 15, 17 for the NEA001 approach. **Hull AQMA No.1** Hull AQMA No.1 was declared for annual mean NO_2. **Chapter 26 Air Quality** [APP-208] concludes that cumulative effects are considered to be not significant, and that annual mean NO_2 concentrations are predicted to be well within (<75% of) the annual mean NO_2 air quality objective. Therefore, the Applicants consider that there would not be conflicts with any of the objectives of the Hull AQMA No.1.

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AQ.1.15	**Cumulative effects** ES Chapter 26 [APP-208, paragraph 321] suggests that it would be unlikely that there would be a significant cumulative effect associated with traffic emissions at human receptors. How is this justified when paragraph 319 confirms that the in-combination increase in traffic flows associated with DBS East, DBS West and other identified schemes would cumulatively exceed the IAQM and EPUK screening criteria (IAQM and EPUK, 2017) on road links?	Please refer to the first half of the AQ.1.14 response (the first four paragraphs of the response are relevant here).
AQ.1.16	**Securing mitigation** ES Chapter 26 [APP-208, table 26-3] states that the Proposed Development would commit to the implementation of best practice dust mitigation measures as per the oCoCP. However, the wording in the oCoCP [REP1-025] states that when undertaking general works certain dust control measures 'may' be implemented as required. Do you consider that the use of the words 'may' or 'should' commit the Applicants to the implementation of mitigation measures? Should these be replaced with 'must'. If not, why not?	The **OCoCP (Revision 3**) [REP1-025] paragraph 266 states: '*Control measures as detailed in this OCoCP will be implemented throughout the full duration of construction as required.*' Therefore, the **OCoCP (Revision 3)** [REP1-025] commits the Applicants to the mitigation measures detailed.
Health		
AQ.1.17	**NPS EN-1** The ExA notes the socio-economic benefits identified in ES Chapter 27 [APP-214] associated with job opportunities from construction, operation and maintenance of the Proposed Development. However, what opportunities have been taken to promote local improvements to encourage health and wellbeing, which consider impacts on vulnerable groups within society and those with protected characteristics under the Equality Act 2010 in accordance with NPS EN-1 paragraph 4.4.6?	With regard to employment as a determinant of health, **Chapter 27 Human Health** [APP-214], has had regard to the potential impacts on vulnerable groups within society, including those with relevant protected characteristics under the Equality Act 2010 and opportunities to promote health and wellbeing. Specifically, paragraph 244 draws attention to vulnerability associated with age (a protected characteristic) (dependents of people who are on low incomes; future young or old people who may come to rely on those employed) and economic vulnerability (people with low incomes, poor job security, poor working conditions or who are unemployed). The **Outline Skills and Employment Strategy (SES)** [APP-230] outlines commitments and activities focused on the Humber region, including with regard to early-stage careers by providing work, experience, apprenticeships, and traineeships/internships, as set out in paragraph 19. The **SES** [APP-230] (paragraph 19) focuses on expanding the talent pool to unemployed, under-employed, those experiencing employment poverty and the economically inactive; and supporting the increase of diversity of people in the offshore wind workforce and improving inclusion of the industry. The **SES** [APP-230] (paragraph 19) specifically draws attention to local populations by supporting initiatives that promote training and employment opportunities in local residents. The **SES** [APP-230] (paragraph 23) also states that some workers will be drawn from within the Humber region in order to generate the greatest potential for effective change driven by the Projects for income and employment inequalities. The final SES is secured by Requirement 26 of the **Draft Development Consent Order (DCO) (Revision 6)** [document reference 3.1] and it will need to be approved by the relevant planning authority before any phase of the onshore works commences.
AQ.1.18	**Mitigation** ES Chapter 27 [APP-214, table 27-3] presents embedded mitigation measures, including those regarding construction noise on page 43. However, not all of the mitigation measures listed in the table regarding construction noise are in the oCoCP [REP1-025], for example plant to operate at low speeds. Can you review all mitigation set out in table 27-3 to ensure that all necessary measures are captured in the appropriate associated documents?	The noise and vibration control measures, as set out in paragraph 259 of the **OCoCP (Revision 3)** [REP1-025] include all the mitigation measures included in Table 27-3 of **Chapter 27 Human Health** [APP-214] except the requirement for the plant to operate at low speeds. Rather, what has been confirmed in the **OCoCP (Revision 3)** [REP1-025] (paragraph 259) is: The speed of vehicle movements along site haul roads or roads within construction compounds will be limited to below 15 miles per hour (mph) unless approved with the relevant planning authority, ERYC. This is sufficient to cover the requirement to operate at low speeds, as such no proposed update to **Chapter 27 Human Health** [APP-214] or the **OCoCP (Revision 3)** [REP1-025] is proposed.

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AQ.1.19	**Converter stations** If the converter stations were to include gas insulated switch gear, would sulphur hexafluoride be used? If so, how would leakage be controlled operationally and through the draft DCO to avoid a risk to public health or the environment?	Gas Insulated Switchgear (GIS) typically uses sulphur hexafluoride (SF6) gas as the insulating medium for High Voltage (HV) installations a non-toxic, non-flammable but potent greenhouse gas. The components are enclosed in metal-enclosed, sealed enclosures where the SF6 gas provides superior insulation and arc-quenching properties. Detailed design decisions on the switchgear arrangement will be made after consent. Due to environment and space limitations the Offshore Converter Platform will likely utilise a GIS system. The Onshore Converter Station may use either an Air Insulated Switchgear (AIS) or GIS Solution which will be selected as part of the design decision process. The use of any GIS system would include assessment of risk using the hierarchy of control for HSE (Elimination, Substitution, Engineering Control, Administrative Control and Personal Protective Equipment), including the use of SF6 and associated risks. SF6 Alternatives are under development and pilot stage by equipment manufacturers but are not established HV installations such as required by the Projects. The Applicants will explore the use of SF6 Alternatives should any potentially viable alternatives be available to the market nearer the time of construction. Where SF6 is used it will be carried out in line with the following regulations and standards: 1. EU Regulation No.517/2014 (Retained) and the UK Fluorinated Greenhouse Gases Regulations 2015 working with fluorinated gases; 2. BS EN 62271-4:2013 High-voltage switchgear and control gear. Handling procedures of sulphur hexafluoride (SF6) gas and its mixtures; 3. Energy Networks Association 2013 ER G69 Guidance on working with sulphur hexafluoride; 4. BS EN 60376:2005 Specification of technical grade sulphur hexafluoride (SF6) for use in electrical equipment; 5. BS EN IC 60480:2004 Guidelines for the checking and treatment of sulphur hexafluoride (SF6) taken from electrical equipment and specification for its re-use; 6. The Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR); 7. HSE guidance document HSG230 - keeping electrical switchgear safe Engineering measures would include automatic monitoring and leak detection systems, and measures to ensure that containment is carried in line with any leak prevention requirements. If a leak were detected repairs shall be made as soon as practicable after discovery. The GIS Equipment will be housed in HV areas that are typically unmanned, especially while live. The GIS areas would be established as restricted areas with and personnel access restrictions to ensure personnel entering are trained, protected and following an appropriate safe system of work for the HV equipment and Gas risks. Any equipment would be maintained in line with the original equipment manufacturers instructions. Only personnel trained and competent under EU Regulation No.517/2014 (Retained) and the UK Fluorinated Greenhouse Gases Regulations 2015, will be allowed to operate and maintain equipment containing SF6. These measures would form part of operational management procedures that would be developed after obtaining the DCO, prior to the commencement of operation. **Records and Auditing** Locations that have equipment containing SF6 will hold a register, recording the equipment containing and the quantity of SF6 used. The location will produce a decommissioning plan to deal with this equipment at the end of life. The location SF6 register will also keep records of any leaks and repairs including the amount of SF6 used during the

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		operational life. Any repairs or leaks will be managed to ensure equipment leakage rates remain under the maximum rates per year, in accordance with relevant regulations. Leakage rates per year will be linked to the gas volume contained in equipment as stated by the original equipment manufacturer. **Disposal and End of Life Plan** Where possible SF6 will be re-used in accordance with the relevant standards. Where it is not re-useable, it will be recovered and then transported and recycled or destroyed by licensed companies. During decommissioning, gas will be recovered from equipment by trained and competent personnel.
AQ.1.20	**Significance of effects** Can you provide further justification that the public health benefits from energy security to vulnerable groups during operation of the Proposed Development would result in a moderate beneficial effect, which would be significant [APP-214]? Can you provide examples of other made DCOs where similar moderate beneficial (significant) effects on human health were identified?	The Applicants are confident in the conclusion that the Projects provide a significant benefit to population health in relation to the role that energy security plays for public health and that the, 1.5GW to 3GW generated by these Nationally Significant Infrastructure Projects is, nationally significant. This conclusion is aligned with the guidance for assessing Human Health within Environmental Impact Assessment (EIA) and is a consistent finding across recent DCOs for offshore wind farms. Set out below is additional justification for the conclusions reached. In the Institute of Environmental Management and Assessment (IEMA) Guide: Effective Scoping of Human Health in Environmental Impact Assessment (2022) the final row of Table 9.1 confirms a relevant element to scope into the EIA Human Health chapter is *"The wider societal effects of the project for public health [including] how the project contributes to: energy infrastructure … on which society depends for good population health".* The IEMA Guide: Determining Significance for Human Health in Environmental Impact Assessment (2022) has been followed in determining the likely significant effects of energy security arising from the Projects. The guidance is authored by UK relevant experts and health specialists including representatives of the Department of Health's Office for Health Improvement and Disparities (OHID) and the UK Health Security Agency (UKHSA). The IEMA scope and significance methods are a refinement of a pan-European methodology for Human Health in EIA developed by the European Public Health Association and the International Association for Impact Assessment (A Reference Paper for Human Health in EIA, 2020). The guidance therefore reflects the established and considered consensus of public health and impact assessment professionals for both the UK and wider European context. In their relevant representation [RR-053] UKHSA and OHID confirm the are satisfied with the methodology. The IEMA 2022 methodology requires consideration of relevant populations (sensitivity) and relevance of a project change to a health determinant (magnitude of impact), the significance conclusion also draws in additional evidence to explain why an effect is significant for public health, including from the scientific literature and policy. EN-1 paragraph 4.4.1 recognises that energy infrastructure has the potential to impact on the health and well-being ('health) of the population, including that access to energy is clearly beneficial to society and to our health as a whole…" **Chapter 27 Human Health** [APP-214] Table 27-9 sets out the sensitivity methodology, reproduced from the IEMA 2022 guidance. Using this method, section 27.6.2.6.2 of **Chapter 27 Human Health** [APP-214] sets out the assessment of sensitivity in relation to the Wider Social Infrastructure and Resources determinant of health. The assessment text notes the particular vulnerabilities of low income and existing poor health which are associated with high sensitivity within the national population of England. The high sensitivity score is used in the significance conclusion, reflecting the important role of health inequalities. This is confirmed in paragraph 64 of **Chapter 27 Human Health** [APP-214], which states that "for the purposes of applying the Table 27-11 significance matrix sensitivity is driven by the vulnerable population group score". Paragraph 74 and its bullet points set out the specific vulnerable group points against the Table 27-9 criteria as to why the vulnerable group population has high sensitivity. This includes that the population vulnerable in relation to energy security is characterised as having high levels of

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		deprivation (including pockets of deprivation), particularly in relation to low incomes that limit capacity to adapt and exacerbate financial pressures where energy supply interruption or market demand affects income generation or results in additional expense (including wasted food and household bills). This group is also much more reliant on availability of electricity supplies, including for heating, food hygiene and medical equipment, and is therefore likely to carry greater concerns around interruption, affecting mental health. Vulnerability around energy supplies is well documented, and additional supporting literature is set out later in this response. We are confident that the assessment correctly characterises sensitivity on this issue as high. **Chapter 27 Human Health** [APP-214] Table 27-10 sets out the magnitude methodology, reproduced from the IEMA 2022 guidance. Using this method, section 27.6.2.6.1 of **Chapter 27 Human Health** [APP-214] sets out the assessment of magnitude in relation to the Wider Social Infrastructure and Resources determinant of health. As set out in paragraph 334, the magnitude of impact on population health is driven by the following criteria: • Duration is long-term (indicates a high magnitude score); • Frequency is continuous (indicates a high magnitude score); • Severity relates to risks for population mortality (e.g., reducing excess winter deaths); (indicates a high magnitude score) and morbidity of physical and mental health (indicates a medium magnitude score); • Population extent is for a large minority of the population (indicates a medium magnitude score); and • Implications for healthcare service quality are small benefits (indicates a medium magnitude score). Given the scale of the electricity generation, its long-term nature and its distributed benefits across the national grid, the balance of any judgement of magnitude against the methodology would be of a high to medium magnitude. The assessment has been conservative in adopting a medium magnitude score. Whilst the 1.5GW (or 3GW if DBS East and DBS West are built together) has been equated in terms of equivalent to 1.5 million homes powered per year (or 3 million homes if DBS East and DBS West are built together), this is only one way of conceptualising the benefit (i.e. just a convenient unit). In practice the electricity would have a much more distributed benefit to a much larger number of people, including through community services, employment, education, healthcare and operation of other utilities. The severity rating based on risks to population mortality and morbidity are supported by the literature as follows: The availability of energy, and the infrastructure required to deliver it, is a basic necessity for the delivery of life saving and health supporting resources. This infrastructure is so embedded into the foundation upon which healthcare and public health are delivered that it can be overlooked as a necessary condition for a healthy society. The World Health Organization affirms that "energy is essential to meeting our basic needs: cooking, boiling water, lighting and heating. It is also a prerequisite for good health –a reality that has been largely ignored by the world community"[7]. Health care has become increasingly dependent upon energy-consuming technologies including Emergency Medical Services communications, electronic medical records, electronic medical devices, patient monitoring and hospital treatments. Community-based care also requires consistent, reliable energy for health service delivery including refrigeration of medicines and vaccines and diagnostic testing. At the individual level, cold food storage, cooking fuel, home heating and cooling are some of the basic energy requirements needed to support health. More broadly, energy supports the building blocks of health through lighting schools, maintaining social services, maintaining employment and economic productivity and operating technologies that improve social networking and quality of life.

[7] World Health Organization, 2006. Fuel for life: household energy and health, in: Fuel for Life: Household Energy and Health. pp. 42–42.

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		Large scale interruptions to energy associated with power outages and natural disasters have been shown to lead to immediate and severe harm to health[8]. The disruption of municipal services that rely on energy, such as drinkable water and handling of wastewater may increase community-level risk for infectious disease outbreaks[9]. Short-term interruptions to power have demonstrated health consequences ranging from carbon monoxide poisoning, temperature-related illness, gastrointestinal illness, to cardiovascular, respiratory and renal disease hospitalisations and all-cause mortality[10]. While quantitative research on the effect of power outages on public health is sparse, there is expert consensus that power loss can lead to both direct and indirect deaths[8, 11]. Vulnerabilities, including socioeconomic status and age, can exacerbate susceptibility to the impacts of energy interruption. In a rapidly heating world, the risk of heat events has increased. Studies have shown that socially disadvantaged populations are more exposed to heat stress and have lower adaptive capacity[12] . In particular, lower socio-economic status populations, young people, unemployed people, and ethnic minorities are more at risk[12, 13]. These populations already experience higher environmental risks including housing quality, work environments, and neighbourhood conditions[14] making them more vulnerable to interruptions in power supply. Increased costs for residential heating and household energy needs account for a higher percentage of household budgets in lower socio-economic populations[15]. Children in moderately to severe energy insecure homes are more prone to food insecurity, hospitalisations, poorer health ratings and developmental concerns[16]. Energy insecurity has direct health effects such as cold stress and asthma, and affects mental wellbeing through increased stress, parental fear and stigma, family disruption and residential instability[16]. Energy affordability remains a priority to the UK Government. According to a House of Commons research briefing, despite the fall in prices in late 2023 and much of 2024, typical bills under the April to June 2025 price cap will still be 52% higher than in winter 2021/22[17]. At the end of 2024 there were 806,508 (electricity) and 656,545 (gas) accounts with a consumer repaying an energy debt[18] . In 2022 (most recently available data), the percentage of English households that experienced fuel poverty (based on low income, low energy efficiency methodology) was 13.1%[19]. Therefore, sustained interruptions in energy supply or increases in costs would be expected to result in reduced health and wellbeing outcomes. Fuel insecurity, combined with seasonal illness and pressure on services, can have significant health outcomes. In 2021/22 there were 13,980 excess deaths in the winter period compared to the average in non-winter months. Therefore, the evidence provides a reasonable conclusion that the Projects' contribution to energy security via the national grid would have a medium magnitude of impact.

[8] Beatty, M.E., Phelps, S., Rohner, C., Weisfuse, I., 2006. Blackout of 2003: public health effects and emergency response. Public Health Rep. 121, 36–44.
[9] Granholm, F., Tin, D., Ciottone, G.R., 2023. Critical Energy Infrastructure and Health: How Loss of Power May Kill. Prehospital Disaster Med. 38, 279–280. https://doi.org/10.1017/S1049023X23000274
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I.D.	Written Question	Applicants' Response
		Based on the high sensitivity set out in section 27.6.2.6.2 of **Chapter 27 Human Health** [APP-214], and a medium magnitude of impact as further justified above, guidance states that the significance could be either major or moderate (**Chapter 27 Human Health** [APP-214] Table 27-11 significance matrix, which reflects the equivalent table in IEMA 2022 guidance on determining significance Table 7.3). The conclusion reached in paragraph 339 of **Chapter 27 Human Health** [APP-214] is that the effect for this determinant of health on population health is moderate beneficial (rather than major beneficial). This reflects the scale of the Projects' contribution in the wider UK energy security context and a conservative approach to assessment. The approach of assessing the energy benefits of offshore wind farms is increasingly common since this was clarified in the IEMA guidance 2022. **DCOs Decided:** Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects ES Volume 1 Chapter 28 – Health (document reference 6.1.28) (APP-114 of that application), includes assessment of wider societal benefits with regard to energy independence, and reduced air pollutants and greenhouse gas emissions (section 28.6.3.3). That assessment (August 2022) was just prior to the November 2022 IEMA guidance. That assessment found sensitivity of the vulnerable group population to be high and magnitude of project change as low to medium. The significance finding as presented in section 28.6.3.3.4 is minor beneficial (not significant). It is noted that such a conclusion on sensitivity and magnitude could have resulted in a major, moderate or minor beneficial effect under the EIA matrix used in that assessment. Arguably that assessment was conservative in its professional judgment. It is also noted that that project would contribute up to 786MW, around half to a quarter of the energy contribution of Dogger Bank South. DNS's in Wales, whilst not DCOs have equivalences in terms of their national significant. Decided projects include DNS CAS-02112-T2NoG8 - Parc Worlton Solar Farm. ES Volume 1 Chapter 9 paragraph 9.99 to 9.109 assess Macro-economic, Environmental and Sustainability Factors concluding that the energy security benefits for public health of the 42 MW development would be moderate beneficial (significant). That conclusion recognised that the project contributes to narrowing inequalities that are at risk of widening due to reduced national energy security and global climate change. Norfolk Vanguard, ES Volume 1 Chapter 27 – Human Health (APP-351 of that application), Table 27.21 (pdf page 86) notes that the medium magnitude benefits of the project on energy affordability are moderate beneficial (significant) for vulnerable groups of high sensitivity. This was a 1.8 GW project that also predated the IEMA 2022 guidance and whilst stating this conclusion did not go into further detail. **DCOs in Examination:** North Falls Offshore Wind Farm ES Volume 3.1 Chapter 28 – Human Health (document reference 3.1.30) (APP-042 of that application), includes assessment of wider societal benefits with regard to energy independence and reduced air pollutants and greenhouse gas emissions (section 28.6.3.3). The significance finding as presented in section 28.6.3.3.4 is moderate to minor beneficial (significant). Morecambe Offshore Windfarm: Generation Assets ES Volume 5 Chapter 19 – Human Health (Document Reference 5.1.19) (APP-056), includes assessment of wider societal benefits with regard to energy security (section 19.6.3.6). The significance finding as presented in paragraph 19.214 is moderate beneficial (significant). Five Estuaries Offshore Wind Farm ES Volume 6, Part 4 Chapter 2 – Human Health and Major Disasters (Document Reference 6.4.3) (APP-095 of that application), includes assessment of wider societal benefits with regard to

I.D.	Written Question	Applicants' Response
		affordable energy and reduction in air pollutants and greenhouse gas emissions. (section 2.12 'Impact 8: Wider Societal Benefits'). The significance finding as presented in paragraph 2.12.26 is moderate beneficial. Morecambe Offshore Windfarm Generation Assets ES Volume 2, Chapter 14 Human health assessment (APP-018 of that application) section 14.9.6 finds the project's energy security benefits to public health to be moderate beneficial (significant). Mona Offshore Wind Farm ES Volume 4, Chapter 4: Human health assessment (APP-078 of that application) section 4.8.10 on wider societal infrastructure benefits, including energy security, a moderate beneficial effect (significant). Botley West Solar Farm ES Chapter 16 - Human Health (APP-053 of that application), a 840 MW onshore solar project) paragraph 16.9.239 finds a significant beneficial effect for population health due to the links between energy security and health outcomes. **Other DCOs:** The Wylfa Newydd Wylfa Newydd Project (nuclear power station) PINS Reference Number: EN010007, Health Impact Assessment Report (document reference 8.19) included assessment of energy generation demand and affordability. At paragraph C.12.12 the assessment found that for particularly sensitive groups within the affected population who are less able to cope with power cuts or price increases, the residual effect could range up to moderate beneficial, reflecting that, although a modest effect, the reach is national, thus constituting an important public health contribution. In conclusion there is a strong body of scientific evidence on the importance of energy security. Looking at other jurisdictions there are clear examples of the strong adverse effects on public health where energy security is not maintained[20]. Since the November 2022 publication of IEMA guidance on assessing Human Health in EIA there has been increasing recognition of the significant benefits of major energy projects for national population health. The majority of these examples are currently working their way through the examination stage and represent a broad consensus which is not disagreed with by statutory public health stakeholders.

[20] Wright, *et al*. (2024). The Impact of Rolling Blackouts on Environmental Health in South Africa. Journal of Health and Pollution. 12. 10.1289/JHP1090.

1.3 Aviation, Radar, Military and Communications

Table 1-3 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Aviation, Radar, Military and Communications

I.D.	Written Question	Applicants' Response
ARMC.1.1	**Colour of offshore structures** The colour requirement for the proposed offshore structures differs between International Civil Aviation Organisation and Trinity House [APP-125, paragraphs 35 and 36]. Condition 11 of Deemed Marine Licence (DML) 1 [REP1-004] states, '*the undertaker must paint all structures forming part of the authorised scheme yellow (colour code RAL 1023) from at least HAT to a height as directed by Trinity House. Unless the MMO otherwise directs, the undertaker must paint the remainder of the structures grey (colour code RAL 7035)*'. Could you comment on the appropriateness of the colour secured in the DML condition, whether the colour requirement inconsistencies are resolvable, and provide appropriate justification?	No response is required. Question directed to the Civil Aviation Authority (CAA), Maritime and Coastguard Agency (MCA) and Trinity House.
ARMC.1.2	**Notification periods** Are you supportive of the fourteen and five-day notification periods in Condition 12 of DML 1 [REP1-004] and do you have any other comments on the condition as drafted? The ExA notes this condition is repeated in other DMLs and will consider comments received relevant for all instances.	No response is required. Question directed to the CAA, Defence Infrastructure Organisation and the Marine Management Organisation.
ARMC.1.3	**Consultation** Can you signpost to evidence of consultation with the Met Office, CAA, NATS (formerly known as the National Air Traffic Services) and any aerodrome likely to be affected by the Proposed Development, including the organisations support for the findings of the submitted assessment and any associated mitigation? If you have not consulted these organisations, explain how you can demonstrate compliance with NPS EN-1 paragraph 5.5.39.	No consultation has been undertaken with the Met Office as there are no likely adverse effects on Met Office weather radar and radio sites. Consultation with the Met Office was not required as the Projects' Array Areas are more than 20km from any UK weather radars. As stated in **Chapter 15 Aviation and Radar** [APP-125] (section 15.5.7, paragraph 93) the Projects' Array Areas are more than 180km from the closest weather radars, significantly beyond the 20km weather radar safeguarded zones. Notwithstanding the 20km zone, offshore wind turbines can have a detrimental effect on weather radar data at ranges beyond 100km. This has been considered in section 15.5.7; however, wind turbines within the Projects' Array Areas would not be in radar line of sight of any Met Office facilities and therefore there is no impact pathway for adverse effects to occur. No consultation has been undertaken with any aerodromes as there are no aerodromes likely to be affected by the Proposed Development. As stated in **Chapter 15 Aviation and Radar** [APP-125] (section 15.5.2, paragraph 70) the Projects' Array Areas are beyond the radar line of sight (and operational range) of any aerodrome radars and are not below airspace coincidental with any published aerodrome Instrument Flight Procedures. There are no realistic impact pathways for any adverse effects on aerodromes. The Projects' Array Areas are outside the distances from all types of aerodromes where consultation should take place as stated in Civil Aviation Publication 764 Policy and Guidelines on Wind Turbines (CAA, 2016), therefore consultation was not required. Consultation has been undertaken with NATS, which is confirmed in the scoping response on 09/08/2022 (see **Appendix 15-1 Aviation and Radar Consultation Responses** [APP-127]) that the Proposed Development does not conflict with its safeguarding criteria and accordingly has no safeguarding objection to the proposal. The CAA was consulted at the PEIR stage, and they responded on 14/07/2023 (see **Appendix 15-1 Aviation and Radar Consultation Responses** [APP-127]), outlining its requirements regarding aviation obstacle notification, aeronautical obstacle lighting and marking, and helicopter operations. The Projects have noted these requirements and included obstacle notification, and lighting and marking as embedded mitigation (**Chapter 15 Aviation and Radar** [APP-125],

I.D.	Written Question	Applicants' Response
		Table 15-3) and undertaken engagement with helicopter operators (see **Appendix 15-1 Aviation and Radar Consultation Responses** [APP-127]).
ARMC.1.4	**Offshore platform and helicopter operators** ES Chapter 15 [APP-125, Table 15-14] identifies consultation with offshore platform and helicopter operators to agree appropriate mitigation to safeguard oil and gas helicopter operations. Can an update on this consultation be provided including when details of any proposed mitigation would be made available to the Examination?	**Chapter 15 Aviation and Radar** [APP-125] notes potential impacts on helicopter access to the Cavendish and Cygnus Alpha and Bravo platforms. Engagement with stakeholders has revealed that the Cavendish Platform has been decommissioned and removed, so there will be no impacts on this asset. Engagement with the operator of the Cygnus Alpha and Bravo platforms has been undertaken through sharing of drafts of **Appendix 15-3 Helicopter Access Report** [APP-129] and **Chapter 16 Infrastructure and Other Users** [APP-130] documents prior to application. The impact on this asset relates to small potential increases in journey times to the platform under certain conditions. The final impact will be understood only in the context of final design information relating to the footprint of the DBS East Array Area and the tip heights of the wind turbines selected. Once this information is available then discussions with the operator can progress further. The requisite information will not be available within the timeframe of the DBS Examination.
ARMC.1.5	**Southern Managed Danger Areas** In your Relevant Representation [AS-002], you explain the Proposed Development is within Low Flying Area 11. In addition, the Proposed Development is identified within the Southern Managed Danger Areas [APP-125, section 15.5.3] and [APP-126, Figure 15-2]. To aid the ExA in considering compliance with NPS EN-1 paragraph 5.5.59, can you confirm whether the Proposed Development would unacceptably limit military training, in isolation and cumulatively with other projects, including low flying aircraft operations.	No response is required. Question directed to the Defence Infrastructure Organisation.
ARMC.1.6	**Size of small wind turbines** ES Chapter 5 [REP1-009, paragraph 57] explains small wind turbine models on the market today have capacities of 15 to 16 Mega Watts (MW). Table 5-2 [REP1-009] identifies the small turbine rotor blade diameter as 259m. Assuming a 34m lower blade tip clearance above mean sea level, could the Applicants clarify if the maximum tip height for small turbines above Mean High Water Springs (MHWS) would be 293m? If not, what would the maximum tip height be to achieve 15 to 16 MW?	A 15MW wind turbine, with an assumed maximum 259m rotor and 34m Mean Sea Level (MSL) lower blade tip clearance, would have a maximum upper tip height of 293m MSL. This equates to approximately 291.8m MHWS.
ARMC.1.7	**Power density** In response to Issue Specific Hearing (ISH) 2 agenda item 3, action point 11 [AS-155], you explain that constructing a wind turbine array with a power density above 5MW/km2 would be sub-optimal. Can you quantify the impact to energy generation efficiency and explain if there are lower and upper acceptable power density thresholds?	The lowest acceptable power density is 5MW/km2, due to the constraints of The Crown Estate Lease. There is not an upper acceptable threshold - the higher the power density the less favourable the layout is from an economic and technical perspective. From an economic perspective it is difficult to quantify the impact (specifically to electricity generation) but, as an example, one can refer to the **Fraser Nash Array Layout Yield Study** [AS-014] commissioned by The Crown Estate which assesses theoretical 1GW wind farm. In chapter 3.2 "Build-out Density", the authors conclude that increasing the build-out density from 3 MW/km² to 8 MW/km² increases the total turbine interaction loss by 4 %, lowering the overall energy production commensurately. Their conclusion is that *"Build-out density (or turbine spacing) within wind farms is a key driver of internal wake loss. Results from the TurbOPark model in this assessment indicated an approximate 1 percentage point increase in total interaction loss (due to wakes and blockage) for every 1 MW/km2 increase in build-out density which is broadly consistent with prior findings from the PARK 2 model."* As mentioned in a previous response (point 11 of Table 4-1 in **The Applicants' Responses to January 2025 Hearing Action Points (Revision 2)** [AS-155]), the Applicants seek to achieve as close to 5MW/km2 in order to be competitive in the highly competitive bidding process for a Contract For Difference, without which the Projects may be delayed or not be constructed at all.

I.D.	Written Question	Applicants' Response
ARMC.1.8	**Search and Rescue aircraft** ES Appendix 15-3 [APP-129, paragraph 49] states, '*In summary, although a reduction in helicopter access under CAT Regulations would impose a logistic restriction on a gas installation, it would not result in a reduced level of safety, as SAR helicopters would still be able to access an installation*'. Can you comment whether, should emergency and icing conditions coincide, an additional reliance on Coastguard Search and Rescue aircraft would be acceptable? If not, why not?	No response is required. Question directed to MCA.

1.4 Benthic and Intertidal Ecology and Relevant Habitats Regulations Assessment (HRA) Aspects

Table 1-4 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Benthic and Intertidal Ecology and Relevant Habitats Regulations Assessment (HRA) Aspects

I.D.	Written Question	Applicants' Response
BE.1.1	**Securing commitment to bundle export cables** 1. NE's Risk and Issue log [REP2-069] states that it welcomes the Applicants' commitments to bundling the export cables for each project as mitigation as it would halve the number of trenches needed for each array. The ExA notes the reference to cable bundling in the Cable Statement [REP2-039] and commitment C188 regarding cable bundling in the Commitments Register [REP2-025] but could the Applicants advise how this commitment is secured directly in the draft DCO itself as per NE's advice [REP2-069]? 2. Is NE satisfied with the wording of commitment C188 in the Commitments Register [REP2-025]?	1 The Applicants direct the Examining Authority to the response (REP1-067:B49) in **The Applicants' Responses to Deadline 1 Documents** [REP2-058] which states: *'…The commitment to cable bundling has been made in the **Cable Statement (Revision 2)** [AS-078]. Each Deemed Marine Licence (Schedules 10-14) presented in the **Draft DCO (Revision 5)** [REP1-004] contains a condition (such as condition 15 (1) (g) in Schedule 10) which states that construction activities may not commence until a final cable statement (in accordance with the cable statement) has been submitted to and approved in writing by MMO, in consultation with Trinity House, the MCA, the relevant statutory nature conservation body and UKHO as appropriate. Through this mechanism this commitment is secured by the Draft DCO as it stands and no updates to the Application are necessary.'* 2 No response is required. Question directed to Natural England.
BE.1.2	**Penetration or disturbance of the substratum below the surface of the seabed** NE advised in its Relevant Representation (RR) [RR-039, point C29] that penetration or disturbance of the substratum below the surface of the seabed should be screened in for the operation and maintenance phase for Dogger Bank and Special Areas of Conservation (SAC). NE's Risk and Issue log [REP2-069] suggests this issue has progressed and that the Applicants have clarified this impact was screened in. Can you update that the relevant Tables (6-4, 6-6) in the Report to Inform Appropriate Assessment (RIAA) [AS-051] to reflect this, as NE advises? If not, explain why not.	As noted in the Applicants' **Cover Letter** [document reference: 13.1] for Deadline 3, an updated version of **RIAA HRA – Part 2 of 4 - Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] will be submitted at Deadline 4, which will include updates to Table 6-4 and Table 6-6.
BE.1.3	**Benthic habitats as supporting habitats for bird and marine mammal features** NE states in its RR [RR-039] that appropriate consideration and assessment of potential impacts on the conservation objectives for Special Protection Areas (SPAs) and SACs where the benthic habitats serve as supporting habitats for bird and marine mammal features, including Flamborough and Filey Coast (FFC) SPA and the Southern North Sea SAC, has not been adequately undertaken. The ExA is aware of the Applicants response to this in its response to NE's RR [AS-048] but this issue remains unresolved in NE's Risk and Issues Log [REP2-069]. Can you explain the latest status of this issue and how the Applicants intend to resolve this disagreement with NE before the close of the Examination?	The Applicants have provided a response on this statement in REP2-069:C10 in the **Applicants' Responses to Deadline 2 Documents** [document reference: 13.3], submitted at Deadline 3 and stated below for ease. *'Note that if the Applicants assigned prey species in the EIA as High Value and High sensitivity, the significance of effect for the assessment of all impacts would be Minor Adverse, which is not significant in EIA terms. This is due to the negligible magnitude of impacts (e.g. 0.018% of the medium to high potential habitat for sandeel of the SAC for habitat loss and 0.23% of the medium to high potential habitat for sandeel of the SAC for disturbance). There would be no change to the assessment conclusions if the sensitivity was increased.* *The Applicants reiterate that the value of the Dogger Bank as an Annex 1 feature is considered within the **RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] whilst the value the biotopes found there-upon are considered in the Environmental Statement.* *The Applicants do not contest that the Dogger Bank is a foraging area for mobile species, but seek to highlight that it is not the only foraging area for these species. Therefore, when considering effects on foraging for mobile species the SAC boundary is less relevant and foraging should be seen in the wider regional context of prey available to the wide-ranging predators of interest to Natural England – all of whom have foraging ranges of many, many thousands of km² across areas many times the size of the proposed Offshore Development Area, hence the approach taken. In terms of the EIA, the SAC boundary is used as a geographic reference only based on the pre-application advice of NE that there should be a clear separation between EIA and HRA assessment.* *The supporting role of benthic habitats and fish and shellfish for other features is considered within both the ornithology assessment (**Chapter 12 Offshore Ornithology** [APP- 103] and **RIAA HRA Part 4 of 4** [APP-048 and updated in AS-085])*

I.D.	Written Question	Applicants' Response
		*and marine mammal assessment (**Chapter 11 Marine Mammals** [APP-095] and **RIAA HRA Part 3 of 4** [APP-047]). The impacts are assessed within **Chapter 9 Benthic and Intertidal Ecology** [APP-085] and **Chapter 10 - Fish and Shellfish Ecology** [APP-091]) and then cross-referenced in the relevant assessments for ornithology and marine mammals for all phases of the Projects (construction, operation and decommissioning). The Applicants therefore consider that the assessment is line with best practice for offshore wind assessments.'*
BE.1.4	**The Dogger Bank SAC review of consents** The ExA notes that your Written Representation (WR) [REP1-088] requested confirmation that a Review of Consents as required by the Competent Authority under Section 33 of the Offshore Habitats Regulations has been undertaken for Dogger Bank SAC and that if a Review of Consents has not been undertaken you state this must be delivered urgently. Can you clarify your concerns in this regard, including where, with whom and at what stage you believe actions lie?	No response is required. Question directed to The Wildlife Trusts.
BE.1.5	**Dogger Bank SAC – use of as built habitat loss** You stated [RR-039, C34] that the Applicants had calculated an as built estimate of habitat loss for consented projects within the Dogger Bank SAC, that you disagree with this approach and advise that consented parameters should be used to inform habitat loss estimates for assessment within Dogger Bank SAC. The Applicants responded [AS-048, page 101] that whilst as-built numbers have been included in the RIAA Part 2 [AS-051] for reference, the 11.71km² footprint quoted in paragraph 19 (section 6.4.1.1.3) [AS-051] is the consented footprint and this was used in the in-combination assessment presented in paragraph 114 (section 6.4.2.5.2), not the constructed footprint. Can you confirm whether the Applicants' response addresses your concern? If not, why not?	No response is required. Question directed to Natural England.
BE.1.6	**Compensation for Adverse Effects on Integrity (AEoI) of the Dogger Bank SAC** At Deadline 2, the Applicants confirmed that the principal compensation proposed in the Project Level Dogger Bank Compensation Plan revision 2 [REP2-012] would be the designation of a new protected site or extension of an existing site to offset predicted impacts on the Dogger Bank SAC sandbank feature, which would be delivered strategically, via Defra, through contribution to the Marine Recovery Fund (MRF). Do you agree with the Applicants' statement in their Deadline 2 cover letter page 4 [AS-158] that, '*…the Applicants believe that the compensation measure proposed by the Applicants is accepted by Natural England and the delivery mechanism confirmed by Defra and DESNZ, hence this does not need further debate.'* 1. Do you agree with the Applicants' conclusion in section 2.3.3, paragraph 27 of the Extension of the Dogger Bank SAC for HRA Derogation Compensation rationale and evidence base [APP-062], that an extension of the Dogger Bank SAC to the north would encompass an equivalent (or greater) area of habitat to that lost, that inclusion of greater area of more stable sediments to the north may increase the overall ecological function, and that it would not decrease the overall structure and function of the SAC? If not, explain why not. 2. Has your position on whether habitat disturbance effects should contribute to AEoI of the Dogger Bank SAC and the level of compensation required suggested by the Applicants	No response is required. Question directed to Natural England, The Wildlife Trusts and the Lincolnshire Wildlife Trust.

I.D.	Written Question	Applicants' Response
	changed or remained the same since further evidence was submitted by the Applicants? Explain your answer. 3. Does the WMS on the Marine Environment published on 29 January 2025 and the *Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance* published by the DESNZ on 29 January 2025 change your concerns on compensation proposals for the Dogger Bank SAC? Provide reasons for your answer. 4. Comment on the adequacy and conclusions of Appendix 3 to the RIAA - Habitats Regulations Assessment- Project Level Dogger Bank Compensation Plan Revision 2 [REP2-012] submitted by the Applicants at Deadline 2. Provide reasons for your answer.	
BE.1.7	**Recovery of Sandbank Habitat Following Habitat Damage [AS-025]** The ExA notes the Applicants' position on Annex I sandbank habitat of the Dogger Bank SAC in their cover letter to their Deadline 2 submissions [AS-158] and their suggestion that the ExA requests NE to provide justification or evidence to support their position that the habitats within Dogger Bank SAC do not recover promptly from disturbance from construction activities. The ExA notes that NE has commented on the Review of Evidence on Recovery of Sandbank Habitat following Habitat Damage [AS-025] in its Deadline 2 submission Appendix C2.1 [REP2-065] and has provided a link to an article providing evidence on its position. 1. Does NE have any further evidence it could cite regarding this issue? 2. Does NE's Deadline 2 submission Appendix C2.1 [REP2-065] address the Applicants' concern? 3. Can the Applicants' confirm how this is to be resolved by the close of the Examination.	1. No response is required. Question directed to Natural England. 2 The Applicants highlight that Natural England have not provided any further empirical evidence to support their position. The paper cited is generic (not specific to Dogger Bank SAC) and does not include any evidence from any offshore industry (other than fisheries or aggregates, which have very different effects in terms of form and frequency) regarding physical disturbance and recovery. The sources within the paper are old (over ten years) and, in many cases, are meta analyses / reviews (and not specific to either Dogger Bank or sandbanks) rather than direct studies. One reason to undertake monitoring as part of marine licencing is to provide better understanding of the effects of development and inform future decision making, therefore the absence of reference to recent and relevant studies (such as any offshore wind post-construction monitoring) is surprising. The Applicants reiterate that as well as referencing historic offshore wind survey from around the UK, their evidence base (provided in **Chapter 9 Benthic and Intertidal Ecology** [APP-085], **RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] and **Review of evidence on recovery of sandbank habitat following habitat damage** [AS-025]) also includes recent, site specific and specially commissioned work from the Dogger Bank as well as UK Government research on disturbance at Dogger Bank. Whilst the site specific evidence the Applicants present in the **Review of evidence on recovery of sandbank habitat following habitat damage** [AS-025] is limited to a few cases (because the consented Dogger Bank projects are currently in construction and limited monitoring has been reported to date) it nonetheless demonstrates physical recovery in very short timescales (months to <4 years). As the Applicants have stated previously if there is physical recovery then there is no barrier to ecological recovery in sandy sediment habitats. The Applicants highlight that their assessment is based upon the Marine Evidence–based Sensitivity Assessment (MarESA) approach, and Natural England are not taking account of these assessments. For example, for the most common biotope within the Array Areas (MB5233 Nephtys cirrosa and Bathyporeia spp. in Atlantic infralittoral sand), MarESA states (emphasis added): *'As a consequence of the dynamic nature of the habitat the faunal component of the biotope is very sparse and low in species richness. Therefore, the community might be considered 'mature' only a few days or weeks after the last storm event, as the mobile species displaced from the biotope and those from adjacent area colonize the substratum via the surf plankton.* ***Even following severe disturbances recovery would be expected to occur within a year****; biotope resilience is therefore assessed as 'High' for any level of impact.'*

I.D.	Written Question	Applicants' Response
		The Applicants have updated Table A-1 of the **Review of evidence on recovery of sandbank habitat following habitat damage** [AS-025] with further detail from the MarESA assessments to further explain the rationale behind the conclusions reached in the Environmental Impact Assessment (EIA) and HRA (**Chapter 9 Benthic and Intertidal Ecology** [APP-085] and **RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051]. This was requested by Natural England (see Table 2-10 of **The Applicants' Responses to Deadline 2 Documents** [document reference 13.3]). This is provided in the **Review of evidence on recovery of sandbank habitat following habitat damage (Revision 2)** [document reference 10.36] submitted at Deadline 3. In addition, Natural England state that frequency of impact should be considered. The point on frequency is noted, but the Applicants highlight that for the vast majority of locations across the Array Areas there will only be one disturbance event during construction. In some cases there may be multiple disturbances (e.g. if pre-lay grapnel runs and boulder clearance are needed prior to cable installation) within the assessed disturbance swathe. However, once the cable is installed physical recovery will commence at that location. There is no need for repeat disturbance at that location unless remedial work is required, either during construction or for the operational lifetime. Likewise for wind turbines whilst the initial disturbance footprint is large (especially if seabed preparation is required) subsequent construction disturbance is limited to the jack-up / anchoring footprint in the worst case (if dynamic positioning for installation vessels is possible this would not impact the seabed). It is not realistic to consider disturbance as continuous across the entirety of the Offshore Development Area as any disturbance will actually be highly localised, episodic and short term and the majority of the Array Areas will not be disturbed post-construction.
		3 Natural England state [REP2-065] that: *'We believe that to resolve this issue evidence from cable installation within Dogger Bank SAC and subsequent recovery would need to be submitted.'* Given that the consented Dogger Bank projects are currently in construction and limited monitoring has been reported to date, this evidence will not be available to inform this examination. However, the Applicants consider that the evidence provided to date (historic offshore wind monitoring, MarESA and site specific studies) do not support Natural England's contention that recovery will be 10 – 25 years and maintain the position that disturbance should not contribute to AEoI. Having discussed recovery previously with Natural England (e.g. during the evidence plan and in strategic compensation workshops), the Applicants do not believe that Natural England's position will change. The Applicants highlight that should agreement not be reached, the worst case for disturbance effects has been provided in **Project Change Request 1 – Offshore and Intertidal Works** [AS-141] and will be included in the updated version of **RIAA HRA – Part 2 of 4 - Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] will be submitted at Deadline 4. Table 4-3 in Project Change Request 1 updates the worst case presented in the **RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051]. This information will allow the Secretary of State to determine the footprint contributing to AEoI should they concur with Natural England's advice.
BE.1.8	**Recovery of Sandbank Habitat Following Habitat Damage [AS-025]** 1. The ExA notes that you give a reason why your conclusion not to rule out AEoI for the Dogger Bank SAC [RR-039], reinforced in section 4 of Appendix C2.1 at Deadline 2 [REP2-065] is	1 – 4 No response is required. Questions directed to Natural England. However, while question 4 is not addressed to the Applicants, we have provided a response below to aid the ExA's understanding of the Applicants' position

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	different from that of Hornsea Project Three and the North Norfolk Sandbanks and Saturn Reef SAC, or Norfolk Boreas and Norfolk Vanguard Projects and the Haisborough, Hammond and Winterton SAC, as raised by the Applicants [AS-025]. The ExA also notes you state [REP2-065] that the situation is currently at an impasse in regards to this issue between yourselves and the Applicants. Is this your final position? Is there anything else either you or the Applicants could do to move this issue forward by the close of the Examination? 2. Given evidence provided by the Applicants [AS-025] does NE consider the construction effects of the Proposed Development to meet the temporary and reversible criteria set by NE for consideration of small-scale habitat loss with SACs in relation to AEoI? Explain your response. 3. Can you comment on the Applicants' reasoning on page 21 [AS-025] in regards to whether the scale of habitat loss on Dogger Bank SAC would be regarded as inconsequential? 4. Can you comment on the reliability and applicability of the evidence of recovery times to disturbance presented in Table A-1[AS-025]?	4. As stated above the Applicants have updated Table A-1 of the **Review of evidence on recovery of sandbank habitat following habitat damage** [AS-025] with further detail from the MarESA assessments to further explain the rationale behind the conclusions reached in the EIA and HRA (**Chapter 9 Benthic and Intertidal Ecology** [APP-085] and **RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051]. This was requested by Natural England (see Table 2-10 of **The Applicants' Responses to Deadline 2 Documents** [document reference 13.3]). This is provided in the **Review of evidence on recovery of sandbank habitat following habitat damage (Revision 2)** [document reference 10.36] submitted at Deadline 3.
BE.1.9	**Recovery of Sandbank Habitat Following Habitat Damage [AS-025]** The ExA would find it helpful if Figure A-1 [AS-025] was resubmitted with a key indicating greater quantification of bathymetry depths, particularly for depth ranges indicated by the green, yellow and orange shades.	The Applicants acknowledge the Examining Authority's request and have updated Figure A-1 in the **Review of evidence on recovery of sandbank habitat following habitat damage (Revision 2)** [document reference 10.36] submitted at Deadline 3.
BE.1.10	**Potential for an AEoI on Dogger Bank SAC resulting from disturbance or damage to Annex I sandbanks from cable installation** Do you wish to respond to NE's statement in section 4 of Appendix C2.1 at Deadline 2 [REP2-065] that it, '*… does not believe that the evidence provided allows for Plan Level HRA conclusions (as signed off by the Secretary of State) to be 'superseded' by the project level assessment as proposed by the Applicant at [AS-025] Paragraph 39 Page 17.*'	The Applicants reiterate their opinion, that the conclusions of the Plan Level HRA may be superseded by Project Level assessments where more detailed information is available. The Applicants note that in the case of guillemot at Flamborough and Filey Coast Special Protection Area, for example, the Plan Level HRA concluded no AEoI for that feature, but subsequent decisions made by the Secretary of State have concluded AEoI for that feature. The Applicants consider that it would be unreasonable to only update Plan Level HRA conclusions in a negative way in response to project-level information, and highlight the site-specific nature of the evidence provided in support of the Applicants position (as summarised in response to item BE.1.7 above) in comparison to that used to inform the Plan-Level HRA.
BE.1.11	**Unexploded ordnance (UXO) clearance within the Dogger Bank SAC** The ExA notes NE's advice in Appendix F2 [REP2-067] that a hierarchy of mitigation for UXO clearance is committed to within the Dogger Bank SAC, following a similar approach to that of Dogger Bank A, which includes UXOs being relocated to areas with a surface sandy layer greater than 5m. Explain if this is part of the proposed commitments, providing signposts to the relevant parts of the application. If this commitment has not been proposed, explain why.	The Applicants have responded to the UXO points raised in Appendix F2 - **Natural England's comments and advice on Marine Mammals** [REP2-067] in Table 2-7 of **The Applicants' Responses to Deadline 2 Documents** [document reference: 13.3]. In summary, the Applicants are committed to using Low Order techniques as the default UXO clearance method (as per the latest Joint Nature Conservation Committee guidelines[21]) and welcomes further discussion on appropriate methods to reduce the disturbance area for UXO clearance during a separate Marine Licence application post consent, where any commitments regarding UXO clearance will be secured.
BE.1.12	**Post-consent monitoring of benthic communities** In NE's updated advice on Benthic and Intertidal Ecology Appendix C2.1 [REP2-065], it refers to the MMO's review of environmental data associated with post-consent monitoring of licence	The Marine Management Organisation's (MMO) advice[22] for monitoring of benthic communities is summarised as follows (note that the advice is generic and the Applicants consider that use of a 2m beam trawl for survey within the

[21] https://hub.jncc.gov.uk/assets/cbd480f1-47ea-4d78-b94c-04e0f9389daa#jncc-guidelines-unexploded-ordnance.pdf
[22] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/317787/1031.pdf

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	conditions of offshore wind farms 2014, which discusses evidence and monitoring approaches for impacts on benthic communities. Can you explain how your proposed monitoring aligns with this advice from the MMO?	Dogger Bank SAC is not appropriate and is unlikely to be requested – not least with the byelaw prohibiting fishing with bottom contacting towed gear within the SAC in place):
		
		'UK studies to date are in agreement that, over the timescale of the recent investigations no large scale (i.e. within the area of the wind farm and boundary areas) benthic community changes that could be attributed to OWF developments have been detected. These have been conducted over a three year post construction period; hence any future large scale benthic monitoring need not be conducted within this same timeframe unless local conditions dictate the need. In all cases the monitoring will be built upon the basic principles that the EIA will have predicted an impact, including its nature, level of certainty, significance and timescale, and that these will be accounted for in a hypothesis. Notwithstanding these two basic principles the potential for new knowledge and or unforeseen impacts should be taken into account and built into the potential to modify the monitoring requirements. It is recommended that monitoring should be refocused in the following manner; acknowledging that some of this monitoring already exists:
		
		• *Specific focused studies on conservation / ecologically important features should be based on appropriate BACI [Before-After Control-Impact] design, with methods related to the habitat, and timescales related to the ecological character of the feature, e.g. Sabellaria reef feature, annual assessment of impact and or recovery over a three year period, using dropdown video and benthic grab sampling; damage to sensitive intertidal habitats/biotopes through biotope mapping surveys at one, three and five year intervals.*
		• *Benthic ecological assessment, covering the area of the wind farm and boundary areas, through pre-construction baseline grabbing, video and 2m beam trawl surveys, as currently. If possible, a number of benthic grabs, videos and 2m beam trawl sites to be located within close proximity to a number of proposed turbines.*
		• *Local colonisation studies on a small number of representative turbines (depending on variation in local conditions) to assess occurrence of nonindigenous species (NIS) (diving/video including sampling) and development of biomass (diving sampling), noting that NIS may be some of the first species to occur.*
		• *Subsequent consideration of the consequence of the impacts of scour/organic deposition (geophysical survey, diving coring and or grab sampling in close proximity to a number of turbines) and trophic level impacts on local epifaunal and small/juvenile fish populations within appropriate radius of turbine (video and if practical 2m beam trawl), in both cases repeating baseline sampling.*
		• *Longer term consideration, including the whole, or relevant parts of, the wind farm and boundary areas, employing benthic grab, video and 2m beam trawl studies, as a repeat of the baseline surveys, built on the outcomes of the above localised studies.*
		
		It should be emphasised that where impacts, that have arisen during the initial phase of monitoring, are less than predicted, then consideration may be given to increasing the interval between surveys and vice versa. This should be discussed and agreed with the regulator and their specialist advisors.'
		
		Benthic monitoring is included within the **In Principle Monitoring Plan (IPMP) (Revision 2)** [REP2-043]. The exact survey specification has yet to be determined but the Applicants' methodology would be informed by current monitoring underway and proposed for Dogger Bank A, B, C and Sofia and feedback from NE and MMO to determine any lessons learned and ensure that the monitoring is fit for purpose. The timing of surveys post-construction and the frequency and duration of subsequent survey will need to be agreed.
		
		The **IPMP (Revision 2)** [REP2-043] states that monitoring would focus upon:
		
		• Abrasion and disturbance (temporary); this includes the following:
		  ○ Abrasion/disturbance of the substrate on the surface of the seabed;
		  ○ Penetration and/or disturbance of the substratum below the surface of the seabed, including abrasion;
		  ○ Habitat structure changes – removal of substratum (extraction); and

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		○ Smothering and siltation rate changes (Heavy & Light). • Habitat loss (permanent), this includes the following: ○ Physical change (to another seabed type); and ○ Physical change (to another sediment type). Benthic survey would consist of both geophysical and benthic survey involving both grab sampling and seabed imagery acquisition. Geophysical surveys would be carried out both before and after construction both for engineering / asset integrity purposes and to feed into the requirements for other environmental topics such as benthic ecology and archaeology. From a benthic habitats' perspective, the geophysical surveys would include high resolution bathymetry and side scan sonar to classify the habitats (and any trends over time), whilst also informing the benthic sampling design. They would also be used to demonstrate the recovery of the physical form of the areas of seabed affected. It is proposed that a focussed programme of benthic grab sampling is used, both to ground truth the geophysical data and provide baseline particle size and benthic data for comparison with the post-construction position. Samples would be taken at a subset of works locations, which would be determined once the final design and layouts are known and confirmed. Grab sampling would be undertaken in the Array Areas, Inter-Platform Cabling Area and in the area of the Offshore Export Cable Corridor that overlaps with the Dogger Bank SAC. The sampling stations would be selected to capture the different range of habitats and environments identified in the Environmental Statement (ES), in order to ensure that they are representative of the benthic environment in the Dogger Bank area. Grab sampling will be designed to capture localised, near-field, far-field and reference sites. The Applicants consider that these proposals, whilst high level, align with the above MMO advice (noting that this is generic and dated), with the exception of specific reference to colonisation of foundations / scour protection. This would most likely be undertaken via use of drop down video. Reference to this impact can be added for operational monitoring if required and the IPMP updated at Deadline 4. The Applicants also note the MMO's recent comment at Deadline 2 regarding the upcoming MMO Standardisation of Offshore Wind Post-Consent Monitoring guidance due to be released in 2025, and direct the Examining Authority to our response on the matter under REP2-061:35 in **The Applicants' Responses to Deadline 2 Documents** [document reference: 13.3].
BE.1.13	**Transboundary 32 Response – The Netherlands** Can you comment on whether the Applicants have adequately addressed your concerns [OD-012] in their response [AS-117] in relation to benthic ecology. If not, explain what is outstanding and provide suggestions as to how they could be resolved.	No response is required. Question directed to The Netherlands Ministry of Infrastructure and Water Management.
BE.1.14	**Biotope sensitivity methodology**	1 Natural England's Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards. Phase III: Expectations for data analysis and presentation at examination for offshore wind applications[23] states the following (in section 7, Seabed habitats and species): *'The Marine Life Information Network (MarLIN) website should be used to obtain receptor specific information on the sensitivity, resilience and recoverability of species, habitats and biotopes to be used within assessments.'*

[23] Parker, J., Fawcett, A., Banks, A., Rowson, T., Allen, S., Rowell, H., Harwood, A., Ludgate, C., Humphrey, O., Axelsson, M., Baker, A. & Copley, V. (2022c). Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards. Phase III: Expectations for data analysis and presentation at examination for offshore wind applications. Natural England. Version 1.2. 140 pp

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	1. The sensitivity of habitats and biotopes to temporary physical disturbance (as summarised in ES Chapter 9 [APP-085, table 9-15]) were taken directly from the MarLIN website. Can you provide further detail about the purpose and context of that source, and comment on whether it provides an adequate basis for the EIA, including potential scenarios where in-situ substratum glacial sediment layers were penetrated or disturbed during construction activities? 2. Other sources were used as the basis for the Marine Conservation Zone (MCZ) assessment of biotope sensitivity (Stage 1 MCZ Assessment [APP-240], paragraph 26). Are the two approaches consistent? 3. Can you specifically respond to NE's comment [RR-039], reiterated at Deadline 2 in NE's advice on benthic and intertidal ecology Appendix C2.1 [REP2-065], that it 'strongly disagrees' with the approach taken to valuing benthic receptors, noting that all of the biotopes identified within the Dogger Bank SAC are representative of Annex I sandbank communities and, as such, should be considered of high value?	The MarESA assessments therefore provide a key source of information for the assessments and are a standard resource applied in EIA and HRA. In Natural England's own advice on operations for designated sites (such as that shown in their Designated Sites View website [24]), the sensitivities to activities all relate back to the sensitivities of the biotopes (as assessed by MarESA) that comprise the Annex 1 feature(s). Natural England state the following: *'The Advice on Operations provides an initial assessment of whether a proposed plan or project (or ongoing activity) may have an impact on a feature in the site. The sensitivity assessments should be used at an early stage of a plan or project when considering potential impacts of an activity. Advice on Operations should be used in conjunction with the specific details of a proposed plan or project (e.g. indirect and/or additive impacts, activity duration, time of year, scale etc.) and the site-specific Supplementary Advice on Conservation Objectives (SACO) in order to develop assessments of impacts to features within the site.'* In terms of site-specific effects, the Applicants have augmented the MarESA information with industry site specific information where available in line with the above advice. 2 Paragraph 26 of the **Stage 1 MCZA** [APP-240] states: *'In order to determine the sensitivity of the protected features of the MCZs, NE's AoO has been utilised which indicates the sensitivity of each receptor to relevant pressures. Specifically, the sensitivity range of the biotopes associated with each protected feature has been determined in relation to relevant pressures, taking the highest sensitivity as a worst case scenario.'* For clarity the AoO is Natural England's advice on operations, this was taken from their Designated Sites View website and directly refers to MarESA for its sensitivity assessments. There is no inconsistency in the assessment as everything is based upon the same information. 3 The Applicants reiterate their response to RR-039:C7 in **Response to Natural England's Relevant Representation** [PDA-013] that [emphasis added]: *'In the EIA (Chapter 9 Benthic and Intertidal Ecology [APP-085]) it is explained in section 9.4.3.1.1 that sensitivity is primarily based upon the ecological sensitivity of the receptor to an effect and this is based on the MarESA biotope sensitivities. Whilst value (in this case being part of a designated feature) **may be used as a modifier** to increase sensitivity **this is not automatically done and is subject to expert judgement**. Given the ubiquity of the biotopes within the Dogger Bank across the Southern North Sea, it was not considered that the value element was required to modify the sensitivity. Whether these biotopes are within or outwith a designated site is not relevant in this case. Note that in the case of the piddock feature, higher sensitivity was assigned not only due to ecological sensitivity but also as this is much rarer.* *The value is considered therefore within the HRA (**RIAA HRA Part 2 of 4** [APP-046]). The status of the biotopes as part of a designated site is the primary consideration and the key driver in the difference in the conclusions on adverse effect on integrity within the Appropriate Assessment from significance in the EIA.'* Note that if the Applicants assigned all habitats within SACs as High Value and High sensitivity, the significance of effect for the assessment of all impacts would be Minor Adverse, which is not significant in EIA terms. This is due to the negligible magnitude of impacts which in summary would be localised and short-term.

[24] https://designatedsites.naturalengland.org.uk/Marine/FAPMatrix.aspx?SiteCode=UK0013036&SiteName=flamborough&SiteNameDisplay=Flamborough+Head+SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=

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BE.1.15	**Mitigation for permanent habitat loss to the Annex 1 feature of the Dogger Bank SAC** Can you respond to NE's request in its advice on benthic and intertidal ecology Appendix C 2.1 [REP2-065] that it would welcome further consideration by the Applicants of mitigation measures to avoid permanent habitat loss, noting that it has advised against Option 3, to dispose of sediment outside the designated SAC, due to the conservation objectives of the site being hindered.	The Applicants have provided a response to Natural England's request in REP2-065:3.1, Table 2-3 of the **Applicants' Responses to Deadline 2 Documents** [document reference: 13.3], submitted at Deadline 3. This response is repeated below: *'The Applicants note that no likely significant effects are anticipated in connection with this activity as assessed for the worst case presented in the Environmental Statement. Hence, no mitigation need necessarily be provided. However, after further consideration of the practicalities of this request for these Projects the Applicants consider that, within the boundary of the Dogger Bank SAC, they can commit to depositing like sediment on like sediment. Specifically, material identified as sand within surficial sediments can be dredged and deposited on areas of surficial sand. Similarly, surficial sediments identified as being gravel or silt will be disposed of on areas presenting surficial gravels and silts respectively. The **Cable Statement (Revision 3)** [REP2-039] will be updated to reflect this commitment, with submission at Deadline 4.'* In addition, following the initial DCO application for the Projects in June 2024 the Applicants have committed to further reductions in infrastructure within the Dogger Bank SAC and wider Offshore Development Area, through the changes detailed in **Project Change Request 1 - Offshore & Intertidal Works** [AS-141] and through the commitment to cable bundling (as detailed in response to I.D. BE. 1.1 above). These commitments have reduced the footprint of permanent habitat loss within the Dogger Bank SAC. An updated version of **RIAA HRA – Part 2 of 4 - Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] will be submitted at Deadline 4, which will include updates to the worst-case estimates for habitat loss.
BE.1.16	**HRA conclusions for the Flamborough Head SAC** 1. The ExA is aware of the disagreement between the Applicants and NE regarding the conclusions of the RIAA for the Flamborough Head SAC in relation to Annex I habitat, the Applicants' response to this issue [PDA-013] and NE's comments on this at Deadline 2 [REP2-065] section 5. How are the Applicants planning to resolve this issue by the close of the Examination? 2. If the SoS was to agree with NE in the final HRA and conclude an AEoI due to damage to qualifying habitat features in the Flamborough Head SAC, what compensation could be secured?	Within REP2-065 (Table 2; NE Ref 1) Natural England state: *'Natural England believes that this is readily resolvable and advises that to provide the necessary transparency in their assessments and assessment conclusions, the Applicant should state which specific habitats/biotopes were used to determine feature sensitivity according to MarESA.'* The Applicants have updated the **Benthic Ecology Technical Note (Revision 2)** [document reference 10.38] which has been submitted at Deadline 3 to include the additional detail on these biotopes. The Applicants consider, having sought advice from Natural England (via email 21/02/25), that this should resolve any outstanding disagreement on sensitivities. The Applicants do not consider that compensation is therefore relevant.

1.5 Commercial Fisheries

Table 1-5 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Commercial Fisheries

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CF.1.1	**Approach to surveys** Can you comment on the Applicants' approach to undertaking surveys, the identified limitations [APP-120, Table 2.2.2] and whether these would cause significant uncertainty or unreliability to the assessment [APP-117, paragraph 45]? Please comment on whether further survey or engagement could have reasonably been undertaken. Your response should include justification.	No response is required. Question to be directed to the Marine Management Organisation (MMO).
CF.1.2	**Definitions** The National Federation of Fishermen's Organisations (NFFO) raised its concerns in relation to the commercial fisheries assessment definitions during the Preliminary Environmental Information Report (PEIR) consultation [APP-119] and reiterated these in representations [RR-034] and [REP1-076]. Can you provide justification that the definitions of sensitivity, magnitude of impact and significance of effect provided in Tables 13-10, 13-11 and 13-12 respectively in Chapter 13 of the ES [APP-117] are appropriate and can be relied on for reaching a reasoned conclusion on the significant effects of the Proposed Development on the environment? The following examples may help highlight the ExA's observations: • A receptor with limited operational range, no ability to deploy alternative gear or dependent on a single fishing ground that is affected for up to a year would be assessed as reversible and a minor adverse effect. • A receptor with limited spatial adaptability and tolerance or limited ability to deploy alternative gear can be affected for 7 years and lose 10% annual earnings, would be assessed as reversible and a minor adverse effect. • A receptor with limited spatial adaptability and tolerance or limited ability to deploy alternative gear can be affected for 30 years and lose 50% annual earnings, would be assessed as reversible and a moderate adverse effect. Can you provide justification, in addition to that provided in your response to January 2025 action points [AS-155], to support the definitions used? This should include evidence: • that a commercial fishing receptor could reasonably accommodate a 50% reduction in its annual value of landings and not consider that a high magnitude of impact; and • that a commercial fishing receptor could reasonably accommodate and recover from 30 years of impact.	As per the Applicants response provided in ISH2, agenda item 5, action points 15 and 17 (**The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155]), the definitions of receptor sensitivity, magnitude of impact and significance of effect in Tables 13-10, 13-11 and 13-12 of **Chapter 13 Commercial Fisheries** [APP-117] have been informed by and are compliant with a number of key guidance documents set out in Table 6-1 of **Chapter 6 EIA Methodology** [APP-076]. Specific policy, legislation and guidance relevant to commercial fisheries is also detailed within section 13.4.1 of **Chapter 13 Commercial Fisheries** [APP-117]. These definitions have also been informed by consultation with the Commercial Fisheries Working Group (CFWG). In response to the bulleted examples: • Based on the definitions provided in Table 13-10 of **Chapter 13 Commercial Fisheries** [APP-117], a receptor with limited operational range, no ability to deploy alternative gear or dependent on a single fishing ground would be defined as having High sensitivity. Based on the definition provided in Table 13-11, an impact that occurred for up to a year and is reversible would result in a Low magnitude of impact. Using the significance of effect matrix provided in Table 13-12, the significance would be Moderate Adverse which is significant in EIA terms, resulting in intermediate change in receptor condition, which is likely to be an important consideration at a local level. It should be noted that all impacts are assessed based on the worst case scenario, provided in Table 13.1 of **Chapter 13 Commercial Fisheries** [APP-117], where it is assumed that fishing will be excluded from the entire Offshore Export Cable Corridor during construction for a total duration of 21 months. However, the actual disruption and exclusion to fisheries will not be known until post consent once pre-construction surveys have been completed to determine the installation schedule of the Offshore Export Cable Corridor. A construction method statement, in accordance with the **Cable Statement (Revision 3)** [REP2-039] will be secured within Conditions 15 (1)(c) of Deemed Marine Licences (DML) 1 and 2, Conditions 13 (1)(c) of DMLs 3 and 4 and Condition 11 (1)(c) of DML 5. The construction method statement will ensure any potential disruption to fisheries within the Offshore Export Cable Corridor will be temporary and spatially localised, as opposed to the worst case assessed in **Chapter 13 Commercial Fisheries** [APP-117] which assumed exclusion across the entire Offshore Export Cable Corridor for the whole construction duration. • Based on the definitions provided in Table 13-10 of **Chapter 13 Commercial Fisheries** [APP-117], a receptor with limited spatial adaptability and tolerance or limited ability to deploy alternative gear would be defined as having Medium sensitivity. Based on the definition provided in Table 13-11, an impact that occurred for up to seven years with losses between 5-10% of annual earnings would result in a Low magnitude of impact. Using the significance of effect matrix provided in Table 13-12, the significance would be Minor Adverse, resulting in small changes to receptor condition, which may raise local issues but are unlikely to be important in the decision-making process. • Based on the definitions provided in Table 13-10 of **Chapter 13 Commercial Fisheries** [APP-117], a receptor with limited spatial adaptability and tolerance or limited ability to deploy alternative gear would be defined as having Medium sensitivity. Based on the definitions provided in Table 13-11, an impact that occurred for up to 30 years

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		with losses between 11-50% of annual earnings would result in a Medium magnitude of impact. Using the significance of effect matrix provided in Table 13-12, the significance would be Moderate Adverse which is significant in EIA terms, resulting in intermediate change in receptor condition, which is likely to be an important consideration at a local level. • Definitions provided in Tables 13-10, 13-11 and 13-12 have been reviewed and as per our response provided in ISH2, agenda item 5, action point 19 (**The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155]) the sensitivity of intertidal netters has been amended from medium to high sensitivity, in order to maintain consistency with the definitions. It should be noted that this is the only change suggested to receptor sensitivity, magnitude and significance of effect based on the review of definitions. In addition to the Applicants' response provided in ISH2, agenda item 5, action points 15 and 17 (**The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155]), the estimated reduction in value in terms of a commercial fishing receptor's annual landings is estimated from a combination of MMO landings data (2012-2022), EUSTECF data (2006-2016) and VMS activity data (20120-2020). A full list of data sources used to inform the assessment of commercial fisheries is present in section 2.2 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. Landings data provide information on annual landings across whole ICES Rectangles, which is the finest available level of spatial resolution. The Dogger Bank South (DBS) West Array Area is located entirely within ICES Rectangle 38F1 and covers approximately 15% of ICES Rectangle 38F1. The DBS East Array Area overlaps ICES Rectangles 38F1, 37F1, and 38F2, and 37F2, covering approximately 4% of these rectangles. VMS data is used to further illustrate fishing activity in and around the Array Areas in relation to ICES Rectangles. Using this information the total annual landings can be scaled to provide an estimated reduction in landed value. An example of this is described in section 13.6.1.1.1.2, paragraph 104: otter trawl, of **Chapter 13 Commercial Fisheries** [APP-117]. The Medium magnitude of impact where the impact would be long-term (i.e. less than 30 years), though reversible and is likely to occur, was agreed upon to allow assessment within the anticipated lifetime of the Projects (see **Chapter 13 Commercial Fisheries** [APP-117]). The CFWG were presented with the definitions of magnitude of impact during a meeting on 22nd November 2023 (see **Appendix F - Non-Statutory Consultation and Engagement** [APP-043]) and did not raise any concerns over the durations used to define the magnitude of impact. Consultation is detailed in **Appendix 13-1 Commercial Fisheries Consultation Responses** [APP-119] and the meeting minutes presented in **Appendix F - Non-Statutory Consultation and Engagement** [APP-043].
CF.1.3	**Alternative fishing grounds** **The Applicants:** Can you provide, or signpost where it can be found in the application documents, an assessment of alternative fishing grounds in terms of relative production quality and the quantified displacement distance specific to fishing vessels operating in the study area? This should avoid generic receptor group and North Sea extent level assessments.	Alternative fishing grounds have not specifically been assessed; however, commercial fishing activity has been assessed across the wider Commercial Fisheries Study Area based on a variety of data sources listed within section 2.2 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. The Commercial Fisheries Study Area is presented in figure 13-1 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. The assessment of commercial fishing activity throughout the Commercial Fisheries Study Area is provided in section 13.5 of **Chapter 13 Commercial Fisheries** [APP-117] and a more detailed assessment is provided within section 2.1 and sections 2.3 to 2.7 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. As per section 13.6.1.1.1.2 of **Chapter 13 Commercial Fisheries** [APP-117], the DBS West Array Area is located entirely within ICES Rectangle 38F1 and covers approximately 15% of ICES Rectangle 38F1. The DBS East Array Area overlaps ICES Rectangles 38F1, 37F1, and 38F2, and 37F2, covering approximately 4% of these rectangles. The Offshore Export Cable Corridor is predominantly located within ICES Rectangle 37Fo but also intersects ICES Rectangles 37F1, 38F1, 37E9 and 36E9. The following points summarise the key fisheries within the Commercial Fisheries Study Area and where alternative fishing grounds are located in relation the Offshore Development Area. An overall description of the key fisheries

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		identified throughout the Commercial Fisheries Study Area, including species, vessel size, gear type and vessel nationality is provided in section 2.1 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]: • Shellfish, primarily crab and lobsters, are the key species group landed within the Commercial Fisheries Study Area, where most landings are made by UK registered >10m vessels using pots and traps (static gear) within ICES Rectangle 36Fo, south of the Offshore Export Cable Corridor. Shellfish landings are also made in ICES Rectangle 37E9, north of the Offshore Export Cable Corridor. This is presented in figure 2.3.4 and figure 2.6.1 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. Offshore static gear vessel's ability to fish a wider area than any areas they may be temporarily excluded from within the Offshore Export Cable Corridor has been used to inform this receptor's sensitivity and therefore its ability to use alternative fishing grounds. This is described in section 13.6.1.1.3 of **Chapter 13 Commercial Fisheries** [APP-117]. • Key scallop grounds targeted by the dredge receptor group are located along the 12 nm limit extending through ICES Rectangles 37E9, 37Fo and 36Fo. The Offshore Export Cable Corridor intersects the scallop grounds, however most dredge fishing activity is located north of the Offshore Export Cable Corridor. This is presented in figure 2.6.10 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. The high operational range and limited spatial tolerance of dredgers, due to their dependence on key scallop grounds, has been used to inform this receptor's sensitivity and therefore its ability to use alternative fishing grounds. This is described in section 13.6.1.1.3 of **Chapter 13 Commercial Fisheries** [APP-117]. • Pelagic species, such as herring, are predominantly landed within ICES Rectangle 37Fo, by non-UK >10m pelagic trawling vessels. This is presented in figure 2.3.4 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. The Array Areas are located outside of ICES Rectangle 37Fo but is intersected by the Offshore Export Cable Corridor. The extensive operational range of pelagic trawling vessels has been used to inform this receptor's sensitivity via its ability to use alternative fishing grounds and mitigate, to a degree, reduced access to fishing grounds as a result of the Projects through its spatial tolerance. This is described in section 13.6.1.1.3 of **Chapter 13 Commercial Fisheries** [APP-117]. • Demersal species, such as plaice, are predominantly landed within ICES Rectangle 38F2 and 37F2 by >10m vessels using demersal seines and otter trawls. This is presented in figure 2.3.4 and figure 2.6.8 of **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. Approximately 4% of these rectangles overlap with DBS East Array Area and so much of these landings occur from outside of the Array Area within the wider Commercial Fisheries Study Area. The extensive and high operational ranges used by otter trawlers and vessels using demersal seine, respectively, has been used to inform the sensitivity of these receptors via their ability to use alternative fishing grounds and mitigate, to a degree, reduced access to fishing grounds as a result of the Projects through their spatial tolerance. This is described in section 13.6.1.1.3 of **Chapter 13 Commercial Fisheries** [APP-117]. Port landings from within the Commercial Fisheries Study Area are also assessed in section 2.4 **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. Landings from within the Commercial Fisheries Study Area are made to ports along the north-east coast, including ports located outside of the Commercial Fisheries Study Area, providing links to fisheries beyond the Commercial Fisheries Study Area.
CF.1.4	**Effects on commercial fishing group receptors** Your response to ISH2 agenda item 5, action point 18 [AS-155] explains that the commercial fishing group receptors differ between the proposed offshore export cable corridor and array areas. Can you provide evidence to demonstrate how separating the offshore export cable corridor as its own scenario does not lessen the effects within the assessment? For example otter trawls are	As detailed in our response provided in ISH2, agenda item 5, action point 18 (**The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155]), the realistic worst case scenarios for the development of DBS East and DBS West are assessed for: 1. Impacts within the Arrays for the Dogger Bank SAC Byelaw to remain in place.

I.D.	Written Question	Applicants' Response
	identified as minor adverse for loss or restricted access to fishing grounds for both the Dogger Bank SAC byelaw revoked and the offshore export cable corridor scenarios [APP-117, Table 13-59]. Would the assessment identify a different outcome if the scenarios were not separated? This question applies to all receptors for all potential impacts identified in Chapter 13 [APP-117]. **NFFO:** Can you comment on, or provide information regarding alternative fishing grounds in terms of relative production quality and displacement distance specific to fishing vessels operating in the Proposed Development area?	2. Impacts within the Arrays if the Dogger Bank SAC Byelaw is revoked. 3. Impacts within the Offshore Export Cable Corridor. The worst-case parameters used within the assessment are detailed within Table 13.1 of **Chapter 13 Commercial Fisheries** [APP-117]. Due to the Dogger Bank Special Area of Conservation (SAC) Byelaw, which prohibits bottom towed fishing across the whole of the Dogger Bank SAC and overlapping with the entirety of the Array Areas and approximately 20km of the DBS East Offshore Export Cable Corridor and DBS West Offshore Export Cable Corridor, receptors such as demersal seines, dredges and otter trawls would be prohibited from the Array Areas for the scenario where the Dogger Bank SAC Byelaw remains in place. As such there would be no pathway for impacts to occur within the Array Areas under this scenario. Therefore, there would be no change to the assessment if impacts within the Offshore Export Cable Corridor and Array Areas with the Dogger Bank SAC Bylaw in place were considered together. Assessing impacts for separate scenarios (as explained in our response provided in ISH2, agenda item 5, action point 18 [APP-155] and section 13.6 of **Chapter 13 Commercial Fisheries** [APP-117]) provides a greater level of detail to the assessment in section 13.6 of **Chapter 13 Commercial Fisheries** [APP-117], as it takes into account the Dogger Bank SAC Byelaw and allows impacts to receptors within the Array Areas and Offshore Export Cable Corridor to be considered separately rather than considering impacts across the whole Project Area particularly for receptor groups that may only be active in either the Array Areas or Offshore Export Cable Corridor. For example, the dredge receptor group, intertidal netters and inshore and offshore static gears are largely only active within the Offshore Export Cable Corridor. As such there would be no pathway for impacts to occur within the Array Areas for dredgers, intertidal netters and static gears. Therefore, there would be no change to the assessment if impacts within the Offshore Export Cable Corridor and Array Areas with the Dogger Bank SAC Bylaw in place or revoked were considered together. The distribution of fishing activity is described in section 13.5.3 of **Chapter 13 Commercial Fisheries** [APP-117] and in more detail in **Appendix 13-2 Commercial Fisheries Technical Report** [APP-120]. Where receptor groups, like otter trawls and pelagic trawls, are active across the Array Areas (in the event the Dogger Bank SAC Byelaw is revoked) and the Offshore Export Cable Corridor, a different assessment outcome would not be concluded if these scenarios were considered together. This is because although the total area of loss or restricted access to fishing grounds would be greater when considering these scenarios together, with the embedded mitigations in place it is considered that fishing activities will not be restricted from the entire Offshore Development Area at any one-time during construction. Furthermore, the worst-case for the construction duration for both the Array Areas and Offshore Export Cable Corridor would remain the same, resulting in no change to the assessment. Otter trawlers and pelagic trawlers are largely nomadic vessels with extensive operational ranges so are also considered to be able to mitigate, to a degree, any reduced access to fishing grounds through their spatial tolerance as described in section 13.6.1.1.3 of **Chapter 13 Commercial Fisheries** [APP-117]. Embedded mitigations relevant to commercial fisheries are listed in Table 13-3 in section 13.3.3 and the realistic worst-case design parameters are presented in Table 13-1 of **Chapter 13 Commercial Fisheries** [APP-117].
CF.1.5	**Justification of vessel sensitivities**	1 Dredge vessels exhibit a relatively high operational range, however, have a limited spatial tolerance due to their dependence upon the area that overlaps with the Offshore Export Cable Corridor. Around the 12nm limit, approximately 10km of the Offshore Cable Corridor intersects the dredge fishing grounds, which cover an approximate total area of 1,500km^2, a much larger area than where dredgers may be excluded from during construction. As such, dredge vessels were deemed to have access and opportunity to fish reasonable alternative

I.D.	Written Question	Applicants' Response
	1. Can you clarify in detail if the 'medium' sensitivity of the dredge gear receptor group for potential impacts 1, 2 and 6 [APP-117, Table 13-59] is consistent with the definitions provided in Table 13-10 of ES Chapter 13 [APP-117]? Particular consideration should be given to the receptor group's dependence on a specific area for scallop, opportunity to fish reasonable alternative grounds and 'limited' availability to deploy alternative gear types. 2. Can you clarify if the 'medium' sensitivity of the inshore static gear receptor group for potential impacts 1, 2 and 6 [APP-117, Table 13-59] is consistent with the definitions provided in Table 13-10 of ES Chapter 13 [APP-117]? Particular consideration should be given to the receptor group's entitlement to only fish for shellfish and opportunity to fish reasonable alternative grounds?	grounds and therefore some ability to mitigate loss of fishing area. It was also established, via project-specific consultation (**Appendix 13-1 Commercial Fisheries Consultation Responses** [APP-119]), that scallop vessels within this receptor group have a limited ability to deploy alternative gear. Based on this, the sensitivity of the dredge receptor is therefore considered to be medium, as per Table 13-10 of **Chapter 13 Commercial Fisheries** [APP-117]. 2 The inshore static gear vessels operate within distinct areas within the 6nm limit and are considered to have lower levels of alternative fishing grounds and spatial adaptability. Due to this receptor group's smaller vessel size, they possess a lower operational range to that of the larger offshore vessels. Although some of these vessels have ability to deploy alternative gear, this is relatively limited as most static gear fishers hold category C licences and are only entitled to fish for shellfish species. Vessels within this receptor group would likely be required to temporarily remove their gear from areas where installation works were being undertaken. It is noted that equivalent fishing grounds exist within the vicinity of the Offshore Development Area, so it is likely that vessels would relocate their gear and continue to fish (section 13.6.1.1.1.3). The sensitivity of the receptor is therefore, considered to be medium as per the definition provided in Table 13-10 of **Chapter 13 Commercial Fisheries** [APP-117].
CF.1.6	**Impact on intertidal netters** Can you justify the magnitude of impact on intertidal netters from the Proposed Development as negligible when the duration is identified up to two years [APP-117, paragraph 119]? Explain how this is consistent with the definition provided in Table 13-11 of ES Chapter 13 [APP-117].	Paragraph 118 of **Chapter 13 Commercial Fisheries** [APP-117] states that: Construction of the nearshore section of the Offshore Export Cable Corridor would not affect this receptor group, given that the estimated trenchless crossing length is 1400m at an indicative depth of 20m below seabed level and the intertidal nets are less than 150 yards. There is a potential overlap with this receptor group from buffer zones around any nearshore UXO clearance (requirements to be determined post-consent and subject to a separate Marine Licence application and as such are not considered further). The duration of impact is presented as <2 years in paragraph 119 **Chapter 13 Commercial Fisheries** [APP-117] based on the maximum 21 month duration of Offshore Export Cable Installation, however as there will be no impacts from trenchless crossing the <2 years duration does not apply. As such, the magnitude of impact is considered to be negligible.
CF.1.7	**Vessel steaming times** The assessment of effect to vessel steaming times appears to only consider the impact of safety zones for maintenance activities during the operation phase in ES Chapter 13 [APP-117, section 13.6.2.3]. Can you clarify if there would be additional steaming times due to fishing vessels permanently travelling to alternative fishing grounds and if this has been included in the assessment? If not included, explain why and if it would alter any conclusions of the assessment.	Permanent increases in steaming times to alternative fishing grounds due to wind farm infrastructure are not assessed in **Chapter 13 Commercial Fisheries** [APP-117], as it is assumed that fishing vessels will be able to transit through the Array Areas to/from adjacent fishing grounds once construction is complete. Therefore, the presence of wind farm infrastructure during operation would not permanently increase steaming to alternative grounds. On this basis, the magnitude of impact is assessed as Negligible for increased steaming times during operation for all receptors groups due to the temporary and very localised nature of any maintenance activities, as presented in section 13.6.2.3 of **Chapter 13 Commercial Fisheries** [APP-117].
CF.1.8	**Long term effects** Can you explain, or signpost where this is provided in the application documents, how the proposed mitigation would enhance any potential medium and long-term positive benefits to the fishing industry and commercial fish stocks?	Table 13-3 in section 13.3.3 of **Chapter 13 Commercial Fisheries** [APP-117] presents embedded mitigations relevant to commercial fisheries. Table 13-4 and 13-5 in section 13.4.1.1 of **Chapter 13 Commercial Fisheries** [APP-117] forms part of the broader context of mitigation policy outlined in the document which emphasises that the DBS Project has adhered to overarching mitigation policy obligations set out in paragraphs 2.8.241 and paragraphs 2.8.146-2.8.147 of NPS EN-3. Section 8 within the **Outline Fisheries Liaison and Coexistence Plan (Revision 3)** [REP2-053] outlines the Projects' fisheries mitigation strategy.

I.D.	Written Question	Applicants' Response
		The Applicants acknowledge that the nature of the proposed mitigation presents limited opportunities for enhancement. However, where appropriate, guard vessels will be used to ensure navigational safety to mitigate impacts which pose a risk to surface navigation during construction and maintenance. This will be committed to within the **Outline Fisheries Liaison and Coexistence Plan (Revision 3)** [REP2-053]. This embedded mitigation allows for potential long-term beneficial supply chain opportunities from commercial fisheries via the provision of up to five guard vessels during the construction phase and marine operational support such as Offshore Fisheries Liaison Officer (OFLO) duties, support during major maintenance works and further guard vessel requirements during the 30 year operational phase. Beneficial supply chain opportunities are assessed under Impact 5 for construction in section 13.6.1.5 and operation in section 13.6.2.5 of **Chapter 13 Commercial Fisheries** [APP-117]. No significant effects to fish and shellfish due to the Projects have been assessed in **Chapter 10 Fish and Shellfish Ecology** [APP-091]. Furthermore, no significant effects to commercially important fish and shellfish resources are assessed in **Chapter 13 Commercial Fisheries** [APP-117]. Therefore, no impact that is significant in EIA terms are predicted to commercial fish stocks are predicted.
Outline Fisheries Liaison and Co-existence Plan		
CF.1.9	**Cooperation agreements** Clarify why cooperation agreements may only be considered for 'static gear fishers' [AS-082, paragraph 52], and whether this would be consistent with the commitment to 'encourage coexistence through disruptions payments and cooperations agreements in accordance with FLOWW guidance' implied for all relevant fishing gear receptor groups in ES Chapter 13 [APP-117, Table 13-59].	Section 7 of FLOWW (2014) sets out its recommendations for Mitigation and Co-existence. The opening paragraph of that section states that '*There is no one-size-fits-all approach to achieving co-existence between [offshore renewable energy installations] and fishing industries, and so opportunities for co-existence will have to be identified and explored on a case by case basis. Where co-existence is not possible and/or there are significant residual impacts, mitigation measures may be required and where feasible these should be developed in collaboration with the affected fisheries stakeholders.*' Section 7 of FLOWW (2014) is the main section of the guidance that makes reference to where compensation payments might be appropriate, noting that this should only be used as a last resort where there is a residual significant effect and to be paid following demonstration of accurate and justifiable claims. The Applicants may consider cooperation agreements and disruption payments in line with FLOWW Best Practice Guidance (2014). Current FLOWW guidance does not make reference to paying mobile fishers through disruption payments and therefore messaging is consistent and in line with best and standard practice. Each individual fishers' eligibility for construction phase cooperation payments will be means tested against RWE's Evidence Based Cooperation Agreement Methodology which is based on FLOWW guidelines. It is important to note that the circumstance that section 7 is concerned with, is fisheries groups being prevented from fishing as a result of wind farm activity. Section 7.1 concerns disruption and displacement i.e. being physically displaced from an area temporarily or permanently. Section 7.2 considers removal of fixed gear during surveys or constriction. Evidence based fisheries compensation for static gear fisheries is commonplace within the offshore wind industry for pre-construction surveys and during construction if there are large areas closed to the local fishers. Compensation payments are generally calculated based on the economic dependency of an individual fisher on the area. Commercial compensation to individual mobile gear fishers (including dredge fishers) is not standard practice and is usually managed by other means, such as: • Communications between the developer and fisheries stakeholders e.g. OFLOs on construction vessels, weekly notice of operations (highlighting what construction operations are taking place);

I.D.	Written Question	Applicants' Response
		• Employment of a fisheries liaison officer; and • Use of rolling safety zones, so the whole area is not closed to mobile gear vessels. As mobile gear vessels do not have to physically remove fishing gear from an area of ground, they do not lose fishing time whilst gear is removed and relocated in the same way as static gear fisheries. Instead, interactions between a developer and mobile gear vessels during surveys and construction can be managed via COLREGS. The Applicants may consider providing evidence based disruption payments through commercial cooperation agreements with affected fishing fleets which may be required to relocate fishing activities from the Projects' Order Limits during the construction phase as a last resort, in line with FLOWW (2014) and FLOWW (2015) guidance. The Applicants agree and the **Outline Fisheries Liaison and Coexistence Plan (Revision 3)** [REP2-053] will be updated at Deadline 4 to say "affected fishers" rather than static gear fishers only.
CF.1.10	**Alternative Dispute Resolution (ADR)** The Outline Fisheries Liaison and Co-existence Plan (Revision 2) [AS-082, paragraph 54] states, 'Both parties have to agree to refer their dispute to ADR, which will be undertaken by a mutually agreed third party by both sides of the dispute. ADR will be considered as an escalation process and an effort to avoid any contentious and unpreferable legal procedures. Mediation is the preferred ADR mechanism, which is confidential in nature'. Explain what would happen in the event of a dispute where both parties didn't agree to refer it to ADR? In addition, how would the costs of the ADR process, including access to any expert and legal advice, be covered?	The Applicants have included wording on ADR to increase transparency on escalation procedures in line with a request from examining authority on other RWE led development projects which have progressed through the examination phase over the last 12 months. RWE projects will follow a consistent approach to cooperation agreements, and any escalation procedures which may be necessary as a last resort, in line with FLOWW (2014) guidance. As stated in the **Outline Fisheries Liaison and Coexistence Plan (Revision 3)** [REP2-053], "if mutual agreement cannot be reached then both parties should seek to undertake Alternative Dispute Resolution (ADR), in line with FLOWW (2015) guidance. Either party can activate the ADR process in relation to any stage of the disruption payment process, prior to reaching agreement, in an attempt to resolve disagreements or stalemates generated through the process of establishing cooperation agreements, so that a mutually agreed position can be reached". In circumstances where agreement in line with FLOWW guidance cannot be achieved without additional legal support and escalation and ADR is unsuccessful, legal proceedings may be considered as a measure of last resort. The Applicants would advise all parties to seek their own independent legal advice. The initiator of the legal proceeding will likely cover the costs associated.
Cumulative effects		
CF.1.11	Do you agree with the Applicants' conclusion that, '*cumulative magnitude of effect during the operational phase due to loss or restricted access to fishing grounds is expected to be lower than that presented during construction as many fishing practices can resume access across the Offshore Export Cable corridor, Array Areas and within other constructed wind farms*' [APP-117, paragraph 438]?	No response is required. Question directed to MMO and NFFO.
CF.1.12	Can you clarify how you conclude 'no likely change' for cumulative magnitude of effect associated with Eastern Green Link 3 and 4 [APP-117, para 402] if sufficient information has not be provided?	The cumulative effects assessment methodology is described in section 6.7.4 of **Chapter 6 EIA Methodology** [APP-076] and in **Appendix 6-2 Offshore Cumulative Effects Assessment (CEA) Methodology** [APP-078]. The approach to the cumulative effects assessment follows standard guidance from The Planning Inspectorate Advice Note Seventeen and Cumulative Impacts Assessment Guidelines issued by RenewableUK and the Planning Inspectorate Advice Note Nine: Rochdale Envelope and is further described in section 5 of **Appendix 6-2 Offshore CEA Methodology** [APP-078]. Eastern Green Link 3 and 4 are identified as Tier 6 projects, defined as schemes that the regulatory body are expecting an application to be submitted for determination as per Table 6-2-3 of **Appendix 6-2 Offshore CEA Methodology** [APP-078]. Where there is a lack of specific information in the public domain, such as how and when

I.D.	Written Question	Applicants' Response
		(or if) schemes will be built, such as for Eastern Green Link 3 and 4, it is not always possible to undertake a meaningful CEA. Despite the low data confidence, Eastern Green Link 3 and 4 were screened in for potential spatial interactions with the Offshore Export Cable Corridor. At the time of writing, Eastern Green Link 3 and 4 had not yet submitted an application or published details of the Projects timeline. Given the very early concept stages of the Projects no loss or alteration of characteristics, features or elements, or observable impact could be predicted as per the definition for no change provided in Table 13-11 of **Chapter 13 Commercial Fisheries** [APP-117]. Note that when these projects do submit applications, they will be required to undertake a CEA which will need to robustly assess their effects.
CF.1.13	Can you provide justification to conclude 'low' cumulative magnitude of effect associated with Eastern Green Link 2 for dredgers and the inshore static fleet [APP-117, paragraph 401].	Cumulative effects associated with Eastern Green Link 2 are assessed in paragraph 401 of the Cumulative Effects Assessment, section 13.8 of **Chapter 13 Commercial Fisheries** [APP-117]. Cumulative effects on dredgers and the inshore static fleet relating to sub-sea cables within the Offshore Export Cable Corridor are predicted to have the greatest impact, given their reliance on the area. Eastern Green Link 2 is located 2km from the Offshore Export Cable Corridor. Construction of Eastern Green Link 2 is due to commence in 2024, for operation in 2029 and, therefore, has the potential to coincide with the construction phase of DBS West and DBS East. The potential for temporal overlap between the construction phases of Eastern Green Link 2 and DBS will be short-term (<7 years) and over small spatial scale (within 2km), affecting a small proportion (5-10%) of a commercial fishing receptors annual value of landings. The magnitude of effect is, therefore, considered to be low for dredgers and the inshore static fleet, and negligible for all other receptors, as per Table 13-11 of **Chapter 13 Commercial Fisheries** [APP-117].

1.6 Compulsory Acquisition and Temporary Possession of Land and Rights

Table 1-6 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Compulsory Acquisition and Temporary Possession of Land and Rights

I.D.	Written Question	Applicants' Response
General questions		
CA.1.1	**Compliance with Department for Communities and Local Government (DCLG) Guidance** Can you advise whether the Book of Reference (BoR) [REP2-006] is fully compliant with DCLG Guidance?[25] If not, can you amend as necessary?	The Applicants are confident that the Book of Reference **(BoR) (Revision 5)** [REP2-006] complies with Department for Communities and Local Government (DCLG) Guidance.
CA.1.2	**Known inaccuracies** Are any Affected Persons or Interested Parties aware of any inaccuracies in the BoR [REP2-006], Statement of Reasons (SoR) [AS-146] or Land Plans [AS-145]? If so, can you set out what these are and provide the correct details?	No response is required. Question directed to Affected Persons and Interested Parties.
CA.1.3	**Diligent enquiry into land interests** There are a significant number of plots in the BoR [REP2-006] that include an unknown interest in the land. Could you provide a list of the plots where there is an unknown interest and detail for each plot what actions you have taken to try and identify who holds the interest and summarise what further steps will you be taking to identify these interests during the Examination?	The Applicants have included a significant number "unknown" owner and "unknown" Category 2 entries in **BoR (Revision 5)** [REP2-006] as a conservative approach where title interrogation has flagged an unknown title restriction or charge. A person is within Category 2 if they have an interest in the land or have the power to sell and convey or release the land, many of these historic covenants in land such as right to drainage were unrecorded at the time and remain unknown. There are a considerable number of plots where the Applicants have identified unregistered owner(s), occupiers or title interests through diligent inquiry. Therefore, the Applicants believe it is unreasonable to list out each affected plot and set out the same methodology for each interest. The Applicants, as seen in **Consultation Report, Appendix C3 Land Interest Questionnaire** [APP-039] have sent Land Interest Questionnaires to all landowners on a consistent basis in line with the **Consultation Report, Appendix C6 Land Referencing Methodology** [APP-039], asking for information in relation to the identification of interests in their land. The Applicants also erected unknown site notices at all stages of consultation. The Applicants will continue to undertake enquiries, including through Land Registry refreshes, contact with adjoining owners and their agents, and will continue to maintain the **BoR (Revision 5)** [REP2-006] throughout Examination should any new parties make themselves known. In terms of further due diligence over and above the land referencing activities undertaken by the Applicant's appointed agent and where land is subject to a voluntary agreement, the Applicant's legal representatives have issued Commercial Property Standard Enquiries to the legal representatives of affected parties and will update the **BoR (Revision 5)** [REP2-006] should these enquiries establish ownership of a current unknown interest.
CA.1.4	**Possible error** Section 4.6 of the Funding Statement [REP2-008] makes reference to Article 43 of the draft DCO [REP1-004] as dealing with funding. Article 43 of the draft DCO submitted into the Examination deals with the abatement of work abandoned or decayed. Can you check the reference and amend as necessary?	The reference should be to Article 44. The Applicants will update the **Funding Statement (Revision 3)** [REP02-008] at Deadline 8 accordingly.

[25] Planning Act 2008, Guidance related to procedures for the compulsory acquisition of land, DCLG, September 2013

I.D.	Written Question	Applicants' Response
CA.1.5	**Clarification regarding number of temporary construction compounds** The SoR [AS-146, paragraph 4.14] states that two main compounds would be required per project. Can you clarify what you mean by this, ie would there be a total of four main compounds, and how many compounds would be required if the projects were completed either sequentially or concurrently? Reference is also made to the Transition Joint Bay (TJB) construction compound, a satellite temporary construction compound in the landfall zone, a temporary construction compound associated with the Onshore Substation Zone and trenchless crossing construction compounds – can you confirm how many temporary compounds are being proposed?	As described in section 5.7.1.8 Construction Compounds of **Chapter 5 Project Description (Revision 3)** [REP1- 009] Temporary Construction Compounds (TCCs) are required to support the Onshore Export Cable Corridor installation, Onward Cable Connections and emergency beach access. This would include two Main TCC's along the Onshore Export Cable Corridor (see Table 5-28) and up to 15 Satellite TCC's, including one located within the Landfall Zone and one located at the intertidal beach access, 17 in total. These 17 TCCs, including the two Main TCC's referenced in CA1.5 would serve both Projects for all Onshore Export Cable Corridor, Onward Cable Connections and emergency beach access works, regardless of the construction scenario to support the cable duct installation and cable pulling works. The final location of the Main TCC's is not yet confirmed, and several options are included within the Onshore Development Area and assessed in the ES. Potential Main TCC's are works No. 20A/B, and satellite TCC's are works No. 16A/B on the **Works Plans (Onshore) (Revision 4)** [REP2-005]. They are also located on **Figure 5-2** [APP-072]. The options for Main TCC's include the following locations: • A165 (Whitecross Road); • A1035 (Constitution Hill) (2 Options, one north and south); and • South of A1079 - just going into Onshore Substation Zone. Paragraph 4.14 of the **Statement of Reasons (SoR) (Revision 4**) [AS-146] and paragraph 342 of the **Chapter 5 Project Description (Revision 3)** [REP1-009] refer to "two main compounds per Project". This reference needs to be corrected. As described above there would be two Main TCC regardless of the construction scenario. The **SoR (Revision 4)** [AS-146] and **Chapter 5 Project Description (Revision 3)** [REP1-009] will be updated at Deadline 8 accordingly to clarify this. Table 5-28 of **Chapter 5 Project Description (Revision 3)** [REP1-009] sets out the numbers of TCC's for each development scenario. In addition to those already described above there would be up to two Substation Zone TCC's located within the Onshore Substation Zone and one Transition Joint Bay (TJB) Compound located within the Landfall Zone, also shown on **Figure 5-2** [APP-072]. Therefore, there would be up to 20 TCC's in use during construction for a concurrent or sequential construction scenario, excluding trenchless crossing compounds. The number of trenchless crossing compounds, which are separate from the TCC's described above and will be located along the Onshore Export Cable Corridor and Onward Cable Connection have not yet been determined, as there are a number of optional trenchless crossing locations. There would be a minimum of 82 and up to 292 entry and exit compounds (146 per Project), depending on the final number of crossing which use a trenchless technique . An indicative layout of a trenchless crossing compounds for up to 10m and 20m burial depth is included in **Appendix 5-3 Engineering Drawings (Revision 2)** [REP2-016]. It should be noted these compounds, would not remain in place for the full duration of the construction works, the length of time they would be required is dependent on the complexity and depth of the trenchless crossing, which will be determined at the detailed design stage. Table 5-28 of **Chapter 5 Project Description (Revision 3)** [REP1-009] will be updated at Deadline 8 to clarify this as one optional trenchless crossing was dropped from the design, with **Project Change Request 2** [AS-152], as detailed in the **Obstacle Crossing Register (Revision 3)** [REP2-014].
CA.1.6	**Clarification regarding use of 'legal' decarbonisation targets** In the SoR [AS-146, section 5], you use the term 'legal' decarbonisation targets for renewable energy. Can you explain why you have used the term legal and what you mean by this?	The term 'legal decarbonisation targets' is also used in **Chapter 30 Climate Change** [APP-222] and references the legally binding decarbonisation targets set within the Climate Change Act 2008 (2050 Target Amendment Order 2019) which commits to reducing carbon and greenhouse gases by 100% by 2050 in comparison to a 1990 baseline (also known as 'net zero'). In addition, the Energy Act 2013 (brought into legislation in December 2013) outlines the UK's commitment to low-carbon electricity generation, and focuses on setting legally binding decarbonisation targets for

I.D.	Written Question	Applicants' Response
		the UK. Further information can be found in **Chapter 3 Policy and Legislative Context** [APP-066] section 5.3.1; and **Chapter 30 Climate Change** [APP-222] section 3.4.1.
CA.1.7	**Additional detail regarding job numbers** In the SoR [AS-146, paragraph 5.14], construction jobs are split into those delivered in the Humber Region (760) and those across the United Kingdom (UK) (1,190). Can you confirm whether the figure for those across the UK is inclusive or exclusive of the jobs in the Humber Region? In the SoR [AS-146, Paragraph 5.15], the number of jobs from operation and maintenance is provided as a UK figure. Can you provide details of the number of operation and maintenance jobs that would be provided in the Humber Region?	The Applicants can confirm that either DBS East or DBS West built in isolation would support up to 1,190 jobs supported across the UK, this would be 'inclusive' of 760 jobs supported across the Humber Region during the development and construction phase. This would also support 580 jobs in the UK, 'inclusive' of 400 in the Humber Region during the operations and maintenance phase. As stated in paragraph 370 of **Chapter 28 Socio-economics** [APP-217]. There is a typo in paragraph 5.15 of the **SoR (Revision 4)** [AS-146] this should state 580 rather than 980 jobs across the UK. This document will be updated at Deadline 8.
CA.1.8	**Clarification regarding calculation of carbon emissions** The SoR [AS-146, paragraph 5.19] states that the projects would avoid 91.8 million (individually) and 183.4 million (sequentially) tonnes of carbon dioxide equivalent (CO_2e). Can you clarify why sequentially it wouldn't be 183.6 tonnes of CO_2e that would be saved.	The **SoR (Revision 4)** [AS-146] has taken these figures directly from **Chapter 30 Climate Change** [APP-222], although it is noted that in the **SoR (Revision 4**) [AS-146] the figure for the Sequential Scenario has been rounded down to 183.4 million tonnes of carbon dioxide equivalent (CO_2e), whereas in **Chapter 30 Climate Change** [APP-222] it has been rounded up to 183.5 million tonnes CO_2e. The **SoR (Revision 4**) [AS-146] will be updated at Deadline 8 to revise this number. The Sequential Scenario carbon emission savings (183.5 million tonnes CO_2e) are not calculated by doubling the results of the In Isolation scenario savings (91.8 million tonnes CO_2e). This is because the level of emission savings takes into account the potential for emissions avoided from the provision of renewable energy to the grid. This is calculated using the installed capacity of the Projects, which is 3,000MW for the Sequential Scenario, and 1,500MW for the In Isolation Scenario. Therefore, the potential for emission savings is approximately double under the Sequential Scenario. Emissions as a result of activities under both scenarios were calculated as part of the assessment, based on specific activities that would take place for the Sequential and In Isolation scenarios. Due to efficiencies gained through the Sequential Scenario, emissions are not exactly double those predicted in the In Isolation Scenario (7,222,645 tonnes CO_2e compared to 3,861,783 tonnes CO_2e).
CA.1.9	**Crossing agreement v protective provision** At Compulsory Acquisition Hearing (CAH)1 on the 14 January 2025, you advised that for offshore interests you were proposing to use crossing agreements rather than Protective Provisions to protect other parties' assets. Can you: 1. Explain why a crossing agreement would be preferential to a protective provision? 2. Provide an update as to progress with these negotiations, or signpost where this information can be found if it has already been provided? 3. Indicate whether these agreements will be completed before the close of the Examination and, if not, how these assets would be protected in the absence of such an agreement?	1. The Applicants maintain that reciprocal crossing and proximity agreements which contain obligations on both the Applicants and the owner of an existing asset is an industry standard approach which deals with the interactions between assets and/or works which interface offshore and is intended to provide protection to each asset owner for any damage or losses suffered as a consequence of the carrying out of works by the other party. These agreements are specific to the works proposed and are entered into when appropriate levels of detail pertaining to the works are understood. The agreements will also cover approval mechanisms for both the initial crossing works undertaken and also mechanisms for any future works which may be undertaken for maintenance purposes by either the Applicants or a third party asset owner. For these reasons crossings and proximity agreements are preferable to protective provisions. 2. At the pre-application stage, the Applicants consulted with all third party asset owners and discussions regarding crossing and proximity agreements have been held where third parties have been responsive. Where relevant and required between parties, the Applicants will agree crossing and proximity agreements prior to construction as is standard within the offshore industry and therefore it is not considered necessary to have these completed during Examination (as further details on design and construction methodologies will be required).

I.D.	Written Question	Applicants' Response
		3. The Applicants will continue to engage with all affected asset owners as the Projects progress. The Applicants intend on progressing crossing and proximity agreement negotiations where required by existing asset owners post-consent and ahead of construction.
How it is intended to use the land, alternatives and whether rights sought are legitimate, proportionate and necessary		
CA.1.10	**Reasonable alternatives/ necessity** In your roles as the local planning authority and the highway authority are you aware of: 1. Any reasonable alternatives to Compulsory Acquisition (CA) or Temporary Possession (TP) for land sought by the Applicant? 2. Any areas of land or rights that the Applicant is seeking the powers to acquire that you consider would not be needed? Please identify which plots these are and explain why you consider they would not need to be acquired.	No response is required. Question directed to all relevant planning and highway authorities and National Highways (NH).
CA.1.11	**Meaning of incidental** The SoR [AS-146, paragraph 12.2] states that each plot of land described in the BoR [REP2-006] is required either for the purposes of the projects, or is needed to facilitate, or is incidental to the projects. Can you provide further detail as to what is meant by incidental and how this differs from land needed to facilitate?	The wording of paragraph 12.2 of the **SoR (Revision 4)** [AS-146] mirrors the wording within Section 122(2)(b) of the Planning Act 2008: *"(2) The condition is that the land—* *(a) is required for the development to which the development consent relates,* *(b) is required to **facilitate or is incidental** to that development, or* *(c) is replacement land which is to be given in exchange for the order land under section 131 or 132."* [emphasis added].
CA.1.12	**Connection from convertor station to proposed new substation** The current proposal seeks to acquire land for a cable connection from the proposed convertor station to the proposed new National Grid substation – why is this part of this application and not part of the application for the proposed new substation?	For these Projects the Applicants are responsible for securing planning consent for the connection directly to the proposed Birkhill Wood National Grid Substation. This includes all infrastructure associated with the transmission of power generated by the Projects. A High Voltage Direct Current (HVDC) transmission system was selected, this requires the conversion of power to High Voltage Alternating Current (HVAC) for transmission on the National Grid Network. Therefore, Onshore HVDC Converter stations are required to convert the power from HVDC to HVAC, as detailed in section 5.7.2 of **Chapter 5 Project Description (Revision 3)** [REP1-009]. The Onshore HVDC Converter stations are located in the Substation Zone. The Substation Zone was selected following the process set out in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [As-017]. The Onward Cable Connection includes the HVAC cables from the Onshore HVDC Converter stations to the proposed Birkhill Wood National Grid Substation. Once the windfarm is operational, the electricity export cable, from the windfarm to the National Grid substation, will be passed to an Offshore Transmission Operator in accordance with the Electricity Act 1989. This division of responsibility is very common i.e. the offshore wind farm developer consents the infrastructure up to the point of connection with the existing National Grid Electricity Transmission (NGET) substation or (as here) the proposed location of a new substation. This reflects the allocated responsibilities in the connection agreement with the National Energy System Operator (NESO). This approach has been followed, for example, on Equinor SEP and DEP at Norwich Main substation (which is be extended) and RWE Five Estuaries at the location of a proposed new substation near Bromley in Essex.

I.D.	Written Question	Applicants' Response
CA.1.13	**Need for land** One of the possible development scenarios would be that only either DBS East or DBS West would be built. However, the draft DCO is seeking to acquire the land necessary for the construction of both DBS East and DBS West. 1. What is the difference in the land needed for the implementation of only either DBS East or DBS West and that which would be required to build out both DBS East and DBS West? Are you able to provide this information in the form of a map or plan? 2. How would the Application comply with the requirements of s122 of the Planning Act 2008 (PA2008) if only one of the projects was built out? 3. How would the draft DCO ensure that, if only one project was built out, only the land required for that project would be taken and how would it prevent the land not required from potentially suffering from blight?	The potential scenario for one Project (In-Isolation) would include either the DBS East or DBS West array, associated offshore and onshore cabling and only the eastern Onshore Converter Station within the Onshore Substation Zone and only the northern route of the Onward Cable Connection to the proposed Birkhill Wood National Grid Substation, avoiding the INEOS Pipeline. **Appendix 5-3 Engineering Drawings (Revision 2)** [REP2-016] have been updated where necessary following the acceptance of **Project Change Request 2** [AS-152] to demonstrate the change to the Onshore Substation Zone in regard to engineering design. The indicative general arrangement drawings for the Onshore Convertor Station(s) demonstrate the difference in the land needed for the implementation of only either DBS East or DBS West and that which would be required to build out both DBS East and DBS West. The maximum construction parameters for the Onshore Substation Zone in the different scenarios are detailed in section 5.7.2.1 of **Chapter 5 Project Description (Revision 3)** [REP1-009] and **Project Change Request 2** [AS-152]. Section 122 of the Planning Act 2008 outlines the circumstances under which a Development Consent Order (DCO) may authorise the compulsory acquisition of land, requiring the Secretary of State's satisfaction that the land is necessary for the development, facilitation, or is incidental to it, or is replacement land. **Land Plans (Onshore) (Revision 3)** [AS-145] set out the worst case scenario for land take of permanent freehold acquisition or acquisition of rights from the perspective that both Projects are built out and do not show what the land required to build out one Project be would like. However, the requirement for essential landscape and visual mitigation is the primary requirement set out in **Chapter 21 Land Use (Revision 3)** [REP2-022] and would not significantly change in either scenario which satisfies the requirements of s122 (PA2008), meaning that all the land in the **Draft DCO (Revision 6)** [document reference 3.1] is necessary for the development, facilitation, or is incidental to the project(s). Works No. 25A and 26A/B on the **Works Plans (Onshore) (Revision 4)** [REP2-005] and works descriptions within Schedule 1 of the **Draft DCO (Revision 6)** [document reference 3.1] would ensure that if only one Project was built out, only the land required for that Project would be taken by ensuring that works would only take place within those works numbers specific to the Project(s) being taken forward. All other land would not be taken by the Project(s) and would be given back to the landowner for agricultural purposes, so would not be blighted. Additional measures to ensure transparency have been included by way of Requirement 8 of Schedule 2 of the Draft **DCO (Revision 6)** [document reference 3.1], which prevents either Project from commencing its onshore works until a written scheme setting out the phases of the relevant works is submitted to and approved by the relevant planning authority. This drafting follows the approach taken in other offshore generating station DCOs. In order to ensure that only the eastern Onshore Converter Station is built if only the DBS East Project is taken forward, Requirement 8 also prevents the Dogger Bank South East onshore works commencing until notification has been submitted to the relevant planning authority as to whether Dogger Bank South West intends to commence development of the DBS West Project. If the notification gives notice that Dogger Bank South West does not intend to commence development, Dogger Bank South East is authorised only to be build the eastern converter station and must not build the western converter station. This is explanation is included in the **Explanatory Memorandum (Revision 5)** [REP1-006].
Individual objections, issues and voluntary agreements		
CA.1.14	**Affected Persons' issues and concerns**	No response is required. Question directed to any affected persons.

I.D.	Written Question	Applicants' Response
	Do any Affected Persons have concerns that they have not yet raised about the legitimacy, proportionality or necessity of the CA or TP powers sought by the Applicant that would affect land that they own or have an interest in?	
CA.1.15	**The Equalities Act 2010** Could you clarify: 1. How you have had regard to the Equalities Act 2010 in relation to the powers sought for CA and TP? 2. If any Affected Persons have been identified as having protected characteristics? If so, what regard has been given to them?	No individual Affected Persons or Interested Parties have been expressly identified as having protected characteristics as defined under the Equality Act 2010. However, due to the breadth of characteristics protected under the Equality Act 2010, the Applicants have progressed this application on the basis that there would be those with protected characteristics impacted by the proposed development. Ensuring no persons are discriminated by the process has been inherent to the Applicants' work to date.
CA.1.16	**Update on achieving consent for the offshore export cable corridor** The SoR [AS-146, paragraph13.1] advises that two applications have been made to The Crown Estate through The Crown Estate's Cable Route Identification and Approval Process for the proposed Offshore Export Cable Corridors. Can you provide an update on the progress of these applications and, if they have not yet been consented, the timeframe for their determination?	The Applicants have made applications through the Crown Estate's Cable Route Identification and Approval Process and are currently negotiating the transmission agreement for lease for each of DBS West and DBS East with The Crown Estate. Due to "overlapping" option areas for cable corridors, the previously agreed form of transmission agreement for lease needs some amendments. The Applicants are in negotiations with The Crown Estate to finalise the agreements and are hopeful of concluding matters by the close of examination.
CA.1.17	**Update on negotiations** **The Applicants:** The SoR [AS-146, paragraph 13.18] states that draft Protective Provisions are under negotiation and that the Applicants are currently seeking to agree the form of Protective Provisions with the affected undertakers. Schedule 15 of the draft DCO [REP1-004] includes the standard Protective Provisions for the protection of electricity, gas, water and sewerage undertakers (part 1) and the protection for operators of electronic communications code networks (part 2) in addition to bespoke Protective Provisions for the protection of the EA (part 3), drainage authorities (part 4) and for Network Rail Infrastructure Ltd (part 5). Can you provide details of any further bespoke Protective Provisions that are likely to be added to the draft DCO and the timeframe for their agreement? **The Statutory Undertakers:** Can you provide an update on progress regarding the agreement of Protective Provisions and whether you consider that they will be agreed before the close of the Examination?	The Applicants have submitted its preferred form of bespoke protective provisions for the benefit of NGET and National Gas Transmission (NGT) at Deadline 3 (**The Applicants' preferred protective provisions for National Grid Electricity Transmission and National Gas Transmission** [document reference 13.9]). These are the Applicants' proposed form of protective provisions, although they have not yet been agreed with NGET or NGT. The Applicants are continuing negotiations with NGT and NGET with a view to agreeing a form of protective provisions before the close of the Examination. If no agreement has been reached by Deadline 8 of the Examination, the Applicants will include its preferred version of these protective provisions in the final version of the draft DCO which will be submitted at Deadline 8. As set out in response to REP1-079:7 given in **The Applicants' Responses to Written Representations** [REP2-057], the Applicants consider that interactions with future projects should not be included in the NGET protective provisions and the Applicants have recently engaged with NGET in relation to negotiating a private collaboration agreement which would cover these interactions. It is hoped that negotiation of a private agreement will facilitate agreement on the form of protective provisions to be included in the **Draft DCO (Revision 6)** [document reference 3.1]. The Applicants are continuing to engage with the Environment Agency, Network Rail Infrastructure Ltd and Northern Powergrid in relation to protective provisions. The Applicants have been advised by the Environment Agency they may have comments on the protective provisions, however they have not been provided to date. The Applicants have not submitted bespoke protective provisions for Northern Powergrid on the basis that only a few outstanding points of disagreement remain. It is therefore anticipated that an agreed set of protective provisions will be included in a future iteration of the Draft DCO.
CA.1.18	**Crossing and proximity agreements**	The Applicants are progressing discussions on crossing and proximity agreements with the following Interested Parties:

<table>
<tr><th>I.D.</th><th>Written Question</th><th>Applicants' Response</th></tr>
<tr><td></td><td>Which Interested Parties are you progressing crossing and proximity agreements with? Are there any Interested Parties who have requested crossing and proximity agreements (or similar) that you do not intend to progress? If so, which are these and why?</td><td>
<table>
<tr><th>Interested Party</th><th>Summary of Discussions</th></tr>
<tr><td>Dogger Bank Offshore Wind Farm 1 Projco Limited (DBA Projco) and Dogger Bank Offshore Wind Farm 2 Projco Limited (DBB Projco)</td><td>The Applicants have recently reached agreement with DBA Projco and DBB Projco on a crossing agreement relating to the onshore interfaces between the respective projects at Routh.

The Applicants have made contact with DBA Projco and DBB Projco to initiate discussions on proximity agreements in relation to the order limit interactions in the nearshore environment.</td></tr>
<tr><td>Orsted Hornsea Project Four Limited</td><td>The Applicants are engaged with Orsted on the form of commercial agreement required to manage the onshore and offshore interactions between respective projects. Comments on draft Heads of Terms were received from Orsted on 7th March 2025 and being reviewed by the Applicants.</td></tr>
<tr><td>BHP Billiton Petroleum Great Britian Limited (BHP)</td><td>The Applicants made contact with BHP on 1st June 2023, 19th June 2023, 25th January 2024, 1st May 2024, 4th February 2025, 3rd March 2025 to discuss interactions with an existing BHP decommissioned pipeline located within the Projects order limits. No responses were received to previous communications however in response to contact made on the 3/3/25, BHP and the Applicants are meeting on 18/3/25 to discuss the interactions and any requirements for crossing and proximity agreements.</td></tr>
<tr><td>Net Zero North Sea Storage Limited ('NZNSS')</td><td>The Applicants have been in ongoing discussions with NZNSS since 2023 to discuss interactions between the respective projects. A template crossing and proximity agreement was issued to NSNSS by the Applicants in December 2023 and comments are still awaited. The Applicants welcome comments from NSNSS at the earliest opportunity.</td></tr>
<tr><td>INEOS UK SNS Limited</td><td>The Applicants are engaged with INEOS UK SNS Limited and will continue to engage in relation to any agreements required to manage interactions with existing assets.</td></tr>
</table>
When the Projects' offshore construction corridor is refined and any interfaces with other projects are realised, the Applicants will negotiate crossing and proximity agreements with any affected parties. Where there are interfaces</td></tr>
</table>

I.D.	Written Question	Applicants' Response
		and where required by asset owners, the Applicants will enter into crossing and proximity agreements pre-construction.
CA.1.19	**Plot 18-006** Can you provide further detail as to what is happening with plot 18-006? Is it Crown Land or has it been de-trunked?	A de-trunking order was made of a section of the A1079 (Plot18-006) which has transferred ownership of the highway and the subsoil of the A1079 to the Local Highway Authority (i.e. ERYC). This means that ownership vests in ERYC even though the Secretary of State for Transport remains the registered owner. The transfer of registered proprietorship is just an administrative exercise that has not yet been undertaken. The Applicant will continue to negotiate with the ERYC to secure the necessary land rights but will not be pursuing a S.135 consent given the Secretary of State for Transports confirmation that this plot is not within Crown Land. The applicants will update the **BoR (Revision 5)** [REP2-006] and **Crown Land Plans (Revision 2)** [PDA-006] at Deadline 4.
CA.1.20	**Article 15** You advised [AS-039] that the purpose of this Article was to allow the undertaker to use private roads without the need to temporarily possess them for construction and operation. Can you confirm that the owners and users of these private roads are aware of this Article and the powers being sought? If not, why not?	Article 15 authorises the temporary use of private roads within the Order limits by persons or vehicles, for the purposes of, or in connection with, the construction and maintenance of the authorised project, without the need for the undertaker to acquire a permanent right of way over that land. The Applicants consulted with all owners and users of these private roads during all stages of the statutory consultation process, and negotiations regarding voluntary agreement for construction and operation of the Onshore Cable Corridor to cross private roads are at an advanced stage in line with Land Plans (Onshore) (Revision 3) [AS-145]. As shown in **Land Rights Tracker (Revision 3)** [REP1-046], a form of Option agreement and Deed of Grant are agreed pending exchange subject to any third-party consents required and signature.
Funding		
CA.1.21	**Project costs and job numbers for development of either Dogger Bank (East) or Dogger Bank (west)** In the SoR [AS-146, paragraph 5.16], the cost of building both projects together is given as £7 billion. As two of the possible development options would be to build only either Dogger Bank (East) or Dogger Bank (West) what would be the project costs and job numbers if the option of only building out one wind farm was pursued? Paragraph 5.17 states that the expenditure during the operation and maintenance of the projects 'together' would amount to around £177 million per annum with a total Gross Value Added of £1 billion over the projects' lifetime. What would be the figures if only one of the projects was built out? Also, can you provide further details of how these figures were calculated?	As detailed in paragraph 127 of **Chapter 28 Socio-economics** [APP-217], it is expected that a fixed offshore wind farm project in the UK would spend around £2.3 billion per GW installed. It is therefore estimated that the spending on the development and construction of this project would be: £3.5 billion if DBS East or DBS West are built In Isolation and £7.0 billion if the Projects are built together (Sequential or Concurrent). As detailed in paragraph 244 and Table 28-48 of **Chapter 28 Socio-economics** [APP-217] expenditure during the operation and maintenance of the projects 'in isolation' would amount to around £88 million per annum. This is based on the assumption that a fixed offshore wind farm project in the UK would spend around £59 million per GW installed each year on operations and maintenance activities. This assumption is based on a study of the average level of expenditure for fixed offshore wind farms in the UK, which is also the basis for the construction expenditure and is provided in the chapter references (BVG Associates (2019). Guide to an Offshore Wind Farm. A standard input-output economic model was used to calculate these values. This methodology considers where expenditure would take place as a result of the Projects, what sectors the expenditure would occur in and the employment and Gross Value Added (GVA) that would be supported therefore as a result of this expenditure. This also captures knock on economic impacts (Type.1 multipliers) and the method is described in more detail in section 28.6.1.2 of **Chapter 28 Socio-economics** [APP-217], As set out in Table 28-50 of **Chapter 28 Socio-economics** [APP-217], the operations and maintenance of the Projects In Isolation could result each year in a total (direct and indirect) impact of £37 million GVA in the Humber Region and £51 million GVA across the UK. As set out in Table 28-52 of **Chapter 28 Socio-economics** [APP-217], the operations and maintenance of the Projects Concurrently i.e. construction of both projects would be £74 million GVA in the Humber Region and £103 million GVA across the UK.

I.D.	Written Question	Applicants' Response
CA.1.22	**Viability** In the SoR [AS-146, paragraph 15.13], you state that you are confident that the projects will be commercially viable. Given Vatenfall's decision in 2023 to stop development of the Norfolk Boreas wind farm and its decision to review the viability of Norfolk Vanguard, what evidence can you provide to demonstrate that the Proposed Development would be viable and that if the Order was made that it would be constructed?	Each offshore wind farm development project has unique factors such as option fees, ground conditions, wind resources, economies of scale, and distance to shore. Therefore, the challenges or successes of one project are not necessarily applicable to others. For instance, the Norfolk Vanguard and Dogger Bank South projects are in different development areas, vary in nature, and are at different stages of development. RWE has a strong track record in delivering offshore wind projects in the UK over the past two decades (see CA.1.24). This is in part because RWE projects undergo frequent viability reviews throughout development, assessing ongoing viability based on current market conditions like supply chain, Contract for Difference (CfD) prices, and macroeconomic trends. At this juncture, the Dogger Bank South projects are deemed viable.
CA.1.23	**Blight** The SoR [AS-146, paragraph 15.15] advises that the likelihood of a blight claim would be minimal and that to date no blight notices had been received. Can you confirm if this is still the case?	The Applicant can confirm that the likelihood of a blight claim being received is minimal and none have been received to date.
CA.1.24	**Funding model** The Funding Statement [REP2-008, section 4.3, paragraph 46] states that the proposed funding model has been successfully deployed on most RWE projects to date. The same paragraph advises that, due to the experience of the stakeholders in delivering similar projects, the Applicants are confident that the required funding would be available for the Compulsory Acquisition powers at the point at which they would be called on. Can you provide further details of what these projects are and how relatable they are to the Proposed Development?	RWE owns and operates ten offshore wind totalling 3.86GW (with a pro rate capacity of 1.9GW based on equity share. It is developing a further nine offshore wind projects (including the Dogger Bank South wind farms) in UK waters, totalling 9.8GW (7GW pro rata). The majority of these are owned by joint ventures with RWE holding at least half of the equity. Offshore wind farms operating in UK waters built by RWE (or its predecessors E.ON and npower) on behalf of a joint venture are Triton Knoll, Humber Gateway, Greater Gabbard, Galloper, London Array, Rampion, Rhyl Flats, Gwynt y Mor, Robin Rigg and Scroby Sands. These projects range from 58MW (Scroby Sands) to 857MW (Triton Knoll) installed capacity. A further six projects are in development with partners: Awel y Mor, Five Estuaries, North Falls, Rampion 2, DBS West and DBS East. Three further projects in development are 100% owned by RWE: Norfolk Vanguard West, Norfolk Vanguard East and Norfolk Boreas. One project (Sofia) is in construction and 100% owned by RWE. This is a clear record of developing projects of a type, scale, location and jurisdiction comparable to Dogger Bank South, with an equivalent funding model.
CA.1.25	**Funding shortfalls** The Funding Statement [REP2-008, section 4.3, paragraph 51] states that the auditors have confirmed that they see no concerns regarding the Proposed Development's ability to meet its financial obligation for the next 18 months. Although the document is dated February 2025, this statement does not appear to have been updated from the original funding statement [APP-033, section 4.3, paragraph 40]: 1. Can you confirm this statement is still correct? 2. 18 months from February 2025 would be August 2026, but you are seeking 7 years for implementation (Requirement 1) - what evidence do you have that you could meet your financial obligations for this time period?	1. The text in the original submitted **Funding Statement** [APP-033] (section 4.3, paragraph 40) was not updated in the revised **Funding Statement (Revision 3)** [REP2-008] (section 4.3, paragraph 51) and is therefore no longer valid. The Applicants will update this at Deadline 8 in light of the situation current at that time, including whether new accounts and audits for the companies have been completed at that time. 2. The Applicants' set out below additional information on the Funding of the Projects to provide further surety of how financial obligations for the entire 7-year implementation period will be met. Under the terms of the shareholder agreement binding both shareholders of the Dogger Bank South West and East Joint Ventures, funding is guaranteed for each development phase, from one milestone date to the next. At the start of each phase, the projects will present a budget proposal to the board, detailing activities and costs leading up to the next milestone. Once approved, shareholders are legally bound to provide funding, and failure to do so would result in a breach of the agreement, ultimately causing them to lose their interest in the project and future returns. The financial status and credit ratings of the shareholding companies is described in section 3 of the **Funding Statement (Revision 3)** [REP2-008]. The funding model for the Projects, which guarantees funding up to the next milestone and as long as the Projects are deemed viable, is standard in the offshore wind industry where funding is secured progressively rather than fully upfront. Offshore wind projects are typically financed in stages, aligning with key milestones such as development,

I.D.	Written Question	Applicants' Response
		procurement, construction, and operation. The milestone dates for the Dogger Bank South projects include DCO application, DCO award, securing a route to market (e.g., CfD contract award), and the Final Investment Decision (FID), which marks the commitment to fund the entire construction phase. For the current phase of the project funding is in place up to DCO Award (assumed December 2025). During 2025 the shareholders will agree funding up to the end of the next phase of the project cycle, i.e. securing a route to market. As outlined in the Funding Statement, Article 44 of the **Draft DCO (Revision 6)** [document reference 3.1] (noting this is currently incorrectly referenced in the Funding Statement as Article 43, see question CA.1.4) ensures that compulsory acquisition (CP) powers cannot be exercised unless and until a financial guarantee or security is in place to cover all associated compensation liabilities. This means that before any CP-related costs arise, the Applicants will have secured the necessary funding to meet these obligations. Article 44 (5) includes a requirement for the Secretary of State to approve financial guarantees before the exercise of CP powers which provides an additional layer of oversight and assurance that the necessary funds will be in place before any financial liabilities are incurred. As noted in the Funding Statement, the Applicants will be responsible for providing funding to cover the costs of the delivery of and the compulsory acquisition associated with the Projects. This funding will be provided by the Applicants' partners: RWE Renewables UK Limited and Masdar. Each of these companies have substantial assets in their own right and considerable experience in infrastructure development. Their financial strength, extensive experience in delivering large-scale infrastructure projects and a proven track record of securing the necessary capital ensures that the Project remains financially sustainable throughout.
CA.1.26	**Cost of funding for HRA compensatory measures** The Funding Statement [REP2-008, Section 5.2, paragraph 62] states that the cost of compensation is estimated at £173 million but details have not been provided as to how this figure is made up due to the commercially sensitive nature of ongoing contract negotiations. Whilst the ExA note this, it needs to have confidence that the figure proposed is realistic and would cover the costs of the proposed compensation. Therefore, could you please provide any additional information that would help reassure the ExA that the proposed compensation sum would be appropriate.	The assumed DBS compensation costs of £173 million consist of measures to compensate for benthic habitat, artificial nesting structure for kittiwake and predator control for guillemot (and razorbill without prejudice). The benthic habitat measures costs includes an assumption to pay a contribution (along with other infrastructure projects) towards surveys and staff time for the creation and management of a new or extended Marine Protected Area. The artificial nesting structure costs include for assumptions around the costs for design, consent, fabrication, installation, maintenance, leasing and monitoring of an artificial nesting structure. The predator control costs for DBS were assumed to include for predator eradication and monitoring at three sites with a further two full eradication campaigns required at all three sites. Operational lifespan costs of 30 years have been assumed for benthic habitat and predator control measures. Artificial nesting structure costs have assumed a 40 year operational period and a decommissioning requirement. By way of comparison Hornsea Project Four: Derogation Information, Without Prejudice Derogation Funding Statement for Deadline 7, Date: 10th August 2022 Document reference: B2.10 Revision: 02 (REP7-037)[26] assumed a cost of £16M for offshore nesting structures consisting of £7M DEVEX, £1M CAPEX, £8M OPEX. Outer Dowsing Offshore Wind in their submission Habitats Regulations Assessment (HRA) Compensation Funding Statement November 2024 Document Reference: 7.9 (REP2-027)[27] has assumed a cost of £35.6M consisting of £5M DEVEX, £27.1M CAPEX, £3.5M OPEX. Similarly for predator control measures Hornsea 4 Funding Statement (REP7-037) has assumed a cost of £4.5M consisting of £1M DEVEX, £0.5M CAPEX, £3M OPEX. Outer Dowsing Offshore Wind's Funding Statement (REP2-027) assumed predator control measures of £4.8M consisting of £1.6M DEVEX, £0.5M CAPEX, £2.7M OPEX.

[26] Hornsea Project Four (2022) Derogation Information: Without Prejudice Derogation Funding Statement. Available https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010098/EN010098-002048-Hornsea%20Project%20Four%20-%20Other-%20B2.10%20Without%20Prejudice%20Derogation%20Funding%20Statement.pdf

[27] Outer Dowsing Offshore Wind (2024) Habitats Regulations Assessment: Compensation Funding Statement. Available: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010130/EN010130-001132-7.9%20Compensation%20Funding%20Statement%20(clean).pdf

I.D.	Written Question	Applicants' Response
		Although direct comparison between Hornsea 4 and Outer Dowsing Offshore Wind costs and DBS costs for compensation is not possible it is notable that the combined costs for Hornsea 4 and Outer Dowsing Offshore Wind for artificial nesting structures and predator control measures is £61M, substantially less than the total compensatory measures costed for in the DBS Funding Statement of £173M.
Other Matters		
CA.1.27	**Acquisition of other land or rights** Are any land or rights acquisitions required in addition to those sought through the draft DCO before the Proposed Development could become operational?	The Applicant is confident that all required rights sought are contained within the rights outlined in the draft DCO and no land or rights acquisitions are required in addition to those sought through the draft DCO to carry out the proposed development.

1.7 Draft Development Consent Order

Table 1-7 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Draft Development Consent Order

I.D.	Written Question	Applicants' Response
DCO.1.1	**Precedents** Notwithstanding that drafting precedent has been set by previous DCOs or similar Orders, full justification should be provided for each power and provision taking into account the facts of this particular DCO application. Where drafting precedents in previous made DCOs have been relied on, these should be checked to identify whether they have been subsequently refined or developed by more recent DCOs so that the DCO provisions reflect the SoS's current policy preferences. If any general provisions (other than works descriptions and other drafting bespoke to the facts of this particular application and draft DCO) actually differ in any way from corresponding provisions in the SoS's most recent made DCOs, an explanation should be provided as to how and why they differ (including but not limited to changes to statutory provisions made by or related to the Housing and Planning Act 2016). Can you provide a list of all the previous DCOs that have been used as a precedent for the drafting of this draft DCO or signpost where in the application documentation this can be found?	The **Explanatory Memorandum (Revision 6)** [document reference 3.2] lists out the various different provisions of the **Draft DCO (Revision 6)** [document reference 3.1] and explains the drafting behind each provision. As set out in paragraphs 8.1 - 8.5 of the **Explanatory Memorandum (Revision 6)** [document reference 3.2], the **Draft DCO (Revision 6)** [document reference 3.1] is based on the model provisions set out in Schedule 1 to the Infrastructure Planning (Model Provisions) (England and Wales) order 2009, as well as relevant precedents, particularly from other offshore wind farms. The relevant offshore wind precedents are: • The Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024; • Awel y Mor Offshore Wind Farm Order 2023; • The Hornsea Four Offshore Wind Farm Order 2023; • The East Anglia Two Wind Farm Order 2022; • The East Anglia One North Wind Farm Order 2022; • The Norfolk Vanguard Offshore Wind Farm Order 2022; • The Norfolk Boreas Offshore Wind Farm Order 2021; • The Hornsea Three Offshore Wind Farm Order 2020; • The Hornsea Two Offshore Wind Farm Order 2016; • The Dogger Bank Teesside A and B Offshore Wind Farm Order 2015; and • The Dogger Bank Creyke Beck Offshore Wind Farm Order 2015. In addition, other DCOs have been used as precedents for some individual provisions, including: • HyNet Carbon Dioxide Pipeline Order 2024; • Southampton to London Pipeline Development Consent Order 2020; and • The River Humber Gas Pipeline Replacement Order 2016.
Articles		
DCO.1.2	**Possible typo** Paragraph 3 of the preamble refers to 'documents that accompanies the application' should this be either 'documents that accompany' or 'documents that accompanied'?	The Applicants thank the Examination Authority (ExA) for pointing out this typo, which has now been corrected in the **Draft DCO (Revision 6)** [document reference 3.1].
DCO.1.3	**28 days deemed consent** A number of the Articles which require the submission of an application for consent or approval include drafting (eg Article 10(5), Article 13(2), Article 16 (9), Article 18(1) etc) that would mean that if the discharging authority or organisation fails to notify the undertaker of a decision then the details submitted within 28 days would have deemed consent. **Applicants**: Why have you used 28 rather than the usual 56 days? **All other parties:** Is 28 days a reasonable amount of time to enable you to discharge an application? If not, why not, and what would be an appropriate time period?	The 28 day time limit is considered necessary to remove the possibility for delay and provide certainty that the Projects can be delivered by the undertakers in a timely fashion. As Nationally Significant Infrastructure Project (NSIP)s, the Projects should not be at risk of being held up due to a failure to respond to an application for consent by the discharging authority. 28 days is thought to be a reasonable time period to allow a decision to be reached on the submitted applications for consent. In addition, the Secretary of State has accepted that 28 days is sufficient on other comparable recent DCOs, including Sheringham Shoal and Dudgeon Extensions, Awel y Mor, East Anglia One North and East Anglia Two. The Applicants have amended the time limit under Article 11(5) of the **Draft DCO (Revision 6)** [document reference 3.1] from 28 days to 56 days but this was in order to bring it into line with the **Outline Public Rights of Way**

I.D.	Written Question	Applicants' Response
		Management Plan (Revision 2), located in Appendix C of the **Outline Code of Construction Practice (Revision 3)** [REP1-025].
DCO.1.4	**Article 5 (8) (c) and (d)** **Applicants:** Why does this Article exempt the undertaker from seeking consent from the SoS to transfer or lease the benefits of the provisions of the Order to either Northern Powergrid (Yorkshire) PLC and Yorkshire Water Services Ltd? **Northern Powergrid (Yorkshire) PLC and Yorkshire Water Services Ltd:** Do you have any comments you wish to make on the drafting of this Article?	Work Nos. 22A/B include the diversion of a Northern Power Grid 33kV overhead power line. It may be preferable for the asset owner (Northern Powergrid (Yorkshire) PLC) to carry out the diversion works themselves and so they would need to be able to rely on the benefit of the DCO (once granted) in order to carry out these works without the need to obtain any additional consent. This provision is thought to be appropriate and consent of the Secretary of State is not thought to be required for such a transfer where it is limited to the specific relevant Work Nos. Similar provisions have been included in other granted DCOs, for example the Sheringham Shoal and Dudgeon Extensions DCO includes a similar provision in relation to National Highways for certain Works Nos. that may be more appropriately carried out by National Highways themselves. The reference to Yorkshire Water Services Ltd was removed from the **Draft DCO (Revision 6)** [document reference 3.1] upon acceptance of **Project Change Request 2** [AS-152], which reduced the Order Limits to remove interaction with certain assets of Yorkshire Water Services Ltd, which would have required to be diverted. As that diversion is no longer required, it has not been necessary to include Yorkshire Water Services Limited in Article 5.
DCO.1.5	**Article 5 (13)** The drafting of this paragraph appears to be unprecedented. Can you: 1. Explain why such drafting is needed? 2. Provide an example of a made DCO that contains the same or similar drafting?	This drafting is precedented, including in the Sheringham Shoal and Dudgeon Extensions DCO, the Hornsea Three DCO, the East Anglia Three DCO and the East Anglia One DCO. This provision applies additional restrictions on the transfer of benefit provisions in relation to the exercise of street works and compulsory acquisition powers. Given the nature of those powers it is thought to be appropriate to restrict the operation of Article 5 in this way.
DCO.1.6	**Article 7(2)** Is this drafting necessary? If it is necessary. given that Requirement 19 would require the submission and approval of a code of construction practice that must accord with the oCoCP, is the current drafting, which refers to both the oCoCP and the requirements in Schedule 2, necessary?	This drafting is thought to provide additional clarity on the operation of this article and its relationship with the mitigation measures contained within the **Outline Code of Construction Practice (Revision 3)** [REP1-025]. Similar wording has been included in recently granted DCOs, including the National Grid (Bramford to Twinstead Reinforcement) Order 2024, the HyNet Carbon Dioxide Pipeline Order 2024 and the National Grid (Yorkshire Green Energy Enablement Project) DCO 2024. The Applicants have reviewed the drafting of Article 7(2) and amended it to refer only to the measures approved pursuant to the requirements in Schedule 2 of the **Draft DCO (Revision 6)** [document reference 3.1], as it is not thought to be necessary to refer also to the **Outline Code of Construction Practice (Revision 3)** [REP1-025] when the final version of that document would be captured by reference to the Schedule 2 requirements.
DCO.1.7	**Article 9 (4)** Article 9 (4) seeks to disapply a number of the provisions of the 1991 Act including: (a) Section 56 (power to give directions as to timing of works); (b) Section 56A (power to give directions as to the placing of apparatus); (c) Section 58 (restriction of works following substantial road works); (d) Section 58A (restriction of works following substantial street works); (e) Section 61 (protected streets); and (f) Schedule 3A (restriction on works following substantial street works).	While this question is addressed to ERYC and Hull City Council, the Applicants have provided a response to aid the ExA's understanding of the Applicants' position. The ability to disapply existing legislation through the DCO is authorised by section 120(5)(a) of the Planning Act 2008. Given the nature of the Projects as NSIPs and the critical need to deliver low carbon renewable electricity generation in order to meet the Government's net zero targets, it is not thought to be appropriate for there to be potential delays to the delivery of the Projects caused by the need to seek consent from the relevant street authority for certain aspects of the Projects under the New Roads and Street Works Act 1991. Part 3 of the **Draft DCO (Revision 6)** [document reference 3.1] is considered to provide an appropriate framework for the carrying out of street works pursuant to the DCO. To date, the Applicants have not received any objection to the inclusion of such provisions from either ERYC or Hull City Council.

I.D.	Written Question	Applicants' Response
	Are you satisfied with the disapplication of these provisions and if not, why not and which sections?	
DCO.1.8	**Article 11** As currently drafted, there is nothing in the Article that would require any land that is used for a temporary public right of way to be reinstated once it is no longer required. Should there be and if not, why not?	Under requirement 25 of the **Draft DCO (Revision 6)** [document reference 3.1] any land within the Order Limits that is used temporarily for construction of the onshore works, and not ultimately included in permanent works or approved landscaping, must be reinstated to its former condition, or such condition as the relevant planning authority may approve, within 12 months of completion of the relevant phase of the onshore works, or such other period as the relevant planning authority may approve. This would include any land used during construction for the provision of a temporarily diverted public right of way. Paragraphs 39 to 41 of the **Outline Public Rights of Way Management Plan (Revision 2),** located in Appendix C of the **Outline Code of Construction Practice (Revision 3)** [REP1-025] sates that "*Following completion of construction activities, all public access within the working area will be reinstated to a standard commensurate to that existing prior to the commencement of construction works or an improved condition. The Applicants have made a commitment to reinstatement areas between Jointing Bays with two years of the start of construction, as set out in Volume 7, Chapter 5 Project Description (application ref: 7.5).*" The Public Rights of Management Plan, will be approved by the ERYC and is secured by Requirement 24 of the **Draft DCO (Revision 6)** [document reference 3.1].
DCO.1.9	**Article 14 (2)** The paragraph as drafted currently uses the word 'limiting' in reference to paragraph (1). Why is such a broad term necessary and why is the more specific 'without prejudice to the generality of' not used?	The Applicants have amended the **Draft DCO (Revision 6)** [document 3.1] to include the wording "*without prejudice to the generality of*" instead of "*without limiting*", noting that the drafting in both cases is precedented.
DCO.1.10	**Article 16 (8)** Are you satisfied that the drafting of 8(a) would include the internal drainage board or one which the IDB has permissible rights over. If not, why not and should it? Why does 8(b) refer to the Water Resources Act 1991 and not the 2016 Regulations and should it?	Article 2 of the **Draft DCO (Revision 6)** [document reference 3.1] includes a definition of "*drainage authority*" as meaning, in relation to an ordinary watercourse, the drainage board concerned within the meaning of section 23 (prohibition on obstructions etc. in watercourses) of the Land Drainage Act 1991. Section 23(8) of the Land Drainage Act 1991 defines the "drainage board concerned" as meaning, in relation to a watercourse in an internal drainage district, the drainage board for that district (i.e. the Internal Drainage Board (IDB)) or, in relation to a watercourse in an area outside an internal drainage district, the lead local flood authority for the area. Because Article 16(8)(a) includes reference to a relevant "*drainage authority*", this would, by definition, include the IDB. Article 16(8)(b) refers to the Water Resources Act 1991 as that is thought to contain the relevant definitions for the purposes of the article. The 2016 Regulations adopt the same definitions as the 1991 Act in many instances and so it is thought more appropriate to refer to the original source of the definitions.
DCO.1.11	**Article 17 (11)** To improve the precision of the drafting, should the following wording be inserted in 17(11): '*Section 13 (refusal to give possession to acquiring authority) of the 1965 Act(a) applies to the entry onto or possession of land under this Order by virtue of section 125 (application of compulsory acquisition provisions) of the 2008 Act.*'	The Applicants do not think it is necessary to add the words "*or possession of*" in respect of Article 17(11) as Article 17 does not specifically authorise possession to be taken of land, rather it authorises entry onto the relevant land. The wording "to the same extent as it applies in respect of the compulsory acquisition of land under this Order" is thought to be necessary as section 125 of the Planning Act 2008 does not automatically apply to the Article 17 provisions as they are not strictly compulsory acquisition powers. The Applicants therefore do not propose to amend the **Draft DCO (Revision 6)** [document reference 3.1] as suggested.
DCO.1.12	**Article 23 (6)(b)** In the supplementary agenda to CAH1 [EV3-001, question CAH1.SA.12], the ExA suggested that reference to the benefits should be included in the drafting. In response [AS-040] you advised that	This was an omission and has now been updated in the **Draft DCO (Revision 6)** [document reference 3.1].

I.D.	Written Question	Applicants' Response
	you would amend the drafting accordingly. However, not all the suggested drafting has been included in the most recent draft of the DCO [REP1-004]. Can you review whether the suggested drafting 'is vested or belongs or benefits' should be included in the drafting? If not, why not?	
DCO.1.13	**Article 23 (7)(a)** In the supplementary agenda to CAH1 [EV3-001, question CAH1.SA.13], the ExA suggested that reference to the benefits should be included in the drafting. In response [AS-040] you advised that you would amend the drafting accordingly. However, not all the suggested drafting has been included in the most recent draft of the DCO [REP1-004]. Can you review whether the suggested drafting 'is vested or belongs or benefits' should be included in the drafting? If not, why not?	This was an omission and has now been updated in the **Draft DCO (Revision 6)** [document reference 3.1].
Schedule 1		
DCO.1.14	**Work No 2A/ 2B** In the supplementary agenda to ISH1 [EV4-001, question ISH1.S1.01], the ExA highlighted that work No 2A/ 2B refers to 'offshore electrical platforms' but that Article 2 did not include a definition for offshore electrical platforms. In response [AS-039] you advised that this was an error and that a definition would be added to the draft DCO. The latest version of the draft DCO [REP1-004] has not been updated to include this definition. Can you review and amend as necessary?	The term "*offshore electrical platform*" is no longer used in the **Draft DCO (Revision 6)** [document reference 3.1]. The term was removed as a result of Project Change Request 1 and replaced with "*Offshore Converter Platform*" in Work Nos. 2A/B.
Requirements - Unless the question relates to drafting, questions on requirements can be found in the relevant topic section.		
DCO.1.15	**Proposed converter station design** Requirement 9 of the draft DCO [REP1-004] captures the detailed design requirements for the converter stations. Requirement 9(3)(d) requests the details of 'external appearance and materials' – should this refer to the '*dimensions, external appearance and materials of the buildings*'? If not, how would the dimensions of the converter stations be assessed by the local planning authority?	The Applicants consider that the dimensions of the converter stations would be included in requirement 9(3)(b), which requires approval of the scale of Work Nos. 25A and 26A/B and therefore do not propose making the suggested change to the **Draft DCO (Revision 6)** [document 3.1].
DCO.1.16	**Requirement 15(2)** In the supplementary agenda to ISH1 [EV4-001, ISH1.S2.13], the ExA requested the relevant highway authorities to review the list in Requirement 15(2) to ensure that the necessary details are listed, and if they were not, to provide details of what they wanted to see in the list and why. Because the Preliminary Meeting was adjourned the Hearing was cancelled and the ExA did not receive a response to this question. Can you provide a response?	No response is required. Question directed to the Relevant Highway Authorities. While this question is addressed to the relevant highway authorities, the Applicants have provided a response to aid the ExA's understanding of the Applicants' position. As stated in **East Riding of Yorkshire's Statement of Common Ground** [REP1-028] Table 3.9 (SOCG ID 141) the wording of DCO requirement 15 has been agreed with East Riding of Yorkshire Council and no concerns or objections have been raised. No accesses are proposed for which Hull City Council would be the relevant highway authority.
DCO.1.17	**Requirement 18(2)** In the supplementary agenda to ISH1 [EV4-001, ISH1.S2.18], the ExA asked that you confirm that the list of information to be included in 18(2) for each scheme is complete and, if not, to provide details of what additional information you would wish to see included in the list and why. Because the Preliminary Meeting was adjourned, the Hearing was cancelled and the ExA did not receive a response to this question. Can you provide a response?	No response is required. Question directed to HE and ERYC. While this question is addressed to Historic England and ERYC, the Applicants have provided a response to aid the ExA's understanding of the Applicants' position. As set out in the **Statement of Common Ground with Humber Archaeological Partnership** (archaeological advisors to ERYC) [REP1-045] the Applicants have agreed that the draft Requirement No.18 'Onshore Archaeology' as detailed

I.D.	Written Question	Applicants' Response
		in Draft Development Consent Order (APP-027) Schedule 2 Part 1 is appropriate and acceptable (Table 3.3, SOCG ID 20). As set out in the **Statement of Common Ground with Historic England** [REP1-030] the Applicants have agreed that the approach set out in the **Outline Onshore WSI** [APP-239] is appropriate and acceptable (Table 3.4, SOCG ID 40).

1.8 Ecology and Nature Conservation

Table 1-8 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Ecology and Nature Conservation

I.D.	Written Question	Applicants' Response
ENC.1.1	**NPS compliance - biodiversity management strategy** NPS EN-1, paragraph 5.4.36 states that that, *'Applicants should produce and implement a Biodiversity Management Strategy as part of their development proposals. This could include provision for biodiversity awareness training to employees and contractors so as to avoid unnecessary adverse impacts on biodiversity during the construction and operation stages.'* The outline Ecological Management Plan (oEMP) [REP2- 029] references the provision of toolbox talks provided to staff throughout the construction period. Do you consider the information to be provided would be sufficient to comply with the policy and requirement for a biodiversity management strategy? Can you clarify how and where the content of the proposed toolbox talks would be agreed and secured?	EN-1 defines biodiversity, in relation to the Biodiversity Management Strategy as "*…the variety of life in all its forms and encompasses all species of plants, animals and fungi, the genetic diversity they contain and the complex ecosystems of which they are a part."* The applicant can confirm that the tool box talks, which are planned and outlined within the **Outline Ecological Management Plan (OEMP) (Revision 4)** [REP2-029], will be sufficient to raise awareness of the relevant biodiversity within the Projects, at the pertinent time. The toolbox talks will be delivered prior to commencement of construction within ecologically sensitive parts of the Projects. They will seek to raise awareness of the relevant biodiversity with the objective of avoiding and reducing any adverse effects on biodiversity. For the avoidance of doubt, Section 1.1.1 and Section 1.2 of the **OEMP (Revision 4)** [REP2-029] clarifies these objectives and the methods of delivery: *"4. The aim of this OEMP is to ensure the protection and appropriate management of ecological receptors within the area to be affected by the Projects. Alongside adherence to legislative requirements relating to ecology and nature conservation."* *"11. Site inductions and toolbox talks for all site workers would include reference to the requirements of the EMP and Code of Construction Practice.* 12. *The ECoW would undertake the following tasks:* • *Arrange all specialist environmental surveys;* • *Undertake regular environmental site inspections;* • *Assist (where deemed necessary) the Principal Contractor or the Projects Manager(s)) in delivering site inductions and toolbox talks (e.g. presentations and the dissemination of information to site personnel on ecological matters). All briefings would include reference to the requirements set out in the EMP. The site-wide ecological requirements would be explained within these briefings. Additional toolbox talks may also be provided for each new area of works to ensure that area-specific requirements are fully understood and implemented…"* The relevant toolbox talks will be included alongside the final Ecological Management Plan (EMP). The final EMP is secured by Requirement 12 of the **Draft DCO (Revision 6)** [document reference: 3.1], will be submitted for approval to the ERYC and Natural England prior to implementation and commencement.
ENC.1.2	**Temporary loss – hedgerows** Your response to the ISH2 supplementary agenda question ISH2.9.15 [REP1-050] states, 'As the Strategy has assumed that all hedgerows removed along the Onshore Export Cable Corridor will be reinstated within two years, the Applicants were not required to include the total length of hedgerow temporarily lost in the BNG metric calculations.' However, section 18.10.4.3 of the Biodiversity Net Gain (BNG) Strategy [APP-157] refers to the temporary loss and reinstatement of hedgerows within 6 years. Can you clarify the proposed reinstatement period for hedgerow following temporary loss and confirm that the appropriate length of hedgerow has been included in the BNG calculations?	The Applicants wish to correct the response to the ISH2 supplementary agenda question ISH2.9.15 [REP1-050] by confirming that **Appendix 18-10 BNG Strategy** [APP-157] does consider all hedgerow removals as part of the loss calculations in the Biodiversity Metric. Hedges which are proposed to be replanted (regardless of whether this is within 1, 2 3, 4, 5 or 6 years of removal) have been considered as 'lost' habitats which will subsequentially be recreated. For the purposes of **Appendix 18-10 BNG Strategy** [APP-157], the duration between the loss, and the proposed replanting date, for all hedgerows lost (5.33km) is 6 years. This has been reflected within the Biodiversity Metric calculations provided within Annex B of **Appendix 18-10 BNG Strategy** [APP-157]. It is also shown in the Excel version of the Metric on Sheet "*B-2 On-Site Hedge Creation*", under column O "*Delay in starting habitat creation (years)".* This Excel files were provided at Deadline 1 [REP1-053 and REP1-054]. By assuming a 6 year delay in the replanting of the hedgerows, a precautionary, reasonable worst-case-scenario was assumed.

I.D.	Written Question	Applicants' Response
		A maximum 6 year reinstatement period, i.e. the time from the hedgerow being removed and it being replanted, was used within **Appendix 18-10 BNG Strategy** [APP-157] as this is the maximum anticipated construction period. However, it should be noted that this was a maximum value and shorter reinstatement periods would inherently be sought where possible. For example, though not reflected in the current BNG Strategy (as a worst-case scenario was presented), a commitment has been made that the sections of hedgerow between Jointing Bays will be reinstated within 2 years of their removal. In addition, Requirement 25 of the **Draft DCO (Revision 6)** [document reference: 3.1] states that habitats will be reinstated "*as soon as reasonably practicable and in any event within 12 months of completion of the relevant phase…".* Requirement 25 ensures that if hedgerows can be replanted sooner, then they will and that planting can be completed in the optimal season to ensure successful establishment (i.e. avoiding planting hedgerows in the middle of summer when successful establishment is improbable). **Appendix 18-10 BNG Strategy** [APP-157] applied the following assumptions to provide a reasonable estimate of the temporary hedgerow losses anticipated (as detailed within Section 18.10.4.3 of the **BNG Strategy** [APP-157]): "89. *It is assumed that:* • *For every hedgerow which requires crossing by a section of ducted cable or Haul Road a 24m section will be removed;* • *Where hedgerows interest with construction access points off of existing roads, an average of 25m (12.5m from the centre point) of hedgerow will be removed for access and visibility splays;* • *Hedgerows that intersect with Temporary Construction Compounds will be removed; and* • *Upon the completion of construction (within 6 years of commencement), these sections of hedgerow will be replanted with native, species rich hedgerow planting."* Since **Appendix 18-10 BNG Strategy** [APP-157] was written, minor changes to the Order Limits, revised assumptions relating to hedgerow losses have been made for **Project Change request 2 – Onshore Substation Zone** [AS-152], and updated landscape proposals have been made. These will affect the anticipated losses and creation of hedgerows and will be reflected within a revised BNG Strategy. The revised BNG Strategy will be provided at Deadline 5. In accordance with Requirement 32 of the **Draft DCO (Revision 6)** [document reference: 3.1], the Biodiversity Net Gain Strategy will be submitted for approval to the relevant planning authority prior to the commencement of each phase of works. This will be informed by the detailed design and will secure delivery of an accurately assessed number of units.
ENC.1.3	**Raventhorpe Embankment Local Wildlife Site (LWS)** ES Chapter 18 [REP2-019, Table 18-14] in relation to the Raventhorpe Embankment LWS states that, 'a small section will be affected by the construction of a temporary haul road crossing'. Can you explain the extent of effects from the proposed temporary haul road crossing on the Raventhorpe Embankment LWS, noting that the Obstacle Crossing Register [REP2-014] shows the proposed use of trenchless crossing techniques for this location? How would a haul road be constructed here with the noticeable difference in elevation between the embankment and adjoining fields?	The Applicants confirms that there are no requirements to construct a haul road crossing that would affect the Raventhorpe Embankment Local Wildlife Site, as trenchless crossing techniques are being proposed at this location and that access will be achieved via a different route, as detailed for crossing OOX-005 in **Appendix 5-2 Obstacle Crossing Register (Revision 3)** [REP2-014]. The Applicants will update the **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] to reflect this accordingly. This will be submitted at Deadline 8, to allow any other updates to be captured prior to the end of examination.
ENC.1.4	**Bentley Moor Wood Ancient Woodland - air quality effects from horizontal directional drilling compounds** Your Deadline 1 submission [REP1-066] regarding air quality impacts from non-road mobile machineryor.1. on Bentley Moor Wood ancient woodland is noted. However, could you confirm	No response is required. Question directed to Natural England.

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	whether you are aware that trenchless crossing compounds (which are not shown on the Works Plans (onshore) [REP2-005]) would be situated within 200m of Bentley Moor Wood? If so, are you satisfied that the proposed air quality mitigation measures would be adequate, or if not, what are your concerns and how could they be resolved?	
ENC.1.5	**The Management of Hedgerows (England) Regulations 2024** The Hedgerow Regulations (1997) are referenced in ES Chapter 18 [REP2-019]. The Management of Hedgerows (England) Regulations 2024 came into force in May 2024. Would the 2024 Regulations have any implications for the Proposed Development and the assessment of effects in the ES? If so, please update the documents as necessary.	The Management of Hedgerows (England) Regulations 2024 main objective is to protect hedgerows on agricultural land due to their ecological importance. One of the key points in the Regulations relevant to the assessment of effects described in the **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] for hedgerows is the requirement to establish and maintain buffer strips. These strips must be kept as green cover on land within 2 meters of the centre of a hedgerow to prevent soil erosion and water run-off. As a result, the Applicants propose to update **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] to include the relevant new Regulations in the Policy, Legislation and Guidance section. Whilst the buffer strips were expected to be maintained during the construction phase, the Applicants will ensure that this is adopted by including details of how this will be secured and implemented in the **OEMP (Revision 4)** [REP2-029] therefore maintaining the current assessment of effects unaltered. This legal duty will extend to hedgerow within the Onshore Development Area that will fall under direct responsibility of the Applicants and Offshore Transmission Owner during the operational phase of the Projects but would not apply to areas that will be returned to landowners once construction is complete. **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] and the **OEMP (Revision 4)** [REP2-029] will be updated and submitted at Deadline 8 to allow any other updates to be captured prior to the end of examination.
ENC.1.6	**Local Nature Recovery Strategy** The ExA understands that ERYC is currently progressing the development of a Local Nature Recovery Strategy with the aim of completion by early 2025. **ERYC:** Can you provide an update on its preparation? **Applicants:** With reference to paragraph 4.6.12 of NPS EN-1, clarify to what extent the Strategy has been or would be considered in the review of off-site compensation proposals to be provided as part of the final BNG Strategy?	According to information published by the ERYC, their Local Nature Recovery Strategy (LNRS) is currently being developed and is expected to be published in early 2026. Subject to the ERYC LNRS being published in advance of the final BNG Strategy for the Projects being prepared, the LNRS will be used to account for the strategic significance and suitability of on or off-site BNG measures. The Applicants have consulted with the ERYC as part of **Appendix 18-10 - Biodiversity Net Gain Strategy** [APP-157], which is being updated at Deadline 5, and will continue to do so as they proceed with the preparations of the final BNG Strategy. Practicable opportunities to implement strategically significant BNG measures will be sought as part of the final BNG Strategy where possible.
ENC.1.7	**Embedded mitigation** Embedded mitigation measures in relation to terrestrial ecology are set out in ES Chapter 18 [REP2-019, table 18-4] and are also presented in the oEMP [REP2-029, table 1-1]. However, the information provided in the two tables would not appear to align and some of the embedded mitigation measures in the ES Chapter are missing from the oEMP, such as roosting bats or designated sites. Can you clarify why some of the embedded mitigation measures in the ES would not need to be included in the oEMP?	The Applicant can confirm that the embedded mitigation measures described in Table 1-1 in the **OEMP (Revision 4)** [REP2-029] will be updated to align with the information contained in Table 18-4 of **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] and submitted at Deadline 8 to allow any other updates to be captured prior to the end of examination.

1.9 Fish and Shellfish Ecology

Table 1-9 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Fish and Shellfish Ecology

I.D.	Written Question	Applicants' Response
FSE.1.1	**Worst-case location for the assessment of underwater noise impacts on herring** Action point 34 from ISH2 [EV5-003] stated: *'Natural England [RR-039] stated that the assessment of underwater noise impacts on herring does not use the worst-case location. Provide a response to the suggestion made by the ExA during ISH2 on whether a reassessment based on the most south-westerly point of the proposed DBS West array could result in greater overlap with the 'high' and 'very high' herring spawning potential habitat and whether this could result in a greater impact outcome? If so, would a reassessment be undertaken and submitted?'* Can you comment on the Applicants' response to this question [REP1-051]?	No response is required. Question directed to Natural England.
FSE.1.2	**Underwater noise modelling for herring** 1. Can you respond to NE's response to ISH2 Underwater noise action point 34 [REP1-063 Annex 2] in which it disputes your assertion that underwater noise modelling for herring was previously agreed during the Evidence Plan Process and Expert Topic Group meetings? 2. How do you intend to resolve the disagreement regarding underwater noise impacts on herring with NE prior to the close of the Examination?	1. It is acknowledged that full documentation of the analysis, methodologies, and modelling as submitted within the Application were not available at the Expert Topic Group stage. However, no feedback, or alternative approach as to the locations of underwater noise modelling was given when presented with the best available evidence at the time. In the absence of feedback, comment, or advice, assessment was undertaken as indicated to stakeholders and regulators at this stage based on best available information. Had the fundamentals of the modelling parameters proposed been opposed by Natural England then it would have been reasonable to expect this to have been raised at this juncture. Should modelling have been undertaken at alternative locations, no change in the assessment is predicted, as discussed in detail with Underwater Noise Action Point 34, Table 4-1 within **The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155] (and transcribed below for ease) and presented within the **Heat Mapping Report: Atlantic Herring and Sandee**l [AS-105]. *'The underwater noise modelling locations were chosen to give the greatest geographical spread across the DBS site, in the deepest water (acoustically the 'worst case'). In some specific circumstances, this means that the closest modelled location in the site may not be the closest location in respect of a specific receptor. In the case of herring, Natural England have correctly identified that the South West corner of DBS West Array Area is slightly closer to spawning potential than the West location that was used. However, the region of higher herring spawning potential informed by IHLS data used within the Kyle-Henney et al. (2024) figure can be seen to recess inwards to the south, reducing the overlap of areas of higher spawning potential with the >186dB threshold. There is no expectation for potential population level impacts on herring below this threshold.* *The 'mapping' of receptors in the marine environment, especially mobile ones as shown in **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105], should be treated as indicative of their location, location of spawning potential or nursery grounds etc, rather than as hard, fast absolute areas. This is due to the uncertainties with all marine data sets and the need therefore to combine a range of data sources to inform our understanding.* *As a result of the above, it is important to note that the real distance at which there may be disturbance is not precise, although numerically it is sometimes treated as such. Small changes in noise are not in general distinguishable, and at the ranges of potential disturbance of many kilometres, this should lead to very small*

I.D.	Written Question	Applicants' Response
		changes in the level of noise if it were from the SW location that would not materially change the risk of disturbance on fish. *Given therefore that the 'mapping' of both noise and receptor presence is not precise (but based nonetheless on best available evidence), the Applicants consider that the assessment is robust and reassessment is not necessary.'* 2. Natural England has advised [REP2-068] that comments on Fish and Shellfish will be provided at Deadline 3. The Applicants will review any comments and look to further progress discussions with Natural England during the Examination process.
FSE.1.3	**Fish and shellfish ecology worst case scenario** Table 4-4 [AS-141] does not include reference to Impact 4 under Operation and Maintenance effects (page 45). Can you confirm whether this is correct or whether Impact 4 has been omitted and update the document as necessary?	Impact 4 as assessed during the Construction phase relates to noise associated with piling and Unexploded Ordnance (UXO) only. Impact 4 during the Operation and Maintenance phase relates to noise associated with operational turbines and vessels. The proposed changes to the Projects' Design Envelope do not change the worst case parameters assessed within **Chapter 10 Fish and Shellfish Ecology** [APP-091] for these impacts and therefore have not been discussed further within Table 4-4. It is noted that this should have been stated within Paragraph 30 of Section 4.3.
FSE.1.4	**Herring spawning potential areas** Can you submit enlarged images of Figure 10-8 in ES Chapter 10 – Fish and Shellfish Ecology - Figures [APP-092] focusing on the East and West array areas in order to view the '*recoverable injury*' and '*mortality/potential mortal injury*' contours more precisely, in relation to the herring spawning potential areas?	Please note that revised figures relating to the mapping of underwater noise relative to herring spawning potential have been updated and provided within the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105]. These revised figures utilise the updated Kyle-Henney *et al*. (2024) methodology, and figure 10-8 presented within **Chapter 10 Fish and Shellfish Ecology Figure 10-1 to Figure 10-1**0 [APP-092] is no longer considered current. A figure as requested is provided, utilising the updated methodology (see **Appendix C**).
FSE.1.5	**Sensitivity grading** Can you explain the rationale for a conclusion of medium sensitivity for the eggs and larvae of demersal fish and pelagic fish species and for shellfish (ES Chapter 10 [APP-091], paragraphs 144 and 145)?	A determination of medium sensitivity has been made for eggs and larvae of demersal and pelagic fish, and shellfish, based on the definitions provided within Table 10-6. It is anticipated that eggs and larvae and shellfish have more limited adaptability (low mobility) when compared to more mobile individuals. Some species within these groups also have the potential to exhibit lower tolerance to increased Suspended Sediment Concentration (SSC) and sediment settlement due to their benthic life stages where smothering and oxygen starvation effects may occur. These receptors do not reach the criteria for high sensitivity, as a permanent recovery is anticipated to occur, and they do have a known level of tolerance and adaptability. The recovery time of these receptors is likely to be shorter than the 2-10 years indicated within the definition of medium sensitivity within Table 10-6 of **Chapter 10 Fish and Shellfish Ecology** [APP-091] (likely to be within two years as usual spawning cycles occur). However, as these receptors meet a number of the criteria presented within the definition of medium sensitivity, a precautionary assessment of medium sensitivity was made.
FSE.1.6	**Fish population recovery times** Can you provide references or other evidence to support the recovery time assumption that impacts on fish populations would be negligible or minor, based on their recovery within two to ten years?	As noted within the response to FSE. 1.6. the recovery period is likely to be shorter than the 2-10 years presented within the definition of medium sensitivity in Table 10-6 of **Chapter 10 Fish and Shellfish Ecology** [APP-091]. This recovery period should be considered as highly precautionary and is determined based on the wider definition of medium sensitivity best fitting certain receptor groups. The impact of increased SSC and sediment settlement on those receptor groups assessed as having medium sensitivity is assessed as minor adverse, rather than negligible. Recovery of these receptors is likely to occur within two years as usual spawning cycles take place, especially when considering the limited extent of the impact when compared to the extent of the wider population and spawning habitat available to each species.

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FSE.1.7	**Fish habituation to impulsive noise** NE's RR [RR-039] does not agree that the references that you use (Chapman and Hawkins, 1969; Peña *et al*, 2013) to justify fish habituation to impulsive noise from pile driving are applicable and advises that habituation should not be taken into account in the assessment. Is there any other supporting evidence to justify the use of habituation in addition to your statement in your response to NE's RR [AS-048]?	These citations have been provided within **Chapter 10 Fish and Shellfish Ecology** [APP-091] to demonstrate that habituation of fish to both impulsive and non-impulsive noise sources has been documented within literature, noting that whilst the sources of noise may not be directly comparable it does support the potential for habituation to occur. This information is provided only in reference to the 135dB re 1µPa2s behavioural response limits (and not in reference to any other impact thresholds) to highlight the inadvisability of the application of the findings of the Hawkins *et al.* (2014) paper when compared to the baseline environment present within the Offshore Development Area. Issues relating to the consideration of the 135dB threshold when determining the likely significant effects of a development are discussed in more detail within the memo submitted to the MMO dated 2nd November 2023, and within REP2-061:2.2.8; REP2-061:2.2.14; and REP2-061:2.2.17 of **The Applicants' Reponses to Deadline 2 Documents** [document reference 13.3].
FSE.1.8	**Lincolnshire Wildlife Trust concerns** Could you signpost where direct damage and impacts to fish and shellfish are considered in the ES? The ExA notes your response [PDA-013] to the Lincolnshire Wildlife Trust's RR [RR-028], which suggests that this matter was not scoped out of the assessment as impacts to fish and shellfish were considered in the RIAA, but would welcome clarity on whether the assessment presented in the RIAA in relation to the Conservation of Offshore Marine Habitats and Species Regulations 2017 can be taken to fulfil the separate legal requirements set by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.	The Applicants acknowledge that the response in **The Applicants' Responses to Relevant Representations** [PDA-013] largely focussed on the HRA aspects and signposting to that assessment as Lincolnshire Wildlife Trust's comments were considered to refer to the Dogger Bank in terms of its designation as a Special Area of Conservation (SAC). However, for clarity, direct damage is assessed within Impact 1 Temporary Habitat Disturbance to Fish and Shellfish Species and Spawning and / or Nursery Grounds, section 10.6.1.1. of **Chapter 10 Fish and Shellfish Ecology** [APP-091]. It is noted that for the sake of brevity the impact name does not reference "direct damage", however it is described within the opening paragraph (106) of this section, and direct damage impacts are assessed throughout the section. The Applicants consider therefore that impacts to fish and shellfish are robustly assessed in their own right in Environmental Impact Assessment (EIA) terms for project alone and cumulatively (in **Chapter 9 Benthic and Intertidal Ecology** [APP-085] and **Chapter 10 Fish and Shellfish Ecology** [APP-091] and as part of the SAC in terms of '*the biological structure and function in terms of the key and influential species and characteristic communities present*' within the **Report to Inform Appropriate Assessment (RIAA) Habitats Regulations Assessment (HRA) Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] both for project-alone and in-combination.
FSE.1.9	**Sensitivity of sandeel habitat to disturbance** The Lincolnshire Wildlife Trust [RR-028] disagrees with your appraisal of sensitivity to sandeel habitat disturbance. Can you provide clarification of your rationale and respond to the Trust's concerns about this and related matters such as the cumulative assessment, mitigation and 'due diligence' as they do not appear to have been addressed in your response [PDA-013] to the Lincolnshire Wildlife Trust's RR [RR-028]?	Cumulative impacts are assessed within **Chapter 10 Fish and Shellfish Ecology** [APP-091] Section 10.7.3. The cumulative assessment considers all other local projects with a temporal overlap, and each impact is considered where appropriate. The methodology employed is consistent with industry standard approaches used for consented projects (most recently SEP and DEP, Norfolk Vanguard and Boreas, East Anglia ONE North and TWO). In-combination effects on sandeel as part of the SAC in terms of '*the biological structure and function in terms of the key and influential species and characteristic communities present*' are considered within the **RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051] (section 6.4.2.2). Potential impacts to the Dogger Bank sandeel population have been assessed throughout **Chapter 10 Fish and Shellfish Ecology** [APP-091], the detailed EIA assessments are then cross-referenced to throughout the **RIAA HRA Part 2 of 4 – Annex I Offshore Habitats and Annex II Migratory Fish** [APP-046, updated as AS-051] rather than repeated. For some impacts, including 'Temporary Habitat Disturbance to Fish and Shellfish Species and Spawning and / or Nursery Grounds' (section 10.6.1.), they are considered the most sensitive species of the demersal fish receptor group and have been discussed in depth. As the population of sandeel within the Dogger Bank is expected to have an ability to adapt to, and a tolerance of the impacts associated with the proposed Projects and is also expected to make a permanent recovery following finalisation of works that may contribute to habitat disturbance, it is not considered as

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		having high sensitivity. It is acknowledged that whilst impacts may occur to sandeel at an individual level, it is the adaptability, vulnerability, and recoverability of the population as a whole that is assessed. A determination of medium sensitivity, and subsequent findings of the assessment are considered appropriate considering the scale of works relative to the likely sensitivity of sandeel at a population level, on which this assessment is based. As no impacts assessed within **Chapter 10 Fish and Shellfish Ecology** [APP-091] are assessed as likely to have a moderate or major significance of adverse effect on the sandeel population, no mitigation is proposed. In addition, it is worth noting that, given the impacts of relevance to sandeel (i.e. direct mortality from construction activities, permanent habitat loss or habitat disturbance during construction, operation or decommissioning) the only mitigation available is reduction the footprint. The Applicants have already made all efforts to reduce the footprint of the Projects through the following means and therefore consider that 'due diligence' with regard to mitigation hierarchy has been employed. **Pre-application** • **Chapter 5 Project Description (Revision 3)** [REP1-009]: ○ Gravity base and suction bucket foundations were removed for all turbines and platforms located within the Array Areas; ○ Maximum monopile pile diameter was reduced; ○ Reduction in the maximum number of Offshore Export Cables from six to four following the removal of High Voltage Alternating Current (HVAC) technology from the Projects Design Envelope; and ○ Reduction in maximum platform number from eleven to eight following the removal of HVAC technology from the Projects Design Envelope. **Post-application** • **Project Change Request 1 – Offshore and Intertidal Works** [AS-141]: ○ Reduction in number of offshore platforms in the Projects' Design Envelope, from eight to three within the Array Areas, including reductions in associated seabed preparation and scour protection; and ○ Reduction of cabling within the Array Areas, plus associated seabed preparation and cable protection. • **Cable Statement (Revision 3)** [REP2-039]: ○ Bundling of export cables. It should be further noted that the Applicants are seeking to consent a design envelope and will, where practicable, further reduce the footprints of the proposed Projects where possible prior to construction.
FSE.1.10	Dogger Bank SAC and Southern North Sea SAC – expansion of receptors to FFC SPA and cumulative impacts with Dogger Bank D OWF 1. Can you expand Document 6.1.2 Appendix B - Sandeel Habitat Potential in the Dogger Bank SAC and Southern North Sea SAC [APP-050] to include the FFC SPA receptors, as advised by NE [RR-039, E1.4]? If not, why not?	1 Seabirds are mentioned in section 1.2.1 of **Appendix B - Sandeel Habitat Potential in the Dogger Bank SAC and Southern North Sea SAC** [APP-050], this would include consideration of any species from the Flamborough and Filey Coast (FFC) Special Protection Area (SPA) present within the Array Areas (i.e. kittiwake, guillemot, razorbill, puffin etc). These could be individually listed if required and an update provided at Deadline 4, but the Applicants do not consider that this adds value. 2 The Scoping Report issued for Dogger Bank D in late June 2024 (following submission of the Projects DCO application) provides some details of the proposed project design (see Table 3-1 of that report) but does not provide a detailed worst case scenario with seabed footprints. As such, it is not possible to update **Appendix B – Sandeel Habitat Potential in the Dogger Bank SAC and Southern North Sea SAC** [APP-050]. Note that for the in-combination assessment presented in Appendix B, the boundary of Dogger Bank D (which has not changed) is

I.D.	Written Question	Applicants' Response
	2. Regarding cumulative impacts from OWFs as set out in the RIAA Appendix B – Sandeel Habitat Potential in the Dogger Bank SAC and Southern North Sea SAC [APP-050], the ExA notes that information including an EIA Scoping Report dated June 2024 is available for Dogger Bank D OWF. Can the above document be updated to include Dogger Bank D OWF, based on the information currently available? If so, please can this be actioned and submitted into the Examination?	used as the basis of the calculation of the percentage of potential sandeel habitat within that project's array area. It is assumed that the EIA brought forward for consenting Dogger Bank D in due course would provide a cumulative assessment of the Dogger Bank D and Dogger Bank South (DBS) Projects.
FSE.1.11	**Heat maps for herring and sandeel** Can you respond to the MMO's concern expressed in its Deadline 2 submission [REP2-061] that only a single year (2020) of vessel monitoring data has been used to inform the heat maps for both herring and sandeel? The MMO states a minimum of 10 years of data should be presented with respect to the heat maps for both herring and sandeel. The MMO suggests this should either be corrected to present 10 years of vessel monitoring data, or the Applicants should be able to demonstrate why the spatial data provided in the 2020 vessel monitoring data is more expansive than the sum of 10 years of vessel monitoring activity.	The Vessel Monitoring System (VMS) data presented within the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105] (referenced as MMO, 2023) represents fishing data from the years 2016-2020. It is labelled 2020 VMS data in the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105] due to the most recent revision date being 1st January 2020 but referenced as MMO (2023) in compliance with the data copyright (for further details see the attribution statement section within MMO, 2023). Whilst this data set only represents five years' worth of data, this was deemed sufficient in determining the baseline fishing activity for the purposes of the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105]. The role of this data in the Kyle-Henney *et al.* (2024) methodology is to identify areas in which fishing activity occurs rather than providing detail on the level of fishing activity in any one year. The addition of another five years of fishing data (so that ten years would be achieved) will not alter the conclusions of the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105] given the distribution of fishing data throughout the Offshore Export Cable Corridor and within the Array Areas (as presented by Figure 2-5 within the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105], as almost the whole of the Offshore Development Area is indicated as being fished. A response to the MMO's query in relation to this matter has been provided by the Applicants at Deadline 3 (see Table 2-3 in **The Applicants' Responses to Deadline 2 Documents** [document reference 13.3].
FSE.1.12	**Sandeel habitat assessment** The MMO has expressed disappointment that you have not actioned a previous request to supplement the sandeel habitat assessment with data from the North Sea Sandeel Survey, which is carried out in Sandeel Area 1 in December each year [RR-030]. Can this data be presented now or later in the Examination? If not, can you provide a justification for why not?	The Kyle-Henney *et al.* (2024) methodology describes the use of sandeel records in the OneBenthic database within the heat mapping process; with appropriate caveats relating to areas without sandeel presence data not being reflective of areas where sandeel are not present. The North Sea Sandeel Survey (NSSS) data has several sampling stations within and around the DBS Array Areas, these overlap with the locations of OneBenthic samples which were determined by the **Heat Mapping Report: Atlantic Herring and Sandee**l [AS-105] as being of high confidence supporting habitat for sandeel. Therefore, the inclusion of NSSS would not add benefit to the assessment or change the conclusions of the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105]. Furthermore, sandeel were originally considered to be present within the Array Areas and assessed as such within the EIA, and therefore the addition of NSSS data would not alter the original EIA conclusions made within the Environmental Statement (ES). An investigation of the NSSS data has been undertaken and presented for the avoidance of doubt. Three sampling stations are located >10km south of the cable corridor but no samples are located within the cable corridor beyond the boundary between the Array Areas and Offshore Export Cable Corridor. These findings reflect the sandeel population determined within the EIA baseline and assessed within. The 2014-2024 NSSS sandeel presence data has been presented in Figure 1-1 of **Appendix A of The Applicants' Responses to Deadline 2 Documents** [document reference 13.3] for transparency. This evidence has been submitted at Deadline 3.
FSE.1.13	**Temporal restriction on all piling and UXO clearance activities during the Banks herring spawning season**	The majority of impact pathways for the Projects relating to Atlantic herring spawning grounds occur within the Offshore Export Cable Corridor, with some degree of overlap with the temporary threshold shift (TTS) extent for

I.D.	Written Question	Applicants' Response
	The MMO considers the removal of the electrical switching platform from the offshore export cable corridor to be positive, as it would remove the need for piling to be carried out within an area of high potential herring spawning habitat near Flamborough Head [REP2-061]. However, it maintains its recommendation for a temporal restriction on all piling and UXO clearance activities during the Banks herring spawning season (1 August – 31 October inclusive). The MMO considers this necessary because of underwater noise behavioural impacts that would occur over a large area of the main Flamborough Head spawning ground, with the potential to disturb adult herring engaged in spawning at the spawning ground and the deterrence of adult herring migrating towards the spawning ground. The MMO maintains that underwater noise impacts on herring should be appropriately mitigated but that you have not provided any further information as to how underwater noise disturbances on herring could be mitigated. How do you respond to this position and how are you intending to resolve this disagreement by the close of the Examination?	piling activities occurring in the north-eastern extent of the potential spawning habitat as presented in Figure 2-1 of the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105]. Whilst the extent of TTS is not unusual for piling activities within an offshore wind farm array (~50km), it is noted that there is potential for underwater noise impact to Atlantic herring. Please refer to **Chapter 10 Fish and Shellfish Ecology** [APP-091] for the detailed assessment, noting that the conclusion of the assessment is that these impacts are Not Significant in EIA terms. As the findings of the assessment are deemed not to be significant no mitigation is proposed or deemed necessary in line with the standard principles of EIA. The application of a temporal restriction on piling activities would not only be disproportionate from an impact assessment perspective, but it would have a disproportionate effect on the timetable for the delivery of the Projects. Restricting construction for much of the summer would delay completion of the Projects, reducing their ability to contribute to the UK Government's 2030 climate targets in a timely manner. It should be noted that the acoustic envelope assessed is a worst case which may be reduced and refined as the Projects mature. In addition, mitigation may be adopted for other fauna. One or both of these possibilities may be realised which would provide benefits in terms of the reduction of acoustic impacts of the Projects on taxa such as herring. When using the industry standard for assessing the potential for a significant effect from TTS (Popper *et al.*, 2014), the International Herring Larval Survey (IHLS) data shows that the overlapping potential spawning habitat is not highly productive (consistently 1-50 larvae per m² with an isolated sample of 50-200 larvae per m² north of KP90 – refer to Figure 2.7 of the **Heat Mapping Report: Atlantic Herring and Sandeel** [AS-105]), and therefore the sound produced during piling activities is highly unlikely to result in any significant effect to the North Sea Autumn Spawning Atlantic herring population. As originally described within a letter submitted to the MMO dated 2nd November 2023, the Applicants strongly oppose the use of the 135dB behavioural threshold (which was determined for sprat Sprattus sprattus) for the assessment of potential impacts to Atlantic herring Clupea harengus. Whilst sprat and Atlantic herring are both species within the family Clupeidae, this is not a suitable justification for use of this threshold within impact assessments given the evidence presented by Hawkins *et al.* (2014). The scientific publications upon which this threshold is based (Hawkins and Popper, 2014; Hawkins *et al.*, 2014[28]) **explicitly state that: "these data cannot yet be used to define the sound exposure criteria"; and "We would stress, however, that it would be premature to use these data to define sound exposure criteria for sprat and mackerel" respectively**. The Applicants would further contend that a behavioural response can equate to as little as an ephemeral change in swimming speed and / or direction – a behavioural response which is unlikely to result in a likely significant environmental effect that the EIA process is design to assess. Therefore, the use of 135dB as a behavioural threshold should not be incorporated into MMO advice for the purposes of EIA. Guidance for impact thresholds focussing on matters pertaining to potential likely significant environmental are provided within Popper *et al.* (2014), (published the same year, and noting the common authors between these publications), the underwater noise impact thresholds presented are considered best practice guidance since its publication and are the ones used in **Chapter 10 Fish and Shellfish Ecology** [APP-091]. Where significant effects are assessed as likely, the Applicants' preferred mitigation is a change to work practices, not a time restriction. On a precautionary and without prejudice basis, the Applicants have included noise reduction systems, such as Noise Abatement System (NAS), within the Projects' procurement strategy as an optional element, allowing the Projects to consider the use of NAS at the earliest point during the procurement process. This would allow the Projects to utilise this mitigation, should it be required. The requirements would be determined post-

[28] Hawkins A.D., and Popper A.N. (2014). Assessing the Impact of Underwater Sounds on fishes and Other Forms of Marine Life. Acoust. Today, 10(2): pp. 30-41.

I.D.	Written Question	Applicants' Response
		consent, based on the final project design. The driver for this mitigation is for potential impacts to marine mammals, however, if applied, there would be secondary benefits for other receptors susceptible to noise impacts. Additionally, there is potential for the acoustic impacts of the Projects to further reduce once the final acoustic envelope has been determined following the completion of detailed design. Based upon the evidence provided throughout this document in response to the MMO's comments, the Applicants do not consider a requirement for the implementation of a temporal restriction for the purpose of mitigating potential effects upon spawning Atlantic herring to be proportionate, as this requirement is based on an inappropriate threshold as discussed above.
FSE.1.14	**Transboundary 32 response – The Netherlands** Can you comment on whether the Applicants have adequately addressed your concerns [OD-012] in the Applicants' Responses to Regulation 32 Transboundary Consultation Responses [AS-117] in relation to fish and shellfish ecology? If you are not satisfied, can you explain why not and provide suggestions as to how they could be resolved?	No response is required. Question directed to The Netherlands Ministry of Infrastructure and Water Management.

1.10 Geology and Ground Conditions

Table 1-10 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Geology and Ground Conditions

I.D.	Written Question	Applicants' Response
Geology and ground conditions		
GGC.1.1	**Impacts on existing utilities** ES Chapter 19 [APP-158, paragraph 148] states, '*Potential impacts associated with the Onshore Development Area on existing utilities, in relation to electricity cables, telecommunications and high pressure gas pipelines, are discussed in Volume 7, Chapter 21 Land Use*'. Can you signpost where in ES Chapter 21 [REP2-022] contamination and ground gas effects on existing utilities are assessed?	It is acknowledged that the text contained within **Chapter 19 Geology and Land Quality** [APP-158] paragraph 148 should state that the potential impacts assessed within **Chapter 21 Land Use (Revision 3)** [REP2-022] are associated with the usage and disruption to the existing utilities only and not impacts relating to contamination in order to differentiate the two chapters and the assessments undertaken. Potential impacts with regards to contamination on existing utilities during the construction phase of the Projects are discussed within section 19.6.1.5 of **Chapter 19 Geology and Land Quality** [APP-158]. Potential impacts associated with the operation of the Projects on utilities installed to support the Projects (e.g., water supply pipes) are discussed within section 19.6.2.4 of **Chapter 19 Geology and Land Quality** [APP-158]. The effects of contamination and ground gas are not assessed in relation to existing utilities because the responsibility of the infrastructure is with the existing utility providers. If their infrastructure is laid in an area where potential contamination is present then their risk assessment should cover these issues and ownership would sit with the utility provider. It would only become an issue to the Projects if existing contamination was disturbed during intrusive works which then impacted upon existing utilities and then there still has to be a pollutant linkage. There are minimal instances where a potential interaction may occur between the Projects, existing contamination and existing mapped utilities, these effects would be determined on a case by case basis because the pollutant linkage would be different depending on what the source is and what the receptor is and thus what the solution would be. Where ground contamination is identified this is secured by Requirement 29 in the **Draft DCO (Revision 6)** [document reference: 3.1] whereby the Local Planning Authority will be consulted in consultation with the Environment Agency.
GGC.1.2	**Utility corridor mitigation** ES Chapter 19 [APP-158, paragraph 209] states, 'if utilities corridors for the Projects are within land affected by contamination, construction of clean or lined service corridors will be installed to protect land users and utilities'. Can you clarify: • What is meant by lined corridors and would these be impermeable? If so, how have these been assessed in the ES? (For example, impacts on groundwater flows.) • Would this be limited to new utility corridors serving the Proposed Development or would existing utilities be retrospectively lined? • Are utility providers supportive of the approach?	Should it be determined that there is a need for clean or lined service corridors, the materials used would be dependent on the type and extent of contamination identified. For example, although unlikely for the Projects, if landfilled materials were encountered a lined impermeable corridor would need to be designed to prevent ground gas using the Onshore Export Cable and Onward Cable Connection ducts as a preferential pathway, it is also noted that the cable duct depth across the majority of the Projects means that it would be above the groundwater table and therefore there would be minimal impact if at all to groundwater flows. It is also worth noting that based on **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161] it is unlikely that the Projects will be constructed through land affected by contamination that would require such mitigation. It is not possible to expand further at this stage on what has been included within paragraph 209 of **Chapter 19 Geology and Land Quality** [APP-158,], or undertake an impact assessment at this time because the solution is bespoke to the contamination that may be identified as part of targeted ground investigations. These will be undertaken to determine the extent and source of any contamination, as part of the contaminated land and groundwater scheme as described in paragraph 134 of the **Outline Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025], and secured by Requirement 19 in the **Draft DCO (Revision 6)** [document reference: 3.1]. Where ground contamination is identified this is secured by Requirement 29 in **the Draft DCO (Revision 6)** [document reference: 3.1] whereby the Local Planning Authority will be consulted in consultation with the Environment Agency.

I.D.	Written Question	Applicants' Response
		Existing utilities which are not disturbed directly by the Projects would not be retrospectively lined because it is the utilities providers responsibility, rather than the Applicants, to make sure that they are not creating preferential pathways.
GGC.1.3	**Landfill contamination** Are any of the identified historic landfill sites of concern to you and, having regard to Requirement 19 of the draft DCO and the Outline Pollution Prevention Plan [REP1-025, Appendix D], do you consider that any further assessment is necessary at this stage? Please provide reasoning with your response.	While this question is not addressed to the Applicants, a response has been provided to aid the Examining Authority's understanding of the Applicants' position. In relation to historic landfill sites these are identified in **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161]. There is only one historic landfill identified for which a potential pollutant linkage may exist, ground investigation has been undertaken and has determined that there is no evidence of the landfills existence within the DCO limits. Where ground contamination is identified this is secured by Requirement 29 in the **Draft DCO (Revision 6)** [document reference: 3.1] whereby the Local Planning Authority will be consulted in consultation with the Environment Agency on a contaminated land and groundwater scheme.
GGC.1.4	**Contamination removal** ES Chapter 19 [APP-158, paragraphs 96 and 125] explains if areas of concern or contamination are encountered, a remediation strategy would be developed and agreed with the relevant bodies. Can you explain if excavation and removal of contaminants would be a potential remediation approach? If so, can you confirm how the impact of this activity has been assessed in the ES? (For example, additional vehicle movements to facilitate material removal, a longer construction phase.)	It is not possible at this time to determine the types and duration of any remedial activities that may be required should contamination be encountered as this would be dependent on the type and extent of any contamination identified. It is a bespoke activity based on the issue being remediated. Based on **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161], it is unlikely that the Projects will be constructed through land affected by contamination that would require remediation. As such, it is not possible to include an assessment of remedial activities within the ES as there could be a wide range of suitable and proportionate solutions available.
GGC.1.5	**Contamination remediation and mitigation** Are you content that any remediation or mitigation potentially required, but not yet identified, in relation to contamination, perched waters within made ground, or groundwater from dewatering activities could be delivered within the Order Limits?	While this question is not addressed to the Applicants, a response has been provided to aid the Examining Authority's understanding of the Applicants' position. As detailed in our response to GGC1.3 should ground contamination be identified this is secured by Requirement 29 in the **Draft DCO (Revision 6)** [document reference: 3.1] whereby the Local Planning Authority will be consulted in consultation with the Environment Agency on a contaminated land and groundwater scheme.
GGC.1.6	**Contamination remediation and mitigation** Chapter 5 [REP1-009, Figure 5.9] provides a typical cross section of the proposed onshore export cable corridor but it is unclear where tanks, lagoons and surface water drainage features would be constructed. Can you update this figure and evidence that all likely remediation and mitigation features, together with other project related spatial constraints, could be delivered within the Order Limits of the proposed onshore export cable corridor?	Based on **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161] it is unlikely that the Projects will be constructed through land affected by contamination that would require remediation and associated plant to undertake the remediation. The drawing is an indicative cross section establishing the soil storage requirements and shows the preferred localised storage of topsoil soil and subsoil to minimise soil movements. The soil storage analysis used to develop the drawing assumes stockpiles would occupy 90% of the length of the Onshore Export Cable Corridor to allow for gaps in the soil storage mounds. This allows for providing areas for items such as mobile plant, welfare units, groundwater management, haul road crossings, access points and other necessary equipment or features to facilitate the construction activities. The excavation method is a sequential process, with the use of cable ducts enabling the Contractor to seek to minimise the amount of open excavation as they progress along the section. Tanks, lagoons and surface water features may **be required as part of the Surface Water Management Plan, as detailed in paragraph 189 of the** OCoCP (Revision 3) [REP1-025] but, would not be continuous along the Onshore Export Cable Corridor in the same way as trenches, top soil and subsoil storage and haul roads. They would be deployed where required, with soil storage adjusted to provide specialised areas, if required.

I.D.	Written Question	Applicants' Response
		At this stage it is not possible to speculate what may or may not be required therefore it is not possible to update the drawing in relation to these features until the Surface Water Management Plan is prepared by the Contractor at the detailed design stage. However, the Applicants are confident that they could be delivered within the Order Limits of the Onshore Export Cable Corridor.
GGC.1.7	**Cumulative effects assessment** Can you provide justification to support the conclusion of no potential for significant cumulative effects in ES Chapter 19 [APP-158, Table 19-14]. Further, many of the entries only refer to no construction phase overlap. Could this be updated to include the assessment of the potential for operation phase overlaps and associated impacts?	It has been determined that there would be no potential significant cumulative effects on geology and ground conditions receptors within **Chapter 19 Geology and Land Quality** [APP-158]. Larger DCO projects are anticipated to incorporate mitigation measures protective of geology and ground conditions receptors that are similar in nature to those for the Projects thereby limiting the potential for moderate or major adverse cumulative effects to occur. In addition, some smaller projects (for example the Strawberry Fields expansion scheme) are considered to be at a scale and nature that cumulative effects on geology and ground conditions receptors are considered unlikely to occur. It is anticipated that the other projects identified as having a potential spatial overlap with the Projects would have similar operational practices and mitigation measures as the Projects in place. Therefore, it is anticipated that there would be no potential for cumulative effects to occur on geology and ground conditions receptors during the operational phase of the Projects.
Mineral resources		
GGC.1.8	**Mineral Safeguard Area (MSA)** ES Chapter 19 [APP-158, Table 19-11] explains affected areas of sands and gravel are 0.03% and chalk is 0.002% of the total MSA within the ERYC administrative boundary. Can you identify the percentage of affected area relevant to the specific mineral availability within the ERYC MSA?	Please could further clarity be given on this point as the numbers provided within **Chapter 19 Geology and Land Quality** [APP-158] are the percentages of affected areas relevant to mineral availability within the East Riding of Yorkshire Council (ERYC) Mineral Safeguard Area (MSA).
GGC.1.9	**Mineral risk assessment** ES Chapter 19 [APP-158, paragraph 199] explains a mineral risk assessment may be 'undertaken to determine the amount of mineral at risk from sterilisation and the viability of extraction. Where viable, consideration will be given to the extraction of the mineral resource during construction'. Given the mineral risk assessment may be undertaken, explain how this mitigation can be relied upon to reduce the magnitude of impact to negligible [APP-158, paragraph 200]? Your response should consider whether the mineral risk assessment should be committed to and how this should be secured.	**Chapter 19 Geology and Land Quality** [APP-158] paragraph 143 states that 'A Mineral Resource Assessment (MRA) would be undertaken (if required) post consent, and prior to the commencement of construction works, to provide an indication of the likely quality and extent of the mineral resource, the commercial viability of extraction and environmental impact'. The requirement for a MRA would be identified through consultation with ERYC and is secured through the **Draft DCO (Revision 6)** [document reference 3.1], DCO Requirement 19 and would be undertaken in accordance with paragraphs 158 – 160 of the **OCoCP (Revision 3)** [REP1-025]. Paragraph 199 of **Chapter 19 Geology and Land Quality** [APP-158] refers back to section 19.6.1.4.5 which contains paragraph 143 discussed above. It is acknowledged that the wording within paragraph 199 should mirror that of paragraph 143 to state that a MRA 'would be undertaken (if required)' rather stating one may be undertaken to avoid confusion. It is worth noting that in **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161] there are Figures 19-2-6a to 19-2-6c and Figures 19-2-7a to 19-2-7c which show that there are very small areas of overlap with the MSA, for instance Sand and Gravels will only be intersected at several small locations and at a very shallow depth. Chalk is only intercepted at shallow depth north of the A1035. The amount of overlap is unlikely to result in a large scale removal operation, should extraction be deemed economically viable.
GGC.1.10	**Mineral risk assessment**	It is not possible at this time to include an assessment within **Chapter 19 Geology and Land Quality** [APP-158] as the volume of viable minerals, the handling techniques or the number of journeys required to transport the minerals (and distance of travel) is not known. It is worth noting that in **Appendix 19-2 Geo-Environmental Desk Study and**

I.D.	Written Question	Applicants' Response
	Should the mineral risk assessment find prior extraction of the mineral is viable [APP-158, paragraph 199], can you provide or signpost where the environmental impact of extracting, handling and transporting extracted materials has been assessed in the ES? If this hasn't been assessed, explain how you have considered the worse-case scenario.	**Preliminary Risk Assessment Report** [APP-161] there are Figures 19-2-6a to 19-2-6c and Figures 19-2-7a to 19-2-7c which show that there are very small areas of overlap with the MSA, for instance Sand and Gravels will only be intersected at several small locations and at a very shallow depth. Chalk is only intercepted at shallow depth north of the A1035. The amount of overlap is unlikely to result in a large scale removal operation. The assessment undertaken within **Chapter 19 Geology and Land Quality** [APP-158] is considered to be based on a worst-case scenario as it considers the total area of MSA located within the Order Limits with the assumption that all minerals within the MSA could be of sufficient quality for extraction (see sections 19.6.14 and 19.6.2.3 of **Chapter 19 Geology and Land Quality** [APP-158]).
Designated sites		
GGC.1.11	**Local geological site sensitivity** Can you explain why local geological sites are identified as low sensitivity in ES Chapter 19 [APP-158, Table 19-7]? This appears to be inconsistent with the documents referenced in response to ISH2 agenda item 13, action point 43 [AS-155]. Specifically, Table 2 of the *Institute of Environmental Management & Assessment Guide: A New Perspective on Land and Soil in Environmental Impact Assessment* and Table 3.11 of *Design Manual for Roads and Bridges, LA 109 Geology and Soils*) both seem to identify such a receptor as medium sensitivity. (The ExA notes the ES is consistent with the above the referenced documents elsewhere. For example, Agricultural Land Classification (ALC) grade 3b is consistent with the guidance documents and identified as 'medium sensitivity' in [APP-158, Table 19-7] and [REP2-022, Table 21-6].)	Table 3.11 of Design Manual for Roads and Bridges (DMRB), LA 109 Geology and Soils states that geology of local importance / interest is considered to have low sensitivity, whereas geology of regional importance is given a medium sensitivity. Therefore, the sensitivity bandings given in Table 19-7 of **Chapter 19 Geology and Land Quality** [APP-158], which was based on the DMRB guidance mirror those included within the guidance as follows: • "Medium sensitivity Geology: of regional importance with limited potential for replacement (e.g. RIGS). Geology meeting regional designation citation criteria which is not designated as such. • Low sensitivity Geology: of local importance / interest with potential for replacement (e.g. non designated geological exposures, former quarry's / mining sites)." It is acknowledged that Local Geological Sites (LGS) and Regionally Imported Sites (RIGS) should be of medium sensitivity and that Geological sites of Local Importance should be of low sensitivity.
GGC.1.12	**Local geological site** Can you explain how the Skipsea Drain Local Geological Site has been protected against harm or loss from the Proposed Development, and what opportunities have been taken to enhance it?	Skipsea Drain is identified by ERYC as a LGS on the GIS data provided within their Local Plan 2016 which is included on **Figure 19-3a** [REP1-013]. However, the citation in Appendix C of the ERYC document 'Local Wildlife Sites in the East Riding of Yorkshire - Appendix C' provided on the ERYC Website (2023[29]) does not contain Skipsea Drain as an LGS. Therefore, the documentation provided on the ERYC website does not provide the evidence base for Skipsea Drain being an LGS or a Regionally Important Geological Site (RIGS) and neither do the Hull Geological Society the organisation that designates these sites. Following further investigation into the sources above it would appear that its designation as a LGS within the ERYCs Local Plan is incorrect and this has been confirmed by Hull Geological Society in that they have never classified Skipsea Drain as a LGS sites. The site therefore doesn't need to be considered within the ES.
GGC.1.13	**Geological Site of Special Scientific Interest (SSSI) buffer zones** What is the justification for the selected buffer zones used to assess the potential geological effects of the Proposed Development [APP-161, paragraphs 12 and 13]. Explain why it is appropriate to use varying buffer zones (250m and 1000m) and provide references to support this.	As discussed in paragraph 12 of **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161], a 250m buffer has been applied to the Onshore Development Area to identify potential sources of contamination and receptors that may be present (the Site of Special Scientific Interest (SSSI) being a receptor). It is considered that, with the exception of the below, points beyond 250m would not impact upon or be impacted by the Projects. This approach is considered good practice based on both professional judgement and a qualitative assessment of the conceptual site model (i.e., source - pathway – receptor). The 250m distance originates from the Environment Agency in the 1990s and related to their perception of over what distance a landfill may pose risk to receptors. This has since become an industry standard distance and although can not be directly referenced has been utilised successfully for over 30 plus years.

[29] East Riding of Yorkshire Council (2023) Local Sites in the East Riding of Yorkshire. Available at: https://www.eastriding.gov.uk/environment/sustainable-environment/nature-conservation-and-wildlife/important-sites-for-wildlife/ (Accessed: 10 March 2025).

I.D.	Written Question	Applicants' Response
		As discussed in paragraph 13 of **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161], the 1km buffer zone has been applied to Control of Major Accident Hazard sites as they pose a high risk to receptors depending on what their associated designation is. A 1km buffer has also been applied to groundwater abstraction points due to the higher sensitivity of these receptors to contamination which could be, although highly unlikely, mobilised by the Projects. Again, this approach is considered good practice based on both professional judgement and a qualitative assessment.
GGC.1.14	**SSSI impact risk zones** ES Chapter 19 [REP1-013, Figures 19-3a to 19-3c] states, 'The whole route is impacted by SSSI impact Risk Zones'. Can you explain what this means, which SSSIs this refers to and how this has been assessed?	Natural England states that 'Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make an initial assessment of impacts on SSSIs posed by developments. The IRZs tool comprises a series of zones around each SSSI and within each zone, the tool specifies the types of development which, at that distance, have the potential to have adverse impacts. Although the IRZs are present throughout the Onshore Development Area, only one SSSI (Burton Bushes SSSI) is located within the 250m buffer. It is considered that there would be no impacts to this SSSI, from a geology and ground conditions aspect, as a result of the Projects due to no direct overlap between the Projects and the designated sites. As such, an assessment has not been included within **Chapter 19 Geology and Land Quality** [APP-158].
GGC.1.15	**Geological effects on SSSIs** Can you provide, or signpost where it can be found in the application documentation, the potential geological effects on Withow Gap SSSI and Skipsea Bail Mere SSSI? ES Chapter 18 (revision 4) [PDC-002, paragraph 119] states this is within ES Chapter 19 [APP-158] but there appears to be no explicit reference to these SSSIs in that chapter. Similarly, can you provide, or signpost where it can be found in the application documentation, the assessment of potential geological effects on Burton Bushes SSSI?	Both Withow Gap SSSI and Skipsea Bail Mere SSSI are located beyond the 250m buffer and so have not been assessed within **Chapter 19 Geology and Land Quality** [APP-158] because they are beyond the extents of where an impact is considered to occur from the Projects. Reference to Withow Gap SSSI and Skipsea Bail Mere SSSI within **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] will be removed. The updated chapter will be submitted at Deadline 8 to include this update and any further, minor amendments identified at future deadlines. As stated in Table 19-2-9 of **Appendix 19-2 Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161], Burton Bushes has been designated due to the presence of oak woodland >200 years in age. It is however, noted that the SSSI contains an undisturbed Holderness Till soil profile. It is not anticipated that the SSSI would be impacted due to the construction or operation of the Projects due to its ecological importance and so has not been assessed within **Chapter 19 Geology and Land Quality** [APP-158].

1.11 Good Design

Table 1-11 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Good Design

I.D.	Written Question	Applicants' Response
GD.1.1	**Converter stations** **ERYC:** Are you satisfied that you would have access to sufficient design expertise to ensure good design of the converter stations when discharging Requirement 9 of the draft DCO [REP1-004]? Do you envisage the need for a Planning Performance Agreement to ensure that you have sufficient resources for discharging this requirement? **Applicants**: Have you discussed this matter and the potential need for a PPA with ERYC? If this is deemed necessary by the Council, should reference be made to this in the Design and Access Statement (DAS) [REP2-027]?	The Applicants and East Riding of Yorkshire Council (ERYC) have had a Planning Performance Agreement (PPA) in place since July 2023. The PPA relates to the pre-application stage, Development Consent Order (DCO) pre-examination / examination stage and the post-consent discharge of requirements stage. The PPA provides a framework for the Applicants and ERYC to co-operate throughout discussions relating to the application, working to agreed objectives, timeframes and performance standards. The PPA also covers recovery of costs. The Applicants do not consider that it is necessary or appropriate to reference the PPA in the **Design and Access Statement (DAS) (Revision 2)** [REP2-027], this is a matter for discussion with the ERYC and is something the Applicants will be seeking to progress once the Examination is completed prior to construction in relation to the discharge of all requirements in the DCO.
GD.1.2	**Converter stations** Can you provide more information on the detailed Environmental Colour Assessment referred to in the DAS [REP2-027] and how this would integrate structures and fencing into the landscape? What would this involve?	An Environmental Colour Assessment would follow on from the viewpoint work already undertaken as part of the **Chapter 23 Landscape and Visual Impact Assessment (LVIA)** [APP-192]. The assessment would review these viewpoints, to generate an understanding of seasonal and thematic colours that are most prominent in the landscape. This is affected by elements such as land use, woodland, local settlements or topography. Some of the key considerations when defining a local colour palette include whether to choose a darker palette of colours which sits better within the landscape but can become more apparent in winter settings, or a lighter palette of colours which may be more reflective generally but provide some winter screening against grey skies. Defining these thematic colours within the landscape and referencing the LVIA viewpoints, will help determine an appropriate colour palette to use to integrate Onshore Converter Station(s) into the site into the effectively. Creating an appropriate colour palette based on the findings of an Environmental Colour Assessment will increase aesthetic harmony for the site, environmental integration and community acceptance. Environmental Colour Assessments are undertaken by qualified professionals. More information can be found in the Landscape Institute Environmental Colour Assessment Technical Information Note 04/2028[30].
GD.1.3	**Converter station zone** The DAS [REP2-027, paragraph 196] states that visual screening could be required where there may be receptors. Can you explain what you mean by 'visual screening' and indicate where this could be required? Paragraph 196 also suggests acoustic fencing might be required in specific locations. However, paragraph 203 appears to contradict this and states that no additional mitigation measures would be required due to negligible effects on receptors from noise. Can you clarify if and where acoustic fencing would be required? If it is required, can you provide details of its visual appearance, where it would be secured and - if it is not secured - should it be?	Visual screening would consist of the woodland planting and also hedgerows which form part of the Indicative Landscape Mitigation Plan, shown in Plate 4-36 of the **DAS (Revision 2)** [REP2-027]. Plate 4-34 highlights the areas where hedgerows are proposed to be introduced around the site, as part of this overall plan. The layout of the visual screening in the Indicative Landscape Mitigation Plan responds directly to the need to mitigate views experienced by particular receptors. The receptors around the site include existing dwellings at Butt Farm and camp site to the north, and Bentley village to the south, and people on the Walkington Footpath 4 Public Right of Way (PRoW) as well as those using the A164 and other nearby routes. While fencing will ensure the site is safe and secure, introducing hedgerow as boundary treatments will help to visually contain elements of the development, will provide additional screening, particularly for low-level elements and will provide additional habitats.

[30] Tinkler, Carly (2018). Landscape Institute. *Environmental Colour Assessment Technical Information Note 04/2018*. 19 November 2018. https://www.landscapeinstitute.org/technical-resource/environmental-colour-assessment/

I.D.	Written Question	Applicants' Response
		The use of acoustic fencing was retained as an early option, but it has now been confirmed that engineering measures such as layout and equipment selections within the site has provided a reduction in operational noise. This means acoustic screening is likely no longer needed.
GD.1.4	**Converter station zone** The DAS [REP2-027, paragraph 210] assumes that planting hedges over the existing high-pressure gas pipelines would be acceptable, subject to consultation with the owners of these assets. What are the implications if consent from the owners to plant hedges over the high-pressure gas pipelines was not given? How would this affect the outline landscaping plans and what would be the effects on the landscape and visual assessment?	Before planting any new trees or shrubs in the pipeline wayleave / easement, written permission would be obtained from the pipeline operator. General industry practice permits, planting of shallow rooting hedges and ground plants (e.g. blackthorn, broom, elder, hazel, etc), if necessary (for screening purposes or to mark boundaries) directly across the pipeline. If hedges cannot be planted over the pipelines, then this would result in short gaps in the hedges. While this would be sub-optimal from a landscape and visual, and biodiversity, point of view, it would have little effect on the LVIA. This is because the mitigation relied on in the LVIA is mainly due to the woodland planting, which is not located over the pipelines.
GD.1.5	**Design review** What architectural input was provided when designing the converter stations and has there been any independent review of the design of the converter stations? If not, why not? If so, who was this from, what were the recommendations and were they incorporated in the design?	An independent architectural review of the Indicative Onshore Converter Station designs, used to inform the Project Design Envelope for the Environmental Impact Assessment (EIA), has not been undertaken. Given the scale of the Onshore Converter Stations and the design maturity of the Projects, input from landscape architects is more relevant at this stage. Landscape Architecture consultants (Chartered Members of the Landscape Institute) have developed the design principles set out in the **DAS (Revision 2)** [REP2-027] in collaboration with engineers and the Applicants. This input has informed the location, position and screening strategy for the Onshore Converter Stations, appropriate to this design stage. As noted in sections 4.1.3.1 and 4.1.3.2 of the **DAS (Revision 2)** [REP2-027], the built form and layout of the onshore infrastructure is prescribed by the functional, technical and engineering requirements and will follow best practice. The largest buildings on-site, the valve halls, are specifically designed to house the electrical infrastructure to convert power from High Voltage Directional Current (HVDC) to High Voltage Alternating Current (HVAC). The use of non-standard shapes or materials would not be viable for these buildings due to space requirements, fire risk or material cost. The cladding pattern or layout could be informed by an architect, but the preferred approach for the Projects is to engage a consultant to undertake an Environmental Colour Assessment during the detailed design phase to help integrate the structures into the landscape (see section 4.1.3.4 of the **DAS (Revision 2)** [REP2-027]). The indicative Onshore Converter Station designs assessed in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192], refined in the **Project Change Request 2 – Substation Zone** [AS-152] and included in the **DAS (Revision 2)** [REP2-027] will be further refined at the detailed design stage, post-DCO consent, through discharge of Requirement 9 of the **Draft DCO (Revision 6)** [document reference 3.1]. Architectural input on the site design would therefore be limited to some of the low-level, non-technical buildings within the Onshore Substation Zone. An indicative Landscape Mitigation Plan has been developed (**DAS (Revision 2)** [REP2-027], Plate 4-36), which will be developed and implemented in accordance with Requirements 10 and 11 of the **Draft DCO (Revision 6)** [document reference 3.1]. This aims to provide screening of most low-level infrastructure within 10 years of planting, as shown on the visualisations presented in **Chapter 23 Landscape and Visual Impact Assessment Figure 23-1 to Figure 23-17 (Revision 3)** [REP2-024]. This limits the ability of architectural input to inform the look and feel of the built form across the site. The Applicants have committed to a Design Review Panel Process, overseen by a Project Design Champion, and this commitment was strengthened in the updated the DAS at Deadline 2 (see **DAS (Revision 2)** [REP2-027]). This states

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		that the Design Review Panel will include "*a multi-disciplinary team of professionals with experience working in the built environment*", and also "*an independent landscape architect or person with equivalent professional experience*".
GD.1.6	**Design and Access Statement** The DAS [REP2-027, Plate 4-7] shows the proposed converter stations with the larger footprint prior to Change Request 2. Can you update this plate, and review and update any others in the document that show the larger converter station footprint?	The Applicant has reviewed Plate 4-7 in the **DAS (Revision 2)** [REP2-027] and confirms this is showing previous layout. This will be updated to show the Revision 3 viewpoint imagery at Deadline 8.
GD.1.7	**Infrastructure security** What consideration have you given to the protection of the proposed onshore and offshore infrastructure from acts of vandalism and the threat of terrorist attack?	The site has been developed in line with other RWE Offshore Wind Projects, and the indicative design includes provision for security measures including perimeter fencing, CCTV monitoring, intruder detection and ensuring compliance with and cyber security requirements. The Projects will include security and vulnerability assessment by internal security specialists to identify site specific risks and comply with appropriate national and company infrastructure requirements at the detailed design development phase. These standards will meet the requirements of Department for Energy Security and Net Zero (DESNZ) and National Protective Security Authority (NPSA) for this size and type of energy sector facility. All security designs take into account issues such as light pollution.
GD.1.8	**The Holford and Horlock Rules** ES Chapter 4 [AS-017, Table 4-1] refers to the Holford and Horlock Rules as applicable to the Proposed Development. With references to NPS EN-5 paragraphs 2.9.17 and 2.9.19, can you set out in detail how the Holford and Horlock Rules informed and influenced your site selection for the Proposed Development?	The Holford Rules and Horlock Rules considering National Policy Statement (NPS) EN-5 have been considered in **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017]. The Holford Rules set out guidelines with respect to overhead line routing and to consider the environmental assessment and impacts as part of early design considerations. The Projects considered strategic level alternatives with respect to good design for the Onshore Export Cables. As set out in **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017] Table 4-3, the strategic options of a) overhead lines along the onshore export cable route between landfall and the National Grid and b) buried cables within ducts along the onshore export cable route between landfall and the grid connection location were considered. This review of the strategic options resulted in a commitment at an early stage to burying the Onshore Export Cables within ducts which reduces permanent visual impacts associated with the Onshore Export Cables. To identify the most appropriate location to site the Onshore Converter Stations, National Grid's Guidelines on Substation Siting and Design, The Horlock Rules, have been taken into consideration. These guidelines document National Grid's best practice for the consideration of relevant constraints associated with the siting of substations. The Horlock Rules have been considered as part of the development of the Onshore Converter Stations and this is outlined within **Appendix D**.
GD.1.9	**Alternatives** Could any existing, consented or proposed infrastructure in the offshore and onshore environments (such as that serving Dogger Bank A/ Dogger Bank B/ Hornsea Project 4 OWFs for example) be utilised for transmission of electricity generated by the Proposed Development? Can you provide evidence to support your answer?	It should be noted that DBS East and DBS West are separate Projects. The Applicants have developed DBS East and DBS West transmission infrastructure as co-ordinated Projects in accordance with the National Grid Electricity System Operator (ESO) evolving Holistic Network Design (HND), as updated in February 2024. This work is reported in **Appendix 4-1 - Ofgem and National Grid Electricity System Operator Holistic Network Design Statements** [APP-069]. Due to the nature of the development process and the size of the Projects it has not been a practical consideration for the Projects to share infrastructure with other existing, consented or proposed schemes in the vicinity of the projects (e.g. Dogger Bank A&B (1.2GW +1.2GW), Hornsea Project Four (1.5 + 1.1GW)).

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		Each of the identified Projects have been developed as direct connection schemes, with all engineered electrical elements designed to match their generation and transmission capacity. Ofgem rules prevent projects from unnecessarily over-sizing their electrical connections, and so there will not be capacity available on these existing electric lines. Thermal spacing is also required between the Onshore Export Cables to avoid cable overheating. This means that routes cannot be shared with other projects unless significant space is available to accommodate the thermal requirements. The identified projects each have their own Seabed leases, DCOs and Connection agreement with National Grid, none of which include for such a provision. The named projects all connect at the Creyke Beck substation which has insufficient additional capacity for the Projects to connect to hence the Applicant's connection agreement requiring a connection at the new Birkhill Wood Substation. Whilst the Applicants have continued to engage with other schemes in the area such as Dogger Bank A&B, Dogger Bank D, Hornsea Project Four and Continental Link on siting/routing, knowledge and data sharing, and opportunities for co-ordination; for the reasons outlined above it is not a practical or feasible option to share transmission infrastructure. As detailed in **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017] opportunities for co-ordination with other schemes were considered during the site selection process. Table 4-7 describes how Landfall Option CB6, which utilised the same landfall as Dogger Bank A & B, was considered before ultimately being discounted due to uncertainties around the space requirements of the other project's landfall.
GD.1.10	**Site selection** Do you consider that there are any additional sites that should have been considered in the Applicants' site selection and alternatives assessment [AS-017]? If so, can you set in detail why you consider this to be the case?	No response is required. Question directed to ERYC and HCC.
GD.1.11	**Site selection** ES Chapter 4 [AS-017, table 4-2] presents key stakeholder responses to site selection and the assessment of alternatives. Whilst table 4-2 does state that comments made by key stakeholders were taken account of, it does not say how. Can you set out what changes were made to site selection as a result of these consultation responses?	**Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017] Table 4-2 presents the stakeholder responses regarding site selection and assessment of alternatives in relation to the **Scoping Opinio**n [APP-232]. The comment received in the Scoping Opinion [APP-232] states "*The Inspectorate would expect the ES to explain how the outcomes of consultation with stakeholders has been used to refine the site selection options. The Inspectorate would expect the ES to explain how the outcomes of consultation with stakeholders has been used to refine the site selection options. This is likely to be particularly important where options for micro-siting infrastructure are limited by the presence of other existing or planned infrastructure proposals.*" Examples of how changes were made to the site selection as a result of consultation responses are outlined below: As outlined in **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017] and **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092], during the progression of the EIA, and engagement with National Gas Transmission (NGT) regarding the stand-off distance required between the Onshore Export Cables and the existing NGT High Pressure Gas Main it became clear further route refinement and micro-siting needed to be carried out. Informed directly by the results of ongoing archaeological surveys i.e. geophysical survey to ensure areas of high archaeological potential are avoided, in consultation with Humberside Archaeological Partnership (HAP) and ERYC (**Consultation Report** [APP-034]), HAP outlined the findings of an asset group as a result of the geophysical surveys is of schedulable quality and should be avoided if possible. As a result, the onshore export cable route was micro-sited and the Nunkeeling Deserted Medieval Village is now outside of the Onshore Development Area.

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		As outlined in **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017] and **Chapter 21 Land Use (Revision 3)** [REP2-022], following a desk based review and consultation with ERYC, it was found that the Onshore Export Cable Corridor routed through an Area of Search (AoS) and Preferred Area for Sand and Gravel near Riston Grange. Through this consultation EYRC expressed their preference for the Onshore Export Cable Corridor to be re-routed, as the area is considered an important site in context of regional sand and gravel resource given its designation as a 'Preferred Area', and there being known aspirations from the existing landowner to extend the existing adjacent quarry. As a result, a re-route was selected to the south of the Preliminary Environmental Information Report (PEIR) Onshore Development Area which minimised impacts on the Preferred Area for Sand and Gravel, whilst also taking into account constraints posed by nearby residential properties. The Environment Agency, outlined in the **Consultation Report** [APP-034], expressed a preference for all main rivers, in particularly River Hull and Barmston Drain to be crossed using trenchless techniques. As outlined in the **Obstacle Crossing Register (Revision 3)** [REP2-014], the Projects have made a commitment to cross all Main Rivers using Trenchless crossing locations (e.g., Horizontal Directional Drilling (HDD). As noted in **Appendix 9-1 - Benthic and Intertidal Ecology Consultation Responses** [APP-087], in response to the Projects PEIR Natural England raised concerns regarding the number of offshore platforms proposed in the Projects Design Envelope, with up to eleven offshore platforms across DBS East and DBS West included in the Projects design envelope at the time. Following receipt of this comment and discussion with the Projects engineering team, the Applicants reduced the maximum number of Offshore Platforms from eleven to eight for the Environmental Statement (ES). Also noted in **Appendix 9-1 - Benthic and Intertidal Ecology Consultation Responses** [APP-087], in response to the Projects PEIR Natural England requested that gravity base and suction bucket foundations should be removed from the Projects design envelope for use within the Dogger Bank Special Area of Conservation (SAC). Following this request, the Applicants committed to the removal of gravity base and suction bucket foundations within the Dogger Bank SAC, with the only foundation types assessed for use within the SAC being monopiles or pin-pile foundations. The Applicants submitted a Change Request in the Examination to reduce the size of the Onshore Converter Stations footprint (**Project Change Request 2 - Onshore Substation Zone** [AS-152]. The proposed change reduces the scale of the built form in the rural area and reduce permanent land-take from agriculture by the projects which are beneficial in addressing representations from Albanwise Synergy Ltd [RR-002], Historic England [RR-022], Rowley Parish Council [RR-048], JL White & Son and Butt Farm Caravan, Camping and Glamping Site [RR-054] and ERYC. The Applicants also submitted a Change Request in the Examination to include a small number of updates to the Project Design Envelope following stakeholder engagement and new information becoming available to the Applicants (**Project Change Request 1 - Offshore & Intertidal Works** [AS-141]), including: • Removal of Gravity based Structure foundations • Removal of Electrical Switching Platform (ESP) from the Projects' Design Envelope • Reduction in number of offshore platforms in the Projects' Design Envelope from eight to three within the Array Areas incusing reductions in associated seabed preparation and scour protection. • Reduction of cabling within the Array Areas, plus associated seabed preparation and cable protection; and • Removal of the short trenchless crossing and landfall All consultation with stakeholders and how it has been considered in the application is outlined in the **Consultation Report** [APP-034].

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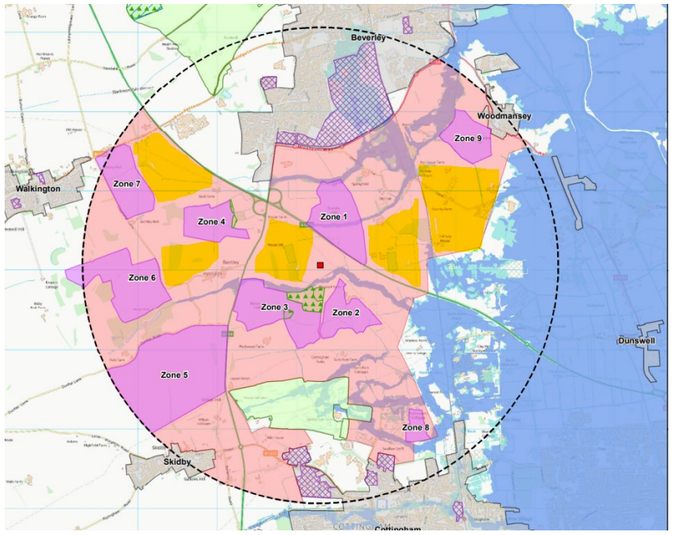
GD.1.12	**Site selection – converter stations** How was the initial 3km area of search radius for the location of a substation from Creyke Beck determined? ES Chapter 4 [AS-017, paragraph 16] confirms that you were informed of an updated location for the substation connection at Birkhill Wood. However, it appears that the area of search was not updated to focus on Birkhill Wood to determine the site selection process for the location of other elements of the Proposed Development (ie the cable route and converter stations). As the area of search was not updated once the location of connection at Birkhill Wood was provided, could there be alternative options for the location of the Proposed Development which had been initially discounted? If so, can you provide more details on the suitability of these options?	As set out in **Chapter 4 Site Selection & Assessment of Alternatives** (Revision 2) [AS-017], the Onshore Converter Station AoS was defined using a 3km radius from the grid connection point provided by National Grid ESO. The 3km radius AoS was set to minimise the length of the connection between the Onshore Converter Stations and Onshore Grid Connection Points whilst also considering the local context and constraints of the surrounding areas. Minimising this distance as far as is reasonably practicable is beneficial because it minimises the cable reactive power component and losses. Following confirmation of the proposed Birkhill Wood substation connection location, the multidisciplinary team also undertook an exercise to review of an updated 3km AoS centred on the new location for the National Grid Electricity Transmission (NGET) substation at Birkhill Wood to determine if any new Onshore Substation Zones could be brought into the substation site selection process, and a review of the original NGET Creyke Beck 1 land parcel to see if it could accommodate the Projects' substations. The review concluded that additional locations provided by the updated AoS did not bring in any new suitable field parcel locations, as the extended AoS largely comprised areas in the city of Hull or within Flood Zones 2 or 3, or were constrained by existing infrastructure. The review also concluded the original Creyke Beck 1 location for the NGET substation did not provide any improvements on those remaining Onshore Substation Zones on the short list due to constraints from existing infrastructure and the small size of the parcel.
GD.1.13	**Site selection – converter stations** Why were the areas highlighted in orange below not included in the substation zone long list (map taken from [AS-011]):  	As set out in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017], the onshore substation AoS (see section 4.8.2) was refined to: • Avoid residential properties (including whole gardens) where possible; • Avoid housing land allocations identified in local plans where possible; • Avoid direct impacts to internationally and nationally designated areas • (e.g., SACs, Special Protection Areas (SPA)s and Sites of Special Scientific Interest (SSSI) etc.) where possible; • Avoid significant impacts to the special qualities of Areas of Outstanding Natural Beauty (AONB) where possible; • Avoid mature woodland and historic woodland where possible; • Avoid areas that fall within Flood Zone 3 and where possible preference was given to locating infrastructure in Flood Zone 1; and • Avoid recreation spaces such as golf courses where possible. Onshore Substation Zones were identified that would be big enough to accommodate the minimum footprint scenario based on the design parameters known at the time, (one HVDC converter station (200m x 180m) and a construction compound (250m x 150m)) while also avoiding considering constraints including existing infrastructure, proximity to residential properties, heritage and landscape designations and ancient woodland . The Areas within the Orange Zones identified in the figure presented within **The Examining Authority's Written Questions (ExQ1)** [PD-014] did not meet the site selection principles based on known information at the time and therefore were not taken forward as part of the development of the long list of options for the Onshore Substation Zone.
GD.1.14	**Site selection – converter stations**	The review of the Onshore Substation Zone Long list is outlined in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017].

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	Provide a list of constraints for Zone 4 considered during the site selection process (in the context of tables 4-11, 4-12, 4-13 of ES Chapter 4 [AS-017]) – how might this be compared to your decision to discount other converter station zones?	All Onshore Substation Zones were subject to a Blue, Red, Amber, Green (BRAG) process w hich were reviewed through multidisciplinary workshops to discuss and balance the risk identified for each option. This is in line with the Horlock Rules which state "*In the development of system options including new substations, consideration must be given to environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects, in order to keep adverse effects to a reasonably practicable minimum*". Based on known information at the time, the combined BRAG assessments for the Onshore Substation Zones identified some constraints associated with the Onshore Substation Zone 4 such as: • INEOS ethylene pipeline within the south of Onshore Substation Zone • Onshore Substation Zone lies within a Local Important Character Area • Areas of steeper slopes with Onshore Substation Zone at < 1 in 50 to >1 in 30 topography and therefore construction may require some earthworks with extent of earthworks dependant on final substation location. • Engineering constraints associated with the onward routeing crossing Jocks Lodge and solar farm planning application • Access constraints from A1079 and A164 dependant on final design of Jocks Lodge • Caravan park to north and village to south, but opportunity for mitigation screening • Heritage assets recorded within Substation Zone 4 However, on balance it was considered the preferred Onshore Substation Zone due to: • Having opportunities for a single site for both Onshore Converter Stations; • Avoids some of the most sensitive landscape and visual receptors in the surrounding areas; • Is located in a relatively flat landscape, with some existing landscape structure in place and with few landscape features which could be lost to development. • It is considered that the landscape of the chosen site is capable of accommodating large scale development. • The site avoids the candidate Yorkshire Wolds AONB to the north, • The site avoids large numbers of residential receptors located at Beverley in the north-east. • The construction of the Projects on the site would not obstruct view of Beverley Minster, a key feature on the skyline, in views from the A1079. • Zone 4 offers the benefit of a single site for both Onshore Converter Stations ensuring a co-ordinated approach to the projects and keeps potential impacts localised to a single area, rather than being more widely spread across two separate locations.
GD.1.15	**Site selection – converter stations** ES Chapter 4 [AS-017, paragraph 90] states that when the two high voltage alternating current (HVAC) options were removed from the design envelope, this left two options for the converter stations: two high voltage direct current (HVDC) converter stations in Substation Zone 4 (co-located); or, one HVDC converter station in Substation Zone 1 and one HVDC converter station in Substation Zone 4. Why was an option of two HVDC converter stations in Substation Zone 1 (co-located) not considered?	As described in paragraph 86 of **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] due to spatial constraints within Substation Zone 1, co-location of 2 x HVDC substations within this zone was not considered possible. The spatial constraints include the presence of 33kV overhead electricity lines which cross through the substation zone, requiring a standoff, and fluvial flood zones of the River Hull (Flood Zone 2 and 3).
GD.1.16	**Site selection – converter stations** Change Request 2 reduces the maximum footprint of the converter stations. If the maximum footprint of the converter stations had been reduced at earlier stage in the site selection process,	The information that enabled the Applicants to reduce the maximum footprint of the onshore converter stations was not available until after the DCO application had been submitted. As set out in **Project Change Request 2 – Onshore Substation Zone** [AS-152], it was only at the point of receiving the grid connection offer and further design activity

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	would this have resulted in more of the sites discounted at the long or short list stage being considered further? Has reconsideration of other sites previously discounted for the converter stations been made following the reduction in size of the converter stations and if so, what did this identify?	to support tender activities had taken place that the Applicants were able to refine the parameters of the onshore converter stations with sufficient certainty to make the formal change request. It is not possible to say whether, had this information been available earlier in the site selection process, any of the sites discounted would have been considered further. In order to address that question the Applicants would need to revisit the site selection process to assess all of the alternative options that were considered, which is not thought to be appropriate or a valuable use of examination time, given that any outcome of that exercise would be purely academic. The NPS EN-1 (paragraph 4.3.9) is clear that it "*does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective." Paragraph 4.3.15 then goes on to provide that "Applicants are obliged to include in their ES, information about the reasonable alternatives that they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility."* The Applicants submit that the exercise that has been carried out with regards to site selection and alternatives is robust and comprehensive and has taken into account all of the information that was available at each stage of the process. This is documented in **Chapter 4 Site Selection and Assessment of Alternatives (Revision 2)** [AS-017]. The selection of the preferred site was made based on a comprehensive and multi-criteria assessment, including reviewing a range of environmental, technical, social, economic and planning considerations. Even if the Applicants did reconsider other sites previously discounted for the Onshore Converter Stations following the reduction in size and the outcome of such re consideration was that a different site was identified, it would not have been feasible, at the point in time that **Project Change Request 2 – Onshore Substation Zone** [AS-152] was made, to amend the application to change the site of the Onshore Converter Stations. This is likely to have resulted in the need to withdraw the current application, re-draft the majority of the onshore application documents (including amending the Order Limits and carrying out any required EIA surveys in the updated Order Limits), carry out further consultation, and re-submit the application. The delay that this would have caused would have been entirely disproportionate and unnecessary and would have been likely to have implications for the viability and deliverability of the Projects. Given the current stage of the application and the urgent need to bring forward the Projects to meet the requirement for new low carbon renewable energy generation, it was therefore not thought to be proportionate to consider previously discounted alternatives at the time **Project Change Request 2 – Onshore Substation Zone** [AS-152] was made. The Applicants would point out that **Project Change Request 2 – Onshore Substation Zone** [AS-152] was made in response to feedback received from stakeholders, in order to minimise the permanent land take required for the Projects and in order to minimise the Projects' environmental impacts.
GD.1.17	**Site selection – cable route** Why did the initial site selection process consider a cable corridor width of 2km? If the size of the cable route had been reduced at earlier stage in the site selection process, would this have resulted in more of the sites discounted at the long or short list stage being considered further?	The Applicants are unsure whether this question relates to the onshore export cable corridor or the offshore export cable corridor and so has provided clarification on both export cables. As described in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017], using the following design principles, a set of potential corridors were drawn within the Offshore Export Cable Corridor AoS to connect the Array Areas to the landfall options: • Be able to connect to viable landfall locations; • Be as short as possible; • Minimise number of crossings of existing offshore cables and pipelines, where crossing is required, cables and pipelines to be crossed at approximately 900 ; • Maintain required separation distances with other offshore cables and pipelines;

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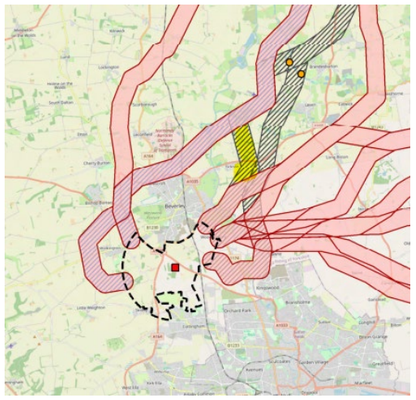
		• Maintain sufficient space for offshore cable installation (including anchor spread of installation vessels whilst maintaining an appropriate safety buffer with existing sub-sea cables and pipelines); • Avoid known historic wrecks as far as possible; • Minimise sterilisation of aggerate dredging areas and other lease areas; • Avoid direct significant impacts to sites designated for nature conservation as far as possible (SACs, SPAs, Marine Conservation Zones (MCZs); and • Avoid direct significant impacts to ecologically important sandbanks and potential reefs as far as possible. From the design principles outlined above, 14 potential Offshore Export Cable Corridors were created. The Offshore Export Cable Corridors were 2km wide which represented an AoS, with each corridor funnelling out wider when approaching the Array Areas to allow for greater flexibility in routing options . This was then refined to a 1km width, with 500m either side for the construction buffer zone. The application of a narrower cable width earlier in the site selection process would not have resulted in greater numbers of possible routes being considered for longer in the site selection process, or the selection of a different options overall for the offshore routing. This is because the presence of the constraints resulting in the rejection of options at each stage were sufficiently 'macro' that they would have resulted in the rejection of options even if they had been of 1km width. The 1km wide Offshore Export Cable Corridors provide flexibility for micro-siting routing options around constraints post consent subject to detailed design. Using the following design principles, a set of 1km wide Onshore Export Cable Corridor Areas of Search were drawn to connect the Landfall options to the refined Onshore Substation AoS (see section 4.10.1 **of Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]): • Routing should be kept as straight and as short as practicable – avoiding tight bends; • Avoid residential titles (including whole gardens) where possible; • Avoid areas identified in local plans for housing development where possible; • Avoid direct significant impacts to internationally and nationally designated areas (e.g. SACs, SPAs, and SSSIs, etc.) where possible; • Avoid direct significant impacts to mature woodland and historic woodland; • Minimise the number and length of trenchless crossings; • Minimise the number of crossings of assets (e.g. utilities); • Minimise the number of road and rail crossings; • Minimise the number of hedgerow crossings; and • Minimise the number of watercourse crossings. This exercise provided an AoS to identify potential routing options within each broader corridor. This process identified nine 1km AoS for the Onshore Export Cable route options with variations to link each landfall option to the refined substation AoS. This enabled 54 individual Onshore Export Cable Corridor options taken forward as part of the long list. Both export cable corridor AoS (offshore and onshore) have provided enough flexibility to identify a number of cable routing options which would provide options and alternatives to be considered, whilst also considering the context of their local environments and adhering to the design principles to avoid or minimise potential impacts from the earliest stage of the development process. The AoS for each respective export cable corridor were drawn to allow flexibility to refine the options at a later stage to avoid potential engineering and environmental constraints .

I.D.	Written Question	Applicants' Response
GD.1.18	**Site selection – cable route** Why was the highlighted section shown from figure 4-24 [APP-068] in yellow below removed during evaluation of the long list as this section does not appear to be affected by Brandesburton ponds (in relation to paragraphs 149-152 of ES Chapter 4 [AS-017])? 	As outlined in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017], engineering and environmental BRAG assessments were completed for the long list of 54 Onshore Export Cable Corridors options. The assessments were reviewed by the multi-disciplinary team, with an internal project workshop being held on 12th January 2022 in order to review the BRAG assessments and decide on which options could be removed at this stage. The original onshore cable routes that progressed through the highlighted section all routed via the Brandesburton ponds and therefore discounted as described within the ES Chapter. The highlighted section was not considered further within the site selection process as it was not a preferable option due to: • The presence of the Onshore Wind Farm that the project would have to route though or in close proximity to, and • Requiring three crossings of the Holderness Drain which is an Environment Agency Main River at unsuitable angles due to local constraints east of Tickton. All other route options only required a single crossing of this constraint. All onshore cable routes connecting into the Onshore Substation AoS from the east were also ultimately discounted due to engineering constraints.
GD.1.19	**Site selection – cable route** ES Chapter 4 [AS-017, paragraphs 173 and 174] suggests that the cable route was amended to avoid a mineral safeguard area. However, the option taken forwards (blue dotted line) shows the route passing through part of a mineral safeguard area (shown in orange) – see figure 4-33 [APP-068] extract below. Can you explain why there appears to be a discrepancy and why the mineral safeguard area could not be avoided entirely? 	As detailed in **Chapter 4 Site Selection and Consideration of Alternatives** [AS-017] paragraphs 173 and 174, during the refinement of the cable route during prior to the design freeze for ES, it was found that the cable route passed through a Preferred Area for Sand and Gravel extraction. For clarity, as well as being located within a Mineral Safeguarding Area, this site is specifically identified in the East Riding of Yorkshire and Kingston upon Hull Joint Minerals Local Plan (2019) as 'SG-A: Land off A165 Leven By-pass, Leven' (as shown in **Figure 4-33** [APP-068]). Following consultation with EYRC about this matter (as referenced in the **Consultation Report** [APP-034] Table 3.2) the Applicants were advised to explore alternative routing that minimised impacts on this site, if it could not be avoided altogether. As described in paragraphs 173 and 174 of **Chapter 4 Site Selection and Consideration of Alternatives** [AS-017] a number of alternative options were considered in a multi-disciplinary review, including a route option further to the south which completely avoided the Preferred Area for Sand and Gravel (the most southern option on **Figure 4-33** [APP-068]). However, this was ultimately deemed less preferable than the other (more northerly) grey alternative route alignment, because it brought the cable route closer to residential receptors on Catwick Lane, increasing potential construction phase disturbance impacts. A further minor amendment was made to route the cable corridor further away from a holiday cottage in the re-routed option, resulting in the final alignment shown in blue dotted line. The final alignment was chosen because it minimised impacts on the Preferred Area of Sand and Gravel (compared to PEIR alignment), with less potential sterilisation of sand and gravel reserves; whilst also minimising impacts on nearby residential receptors.

1.12 Habitats Regulations Assessment (HRA) General (HRA aspects specific to a topic are covered in that topic area, for example Offshore Ornithology)

Table 1-12 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Habitats Regulations Assessment (HRA) General (HRA aspects specific to a topic are covered in that topic area, for example Offshore Ornithology)

I.D.	Written Question	Applicants' Response
Habitats Regulations Assessment (HRA) general (HRA aspects specific to a topic are covered in that topic area, for example Offshore Ornithology)		
HRA. 1.1	**Table summarising the European sites and effects screened in for each specific qualifying feature** For clarity, could you provide a table summarising the European sites and effects screened in for each specific qualifying feature (that is, where it was not possible to conclude no Likely Significant Effects (LSE))? With the exception of offshore ornithology [Table 4-7 of APP-045], this has not been provided.	This information is presented in Table 1: Summary of the Potential Effects of the Projects in the **Report to Inform Appropriate Assessment (RIAA) HRA – Part 1 of 4 - Introduction and Terrestrial Ecology** [APP-045].
HRA. 1.2	**In-combination effects at screening stage** For the screening stage, your RIAA did not identify specific projects for the in-combination assessment in relation to features of terrestrial European sites, or specific projects for the in-combination assessment in relation to marine ornithological features of European sites. The HRA Screening [APP-049] explained that the potential for in-combination effects would be explored in subsequent stages of the assessment. For all sites for which a LSE has been excluded from the project alone, can the Applicants provide a robust rationale for the conclusion of no LSE from the project in-combination with other plans or projects?	An assessment of potential in-combination effects with other plans and projects is presented in the assessments of each site screened in for assessment in the RIAA. The Applicants consider the in-combination assessments presented in the RIAA to be robust and based on a comprehensive list of relevant plans and projects at the time of the Projects' Development Consent Order (DCO) submission. The only exception to this was regarding the Humber Estuary Special Protection Area (SPA), where following consultation with Natural England it was agreed that there would be no impact on functionally linked land with the SPA, and therefore there would be no potential for in-combination effects to occur on the site as a result of the Projects activities (see section 5.4.2 of **RIAA HRA – Part 1 of 4 - Introduction and Terrestrial Ecology** [APP-045] for further details).
HRA. 1.3	**Prey items for other species of conservation value** 1. Provide a response to the Applicants' response to ISH2 Action point 22 [AS-155] regarding allocation of a 'low' value for habitats or species that provide prey items for other species of greater conservation value. 2. Given the number of other OWFs for which the Applicants' state [AS-155] this approach has been deemed acceptable by the SoS in the past, justify why you believe this approach is not acceptable for the Proposed Development.	No response is required. Question directed to Natural England.
HRA. 1.4	**Scottish sites** Could you confirm whether you are in agreement with the Applicants' conclusions presented in the Screening Assessment [APP-049] and RIAA [AS-085] for the relevant Scottish sites?	No response is required. Question directed to NatureScot.
HRA. 1.5	**Condition of qualifying features** For clarity, could you provide a summary table listing the qualifying features of the European sites assessed in the RIAA [APP-045]; [AS-051]; [APP-047] and [AS-085] which are in unfavourable condition or have a restore Conservation Objective target?	Please see **Appendix E** which provides an update to Table 1 Summary of the Potential Effects of the Projects in **RIAA HRA – Part 1 of 4 - Introduction and Terrestrial Ecology** [APP-045] to include the condition of each site screened in for assessment. The Applicants note that the feature condition of each qualifying feature screened in for assessment is not currently publicly available and have noted this in **Appendix E** where applicable.

I.D.	Written Question	Applicants' Response
HRA. 1.6	**Humber Estuary Ramsar site qualifying features** In respect of terrestrial ecology, the HRA Screening Report [APP-049] identifies the bird qualifying features of the Humber Estuary SPA and Ramsar as screened into the assessment. The RIAA Part 1 [APP-045] lists the bird qualifying features of the Humber Estuary SPA (at Section 5.4), but the bird qualifying features of the Humber Estuary Ramsar site are not identified. The assessment appears to focus on the SPA, with minimal reference to the Ramsar. Notwithstanding the above, the RIAA Part 1 [APP-045] goes on to conclude that there would be no AEoI on the Humber Estuary SPA and Ramsar, alone or in-combination [APP-045]. Can you confirm whether the conclusions presented in the RIAA Part 1 [APP-045] for the Humber Estuary SPA apply equally to the Humber Estuary Ramsar and if so, explain how that conclusion was reached in view of the minimal reference to the Ramsar site? Can you update the document as necessary?	The Humber Estuary Ramsar covers the same geographic area as the Humber Estuary SPA and does not include any additional qualifying species not included in the Humber Estuary SPA designation. As such, the Applicants can confirm that the conclusions presented in section 5.4 of **RIAA HRA – Part 1 of 4 - Introduction and Terrestrial Ecology** [APP-045] equally apply to the Humber Estuary Ramsar. As noted in the Applicants responses throughout the examination process, the Applicants consider that it is not appropriate or proportionate to be update documents in line with every comment and representation generally throughout Examination, and do not propose to amend the **RIAA HRA – Part 1 of 4 - Introduction and Terrestrial Ecology** [APP-045] further.
HRA. 1.7	**Designated nature conservation sites with features for which outstanding concerns remain** 1. The ExA notes Table 5.1 and Table 5.2 in your RR [RR-039] helpfully list designated nature conservation sites and national sites with features for which outstanding concerns remain. The ExA would find it very helpful if you could update these tables stating if you no longer have a concern with the feature of a site with a brief explanation as to why. Conversely, if concerns remain for a feature, a brief explanation of the reasons would be helpful. Can these be submitted into the Examination at Deadline 3, Deadline 5 and again with your final position at the close of the Examination? If there has been a change to the level of your concern between deadlines, the ExA would find it helpful if you could resubmit these tables at the next deadline along with an explanation. 2. Can you confirm that you are satisfied that there would be no AEoI from the Proposed Development for all designated nature conservations sites not listed in Table 5.1 [RR-039]?	No response is required. Question directed to Natural England.
HRA. 1.8	**Update of the RIAA to include additional features of the Humber Estuary SAC** 1. NE's RR point B46 [RR-039] noted a number of features for the Humber Estuary SAC which had been screened in for assessment but for which an assessment had not been carried out. In your response [AS-048], you acknowledged that estuaries, coastal lagoons, and *Salicornia* and other annuals colonising mud and sand Atlantic salt meadows should have been assessed in the RIAA. The updated RIAA [AS-051] submitted in November 2024 (section 6.6) does not appear to have been updated to reflect this. Can you explain why, and provide a timetable for doing so if it is still your intention? 2. In your response [AS-048] to NE's RR point B46 [RR-039], you stated that Change Request 1 would be supported by the Project Change Request 1 – Environmental Assessment Update [document reference: C1.1], which will describe any resultant changes to the assessment conclusion presented in the ES and RIAA. The ExA is unable to locate this document. Could you provide a cross reference to this information?	1 The Applicants response to this point (under item RR-039: B46 in the **Applicants Response to Natural England's Relevant Representations (including Appendices A - F, and I)** [AS-048] provided a detailed assessment of these features noted as missing from the original report. As noted in the Applicants **Cover Letter** [document reference: 13.1] for deadline 3, an updated version of **RIAA HRA – Part 2 of 4 - Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3**) [AS-051] will be submitted at Deadline 4, which will include this previously submitted information. 2 The document referred to as the 'Project Change Request 1 – Environmental Assessment Update' was submitted into examination under the title **Project Change Request 1 – Offshore and Intertidal Works** [AS-141].
HRA. 1.9	**In combination assessments in the RIAA – inclusion of Dogger Bank D** The ExA notes that the Applicants consider [AS-048], [PDB-006] and [AS-085] that there is insufficient information at this stage to include Dogger Bank D OWF in the in-combination	In the **RIAA HRA – Part 2 of 4 - Annex I Offshore Habitats and Annex II Migratory Fish (Revision 3)** [AS-051], with regards to the Eastern Green Link 3 and 4 projects (two offshore interconnector projects at the very early stages of development) the in-combination assessment for the Humber Estuary SAC stated that:

I.D.	Written Question	Applicants' Response
	assessments in the RIAA for the Humber Estuary SAC and all the offshore ornithology in-combination assessments. The ExA understands that a PEIR is not yet available for Dogger Bank D OWF but is aware that other information including an EIA Scoping Report dated June 2024 is available. The ExA notes that the advice from NE is that Dogger Bank D OWF should be included in the in-combination assessments [RR-039, G5, G51, B48] and that NE's advice at D2 remains unchanged [REP2-069] regarding inclusion of Dogger Bank D in the in combination assessments for the offshore ornithology assessments and the Humber Estuary SAC. In addition, Dogger Bank D OWF would be a Tier 2 project as per the Planning Inspectorate's Advice Page: *Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment*. Having regard to the above, can you provide revised in-combination assessments to include Dogger Bank D OWF?	*'Due to the early stages of development that the EGL3 and 4 projects are currently in, there is no publicly available information to determine if any nearshore infrastructure will be utilised for these projects. As such, any in-combination effects between EGL3 and 4 and the Projects will need to be considered within the assessments conducted for those projects'* This same statement applies equally to that of Dogger Bank D. The Scoping Report issued for Dogger Bank D in late June 2024 (following submission of the Projects DCO application) provides some details of the proposed project design (see Table 3-1 of that report) but does not provide a detailed worst case scenario with seabed footprints, final locations or routeing for the Offshore Export Cables and landfall or the locations and parameters for external cable protection. As such, the Applicants maintain their position that the in-combination assessment for the Humber Estuary SAC cannot be updated to include Dogger Bank D at this time. With regards to including Dogger Bank D within the in-combination assessments in the **RIAA HRA – Part 4 of 4 - Marine Ornithological Features (Revision 3)** [AS-085], as noted in the latest revision of the document in Table 9-1, 'No quantitative information on impacts is available for Dogger Bank D, therefore there is no update with respect to this project'. This position has not changed following the submission of the **RIAA HRA – Part 4 of 4 - Marine Ornithological Features (Revision 3)** [AS-085] in November 2024. As such, the Applicants maintain their position that the in-combination assessments for the **RIAA HRA – Part 4 of 4 - Marine Ornithological Features (Revision 3)** [AS-085] cannot be updated to include Dogger Bank D at this time The approach to assessing in-combination effects within the RIAA for the Projects is consistent with that for other recently consented offshore wind farm projects such as Hornsea Project Four, where the Marr and Berwick Bank project was not included in the in-combination assessment due to that project having only submitted a scoping report at the time of writing (see section 11.3.2.52 of the Hornsea Project Four RIAA[31] for further detail). The Applicants note that any RIAA brought forward for the consent of the Dogger Bank D project would consider the in-combination effects of Dogger Bank D and the DBS Projects when sufficient information is available for the assessment of both schemes.

[31] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010098/EN010098-001686-Hornsea%20Project%20Four%20-%20Other-%20B2.2%20Report%20to%20Inform%20Appropriate%20Assessment%20Part%201.pdf

1.13 Historic Environment (Onshore)

Table 1-13 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Historic Environment (Onshore)

I.D.	Written Question	Applicants' Response
Historic Environment (Onshore)		
HE. 1.1	**Non-designated heritage assets** Can you confirm if there are any non-designated, locally listed heritage assets that would be impacted by the Proposed Development and have not been referenced in the application documents, and, if so, what the degree of harm would be, with justification?	The East Riding of Yorkshire does not have an adopted list of locally listed heritage assets and as such no such assets have been assessed or would be affected by the Proposed Development. No further known non-designated heritage assets that have not been identified in the **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] **and The Applicants' Responses to Issue Specific Hearing 2 Supplementary Agenda Questions Appendix A Heritage assets, the effects and the attributed level of harm in response to ISH2 10.9** [REP2-059] would be affected. Both the Applicants and East Riding of Yorkshire Council (ERYC) / Humber Archaeology Partnership (HAP) are in an agreed position in the current **HAP Statement of Comment Ground** [REP1-045] that the baseline environment is adequately characterised within **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092].
HE. 1.2	**East Riding Local Plan 2012-2029 (2016) (ERLP) policy ENV3:B** Table 8 of ERLP identifies heritage assets in the East Riding, including the Yorkshire Wolds, which should be considered as an archaeological landscape of national significance. Policy ENV3:B states that the significance, views, setting, character, appearance and context of heritage assets, both designated and non-designated, should be conserved, especially the key features that contribute to the East Riding's distinctive historic character including the nationally important archaeology of the Yorkshire Wolds. How has the national significance of the Yorkshire Wolds archaeological landscape been considered in the assessment of effects on archaeology in ES Chapter 22 [AS-092]?	Section 22.4.1.2.2 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] notes the chapter has accounted for local and regional policy relevant to the study area, including Policy ENV3:B. The analysis of setting and the assessment of effect presented in **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092], set out in detail in **Appendix 22-5 - Onshore Infrastructure Settings Assessment** [APP-178] includes assessment of heritage assets within the Yorkshire Wolds, such as, but not limited to Walkington Conservation area and Risby Park and Garden. The study areas identified in section 22.3.2 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] have been agreed with the Expert Topic Group (ETG). The Projects are in areas that are peripheral to, or in the hinterland of the Wolds, referred to as 'off-Wolds' in the Archaeological Research Framework for the Wolds, and the particularly high concentration and good preservation of highly significant archaeological remains that exist within the Wolds and are unique to that landscape (particularly extensive prehistoric landscapes), are not present within the study area. The Applicants have, however, mapped the Research Agenda in the **Outline Onshore Written Scheme of Investigation** [APP-239] (Table 6-1) to research objectives in the Yorkshire Wolds Research Strategy. This means that the scope and methods of any archaeological works reflect that Research Agenda and that the findings of archaeological work carried out by the Projects would be relevant to those objectives. HAP have indicated agreement with the scope and methods of the archaeological surveys undertaken with the worst-case assumptions and the conclusions of the assessment of effects on archaeological remains by email on 18th October 2024, as evidenced in the **HAP Statement of Common Ground** [REP1-045].
HE. 1.3	**NPS EN-1** NPS EN-1 (paragraph 5.9.9) states, 'The applicant should undertake an assessment of any likely significant heritage impacts of the proposed development as part of the EIA and describe these along with how the mitigation hierarchy has been applied in the ES'. Can you signpost where in the ES the mitigation strategy has been applied or, if it has not been applied, can you provide this information?	Table 22-3 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092], sets out the embedded mitigation measures taken as part of the Environmental Statement (ES). In summary these are: • Mitigation by Site Selection • Sequential build efficiencies, • Outline Onshore Written Scheme of Investigation (WSI) • Mitigation by Avoidance

I.D.	Written Question	Applicants' Response
	Can you signpost where opportunities have been taken to enhance or better reveal the significance of heritage assets affected by the Proposed Development in accordance with NPS EN-1 paragraph 5.9.15?	The site selection process is described in detail in, **Chapter 4 Site Selection and Assessment of Alternatives (Revision 2)** [AS-017] with heritage considerations inputting into Landfall option selection, Onshore Substation Zone refinement and Onshore Export Cable Corridor refinement. The site selection process has included consideration of all designated heritage assets and has avoided any direct physical impacts upon designated heritage assets as part of the site selection process. For the Sequential build of DBS East and DBS West the cable ducts for both Projects will be laid as part of the first project. This will help reduce any impacts associated with temporary change to the setting of designated heritage assets along the Onshore Export Cable Corridor for the Sequential build scenario. As the Environmental Impact Assessment (EIA) progressed further route refinement and micro-siting has been carried out, informed directly by the results of ongoing archaeological surveys i.e. geophysical survey to ensure areas of high archaeological potential are avoided, wherever possible within the confines of engineering and other environmental constraints. This includes a diversion around Nunkeeling Deserted Medieval Village and micro-siting the Onshore Export Cable Corridor around anomalies of probable archaeological origin identified in the Phase 1 geophysical survey, as detailed in **the Geophysical Assessment Report** [APP-180 to APP-188], which are shown on **Figure 22-5a -h** [APP-173]. The Onshore Substation Zone boundary was also refined following the Phase 1 archaeological trial trenching which identified significant archaeological activity in the southeast section, as detailed in the **Interim Archaeological Evaluation Report** [APP-189], which has been avoided in design. Similarly, the Applicants have committed to avoiding the suspected remains of medieval village of Cleeton identified in the Phase 1 archaeological trial trenching at landfall, as detailed in the **Interim Archaeological Evaluation Report** [APP-189]. The Projects archaeological works will be guided by a research agenda, which will guide the post-excavation assessment and analysis phases of the Projects and drive the focus of any engagement, as per the **Outline Onshore Written Scheme of Investigation** [APP-239]. The ongoing results of the surveys undertaken post-consent will support our understanding of how far the evidence and data collected will be able to address the research agenda, which references and draws from several regional and thematic research frameworks; this mitigation would have a wider value in informing future research and management of the archaeological resource. This research agenda will also inform the proposals for outreach and engagement. As outlined in Section 9 of the **Outline Onshore Written Scheme of Investigation** [APP-239] a comprehensive public outreach program will be implemented post-consent, with the specific details set out in an overarching engagement strategy included in site-specific Written Schemes of Investigation (WSIs) as relevant. The specific themes of the overarching engagement strategy will be responsive to the research agenda as this develops as a result of further archaeological work post-consent. Following discussion with Historic England, a more detailed iteration of the outreach and engagement strategy will be presented in a revised **Outline Onshore Written Scheme of Investigation** [APP-239] to be submitted at Deadline 4.
HE. 1.4	**NPS EN-5 and the Electricity Act 1989** Do you consider that the Applicants have had regard to the desirability of protecting sites, buildings and objects of architectural, historic or archaeological interest, and have done what they reasonably can to mitigate any effects in accordance with NPS EN-5 paragraph 2.2.10 and Schedule 9 of the Electricity Act 1989? If not, why not?	No response is required. Question directed to Historic England and ERYC.

I.D.	Written Question	Applicants' Response
HE. 1.5	**Assessment methodology** The CEA in ES Chapter 22 [AS-092] does not appear to consider effects on historic landscape character: can you signpost to where this has been considered, or if it hasn't, explain why?	Assessment of Historic Landscape Character (HLC) was not identified as necessary in the Scoping Report or adopted **Scoping Opinion** [APP-232], and has not been raised as a concern by consultees during subsequent non-statutory and statutory consultation considered under Impact 2 in Table 22-13 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092]. Review of the nature of the historic landscape of the substation site has confirmed that the prevailing character of the Onshore Substation Zone is modern arable cultivation with significant loss of historic features during the agricultural intensification of the later 20th century and significant capacity to accept change where the surviving field boundaries would be retained in the landscape plan such that no cumulative effect would arise.
HE. 1.6	**Assessment methodology** Could you provide a view on the responses to WQ7 and WQ8 (page 59) of the Applicants' Responses to January 2025 Action Points' [AS-155] regarding the methodology for defining the level of importance of heritage assets? Do you agree with the Applicants' stance that increasing the importance of Grade II listed buildings to high importance would not affect the overall findings of the ES?	No response is required. Question directed to Historic England.
HE. 1.7	**Assessment methodology** Can you review the Applicants' Responses to Issue Specific Hearing 2 Supplementary Agenda Questions Appendix A Heritage assets, the effects and the attributed level of harm in response to ISH2 10.9 [REP2-059] – do you agree with the Applicants' assessment and conclusions? If not, why not?	No response is required. Question directed to Historic England and ERYC.
HE. 1.8	**Temporary effects on the setting of designated and non-designated heritage assets** Can you provide further justification for your view that changes in setting due to construction activities would be temporary and of sufficiently short duration that they would not give rise to material harm [AS-093, paragraph 286], given that construction work could take a number of years to complete and that some of the effects from construction at the converter stations area would not be reversible.	Impacts on setting have been separated out where these are temporary, such as along the Onshore Export Cable Corridor and the landfall (Impact 5) and those at the Onshore Substation Zone (Impact 7). Where there are irreversible changes, these would derive from the perception of permanent elements of the completed development and therefore have been considered as operational effects. The worst-case scenario assessed for the construction programme along the Onshore Export Cable Corridor is 33 months,18 months at the landfall (not continuous) and 4 years at the Onshore Substation Zone. Whilst the assessment accounted for the above timescales works will be phased along the Onshore Export Cable Corridor resulting in shorter phases of activity in specific areas; typically relatively short areas of cabling would be opened and backfilled in a rolling programme, meaning that activity in any one area would be short lived, and even more lasting elements, such as construction compounds would relate to specific phases of work rather than necessarily being present for the whole duration of the works. Similarly, the nature, intensity and duration of works at Landfall and Onshore Converter Stations would vary across that construction timetable, with, for example, site preparation and commissioning works comprising much less perceptible activities, or works within the completed structure. Along the Onshore Export Cable Corridor and landfall the construction activity would not change the viewers perception of the identified assets (outlined in paragraph 289 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092]). As outlined in the response to WQ10 in **The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155] '*…the contribution of the agricultural landscape through which the cable route passes to setting of these heritage assets is to allow the viewer to place them into the regionally distinctive agricultural landscape of Holderness. Change to setting arising from the construction works would be observed, but this would be read by a viewer as works within a wider agricultural landscape and would not affect that contribution to significance.*'

I.D.	Written Question	Applicants' Response
		The landscape would be restored to its original state following completion. Traffic management and movement of construction traffic and machinery will be temporary and localised, and managed through the Construction Traffic Management Plan (CTMP), as secured in Requirement 14 of the **Draft DCO (Revision 6)** [document reference 3.1]. The construction stage effects would be reversible. Effects arising from the perceptibility of permanent infrastructure are assessed as operational effects in **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092], and set out in detail in **Appendix 22-5 - Onshore Infrastructure Settings Assessment** [APP-178].
HE. 1.9	**Degree of harm to designated and non-designated heritage assets** Can you provide further justification for the following conclusions in table 1.1 of The Applicants' Responses to Issue Specific Hearing 2 Supplementary Agenda Questions Appendix A Heritage assets, the effects and the attributed level of harm in response to ISH2 10.9 [REP2-059]: • APS_080/ MHU21207 – less than substantial harm at the lower end of the scale would be reduced to no residual harm, but no mitigation is proposed. 1145F – substantial harm would be reduced to no harm, following archaeological recording of items of interest.	APS_080 is a large area of eroded Medieval / Post Medieval ridge and furrow identified in **Appendix 22-3 - Assessment of Airborne and Satellite Remote Sensing Data and Map Regression Analysis for Archaeology** [APP-176] through study of historic aerial photography. This feature has limited archaeological value, and the investigative works already carried out have effectively recorded the nature and extent of this feature, meaning that no further mitigation would be needed. 1145F is a simple post-medieval cobblestone deposit. Trial trenching showed that while deliberately placed, this deposit was not as a formal surface or part of any wider structure and was instead a spread of stony material laid to consolidate particularly unstable ground, as detailed in **Archaeological Trial Trenching Phase 1** [PDA-025 to PDA-028]. Consequently, these remains hold very limited archaeological interest, which is primarily derived through understanding its spatial extent and location in relation to contemporary field boundaries. In the event of loss, archaeological recording would retain the limited archaeological interest of these remains.
HE. 1.10	**Effects on Catfoss Hall Grade II listed building** The ExA notes your response to ISH2.10.1, ISH2 Supplementary Agenda Questions [REP1-056]. Which element(s) of the construction works do you consider would be harmful to the setting of Catfoss Hall (works for the cable route immediately adjacent to Catfoss Hall, the proposed construction compound further south of Catfoss Hall, the nearby proposed works to the highway, or any combination of these elements), and why?	No response is required. Question directed to ERYC.
HE. 1.11	**Effects on Catfoss Hall Grade II listed building** Can you signpost where the effects on Catfoss Hall have been considered in the ES or supporting documents, including the effects from construction on its setting, noting that Catfoss Hall is not referenced in the Onshore Infrastructure Settings Assessment [APP-178] or 'The Applicants' Responses to Issue Specific Hearing 2 Supplementary Agenda Questions Appendix A Heritage assets, the effects and the attributed level of harm in response to ISH2 10.9' [REP2-059]? The ExA notes your response REP1-056: 6 [REP2-058] regarding ERYC's comments on designated heritage assets. Can you provide further detail about the level of harm that the construction works would cause to this specific heritage asset.	Catfoss Hall is included within the list of assets potentially susceptible to a temporary change to their setting outlined at paragraph 289 in **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092]. As outlined in the response to WQ10 in **The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155] '*…the contribution of the agricultural landscape through which the cable route passes to setting of these heritage assets is to allow the viewer to place them into the regionally distinctive agricultural landscape of Holderness. Change to setting arising from the construction works would be observed, but this would be read by a viewer as works within a wider agricultural landscape and would not affect that contribution to significance.*' Effects were assessed as of negligible magnitude at most and consequently no significant adverse effect would arise whether in the case of DBS East or DBS West in Isolation (paragraph 294) of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] or DBS East and West together (paragraph 296) of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092].
HE. 1.12	**Effects on the Black Mill Grade II listed building** What would be the distance between any areas of construction associated with the Proposed Development and the Black Mill? How long would work on the cable corridor take in the vicinity of Beverley Westwood? Can you respond to the concern raised by ERYC [REP1-056] that the Proposed	Black Mill is located approximately 635m southwest of the Onshore Export Cable Corridor at its closest point and approximately 830m southwest from the closest Temporary Construction Compound (TCC) at its closest point. Visibility of the proposed development in views of or from Black Mill would be further limited as a result of screening from hedgerow planting and trees around the fringes of the Westwood. There would be simultaneous visibility of the

I.D.	Written Question	Applicants' Response
	Development would be, 'likely to result in the introduction of distracting works associated with construction, within these longer views of the mill, which would have a potential impact on how the asset is viewed and experienced during the construction phase of the works'?	works and the Black Mill from Walkington Road, in views in which Black Mill is seen as an element of the background to views against a horizon broken by trees and the distant Hall Farm Wind Farm turbines, while the works and compound would be at least partially screened by intervening hedgerow planting. As outlined in the response to WQ10 in **The Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155] '*…the contribution of the agricultural landscape through which the cable route passes to setting of these heritage assets is to allow the viewer to place them into the regionally distinctive agricultural landscape of Holderness. Change to setting arising from the construction works would be observed, but this would be read by a viewer as works within a wider agricultural landscape and would not affect that contribution to significance.*' With regards to the duration of works in the vicinity of Beverley Westwood, **Chapter 5 Project Description (Revision 3)** [REP1-009] provides information on the indicative construction (section 5.8.2) The indicative programme includes the key assumption that the first Project would install the landfall and Onshore Export Cable Corridor ducts for the second Project. The first Project would reinstate the ducted sections within two years, between Jointing Bays.
HE. 1.13	**Effects on listed buildings** In your Local Impact Report (LIR) [PDC-007], you reference potential harm to the significance of 'Cobble Hall', which the ExA understands to be a listed building. However, this building is not referenced in your responses to the ExA's follow up queries on the effects on heritage assets [REP1-056]. Can you confirm if you consider Cobble Hall to be affected by the Proposed Development and, if so, how the significance of the heritage asset would be impacted?	No response is required. Question directed to ERYC.
HE. 1.14	**Significance of effects on non-designated heritage assets** You conclude that when assessed individually there would be less than substantial harm to non-designated heritage assets [REP2-059, Table 1.1]. Has the cumulative effect (when considered together) on non-designated heritage assets been considered? If so, can you signpost this in the application documentation or, if not, why not and if a cumulative assessment might affect the overall findings in the ES?	Table 22-14 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] sets out a comprehensive list of the other developments considered in the assessment of cumulative effects. In all cases, as outlined in Table 1.1 of **The Applicants' Responses to Issue Specific Hearing 2 Supplementary Agenda Questions Appendix A Heritage assets, the effects and the attributed level of harm in response to ISH2 10.9** [REP2-059], harm can be effectively mitigated and therefore any residual harm would be very limited whether considered in terms of individual heritage assets or the wider archaeological resource of the study area as a whole. There is consequently no potential for significant cumulative effects on non-designated heritage assets.
HE 1.15	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** How long would construction work in and around the converter station zone that could affect the setting of the heavy anti-aircraft gunsite scheduled monument take on a worst-case scenario? How would these works affect the setting of this asset?	As a worst case scenario, it is assumed that there would be activity in proximity to the anti-aircraft gunsite, 350m west of Butt Farm, for the duration of the works in the Onshore Substation Zone (up to 4 years as a worst case). The Access Road will be used during working hours for deliveries to site and access between TCC and the Onshore Converter Station areas. Plant movement will be carried out in the early stages of enabling works, during the construction of accesses, the permanent access road, drainage, TCC and Onshore Converter Station Platforms and any early landscaping works. This will be followed by construction of the structures and installation of the electrical equipment. The level of activity will reduce as the site transitions into commissioning, which will be followed by the final landscaping and demobilisation of the temporary site areas. Consequently, the degree of perceptibility of these works will vary over that period, with many works presently minimal discernible change, meaning that the focus of activity will move and the works in any one location would be of limited duration; any change would be further reduced through the adoption of appropriate construction practices. Effects were assessed as of negligible magnitude at most and consequently no significant adverse effect would arise whether in the case of DBS East or DBS West in Isolation (paragraph 294) of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] or DBS East and West together (paragraph 296) of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092].

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		Chapter 5 Project Description (Revision 3) [REP1-009] provides information on the indicative construction (section 5.8.2).
HE. 1.16	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** The Onshore Infrastructure Settings Assessment [APP-178] notes that the battery operated as a mixed sex regiment which used women from the Auxiliary Territorial Service to operate radar, communications systems and other support roles, and that it was used also as a training facility, allowing batteries from around the country to gain operational experience. Can you explain how the gunsite and wider area would have been operated for these specific historic uses and consider whether the effects of the Proposed Development on its setting might be take on a different significance in relation to them.	The considerations mentioned contribute to the significance of the asset, but make a relatively limited difference to the understanding of the setting or effects arising through change to that setting. The scheduling is limited to the surviving gun emplacements, magazine and command post, and the hutted accommodation, radar mat and other ancillary structures are no longer perceptible in the setting of the asset. Archaeological investigation of those parts of the battery within the Order Limits suggest that there is no preservation of remains within the area that would be physically disturbed. As it was common for such home defence gun batteries to accommodate mixed-sex detachments by the time that the battery was operational, it is unlikely that significant alterations were made to the site to accommodate this use, and it is not uncommon for female accommodation to have been provided on a satellite site. The plan and layout of the accommodation and radar site is not readily discernible at present; and can only be understood by reference to plans and aerial photography. Consequently, the contribution of intervisibility between the wider site and the gun emplacement is generalised and has been appropriately considered in the assessment as set out in **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] and expanded on in **The Applicants' Written Summaries of Oral Submissions made at CAH1, ISH1 and ISH2** [REP1-049]. Similarly, use of the site for training would not bear on the consideration of setting, as the scheduled gun emplacements were set out as part of a functional tactical and operational scheme which was the focus of that training, and air raids took place during that period. It is therefore the remaining perceptibility of that tactical scheme that remains the focus of any consideration of setting. Nine separate air raids on Hull, Beverley or Humber in this period of training in 1942, and it appears likely that despite its notional training function, the battery saw operational use in this period.
HE. 1.17	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** Can you provide further justification for your view [PDC-007] that the proposed converter stations would result in substantial harm to the scheduled monument? Do the changes to the scale of the proposed converter stations as a result of Change Request 2 affect your view regarding the significance of harm on the scheduled monument? Why so, or why not?	No response is required. Question directed to ERYC.
HE. 1.18	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** The Applicants suggest in response to ERYC's LIR [REP1-048] that for substantial harm to occur '*solely through change to setting, the vast majority of the significance of the asset would need to derive from its setting, and that all, or approaching all of the contribution of that setting would have to be lost'*. The Applicants state that, '*in this case, much of the value of the asset is intrinsic to its fabric, which would not be affected, and key elements of the setting comprising the designed fields of fire and the relationship to the wider battery site and views of the gun emplacements from that wider battery site, that contribute to setting would be preserved*'. Do you agree with these statements – why, or why not?	No response is required. Question directed to ERYC and Historic England.

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HE. 1.19	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** 1 Historic England states that the significance of the scheduled monument is derived from values, including evidential, historic, aesthetic and communal value [REP1-059]. Can you signpost to where these values have been considered in the ES and to what extent these values would be affected as a result of the Proposed Development? 2 The ExA notes your comments in response to Historic England's WR [REP2-057], that you consider that the principal contribution of the heritage asset's setting would remain unaffected by the converter stations. However, how would other contributions made by the asset's setting be affected? To what extent do you consider that the proposed converter stations would be an 'overbearing presence' on the scheduled monument as suggested by Historic England [REP1-059]?	1 These interests are discussed at section 22.5.6.3.2 of **Appendix 22-5 Onshore Infrastructure Settings Assessment** [APP-178]. This focuses on the key historic interests of the site, reflecting the viewer's ability to understand the tactical function of the site; the archaeological interests that also contribute to significance were discussed briefly. Any effect on archaeological interest was expected to be minimal, and archaeological work reported subsequent to the DCO submission (**Phase 2 2024 Archaeological Trial Trenching Technical Note (Revision 2)** [AS-022]) has demonstrated that no loss of archaeological interest would arise. The aspects that Historic England argue comprise architectural interest are arguably more accurately seen in the scheme set out by Conservation Principles and Historic England Guidance GPA2 Managing Significance in Decision Taking in the Historic Environment as historic interest, relating to the viewers' ability to understand the function of the asset, but are in any case discussed at length in the **Appendix 22-5 Onshore Infrastructure Settings Assessment** [APP-178] and in evidence given orally as per **The Applicants' Written Summaries of Oral Submissions made at CAH1, ISH1 and ISH2** [REP1-049] section 4.9.1. The associations of the asset with the defence of Hull and the Humber region in WWII are not dependent on any manifest elements of the asset and would remain unchanged. Any sense of awe derives from the understanding of the function and operation of the site and from the viewer's imaginative reconstruction of the experience of the site in operation and would again, not be affected. 2 These other contributions would not be affected in any way that would result in any discernible loss of significance. 3 As discussed in **The Applicants' Written Summaries of Oral Submissions made at CAH1, ISH1 and ISH2** [REP1-049], GPA3 is explicit in requiring assessment of change to setting to consider the interaction of heritage interests and the perception of a proposed development rather than stating subjective value judgements. The Applicants have set out a clear statement of how the proposed development would interact with those heritage interests that make up the significance of the asset in line with that guidance.
HE. 1.20	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** Provide further justification for your conclusion [REP2-059, table 1-2] that there would be no residual harm to the heavy anti-aircraft gunsite, 350m west of Butt Farm, given that ES Chapter 22 [AS-092] identifies a residual minor adverse effect on the setting of heritage assets.	As set out at paragraphs 320-323 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092], following the application of mitigation comprising the adoption of appropriate surface finishes and the proposed landscaping scheme, the impact on the anti-aircraft gunsite, 350m west of Butt Farm would be reduced to negligible and resulting in a minor adverse effect on the setting of the heritage asset according to the assessment of significance of effect for EIA purposes. As outlined in paragraph 66 of **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] '*Impacts of negligible magnitude describe a 'discernible change' but one that does not result in loss of significance.*' therefore, there would be no residual harm of the setting of the anti-aircraft gunsite, 350m west of Butt Farm.
HE. 1.21	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** The Onshore Infrastructure Settings Assessment [APP-178] notes that there are 60 well-preserved examples of heavy anti-aircraft gunsites in England. How many of these are located in the East Riding? Are these heavy anti-aircraft gunsites usually within open, rural sites and do they form part of a network? Do you consider the heavy anti-aircraft gunsite nearby to Butt Farm to be a particularly well-preserved or special example, and if so, why?	The National Heritage List of England (NHLE) notes that during World War II, nearly 1,000 gun sites were constructed nationally, but fewer than 200 have any surviving remains. There are 60 scheduled examples of Heavy Anti-Aircraft (HAA) gun batteries listed in the National Heritage List; these are sufficiently well-preserved examples to hold enough significance to meet the criteria for designation and be representative examples. These sites tend to be the later type of fixed emplacements, as at Butt Farm; the survivals are therefore biased towards the later part of the War, reflecting defensive tactics after the 'Blitz' of 1941. This bias towards later sites is compounded by the construction of permanent sites after the emergency conditions of the Blitz, the construction of emergency sites in spring and summer 1944 to meet the V1 threat (Operation DIVER) and the retention of key sites (including Butt Farm) for air defence during the early stages of the Cold War, with these sites being more commonly represented in the schedule than as a proportion of all sites as a result of more complete survival.

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		The preservation of the Butt Farm site, with survival of the permanent emplacements and loss of the ancillary structures is typical of these sites, with related structures being relatively ephemeral. Some sites retain the base for the radar array, semi-permanent structures and foundations of hutted accommodation or other structures, but these features are not recorded as surviving at Butt Farm. The full plan form and operation are not clear as a result of the loss of the ancillary structures within the wider site, and this function can only be understood through reference to documentary material. The 3.7" mountings are the most common variety, with that gun being the mainstay of British air defence during WWII and into the early 1950s. Generally anti-aircraft gun emplacements were positioned to reflect strategic and tactical requirements, and were located in coherent groups offering mutually supportive arcs of fire on predicted approaches to specific targets or en-route to other strategic targets to force the enemy to avoid preferred approach routes. These sites typically hold clear lines of fire in a defined arc, which was typically away from the area to be protected to avoid the risk of collateral damage and allow aircraft to be engaged as they approached the target, deterring them from pressing an attack and affecting the aim of any bombs being dropped. Radar was generally set up behind the principal arc of fire to avoid blast damage to the array. The Butt Farm HAA battery was one of around 50 permanent anti-aircraft gun sites on either side of the River Humber during WWII. NHLE notes five scheduled HAA battery sites in the East Riding: • NHLE 1019185 HAA gunsite at Old Ellerby, 600m south of Ellerby Grange • NHLE 1019186 HAA gunsite, 350m west of Butt Farm • NHLE 1019594 Operation DIVER HAA gun sites on Flamborough Head (scheduling encompasses two sites) • NHLE 1020187 Stone Creek HAA gunsite, at Sunk Island Clough There are two further scheduled HAA gun sites in North Lincolnshire and one in north-east Lincolnshire. No scheduled HAA sites are noted in Hull although HAA batteries were present there as well.
HE. 1.22	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** The Applicants' oEMP [REP2-029] confirms that, '*Permanent lighting at the Onshore Converter Stations has been designed to be directed inwards and provided only to essential areas of the site such as key routes and building entrances. This would produce minimal levels of overspills and help maintain dark corridors along key ecological features during the operation phase such as hedgerows and ancient woodland'*. Furthermore, Requirement 9 of the draft DCO [REP1-004] would require the submission of detailed design parameters, including details of external lighting, which would need to be agreed by the local planning authority prior to installation. Does this address your concerns regarding understanding the effects from lighting during the operation of the converter stations on the scheduled monument? If not, how do you propose that this matter could be resolved before the close of the Examination, given that the Applicants have stated that they do not intend to provide night-time visualisations of the converter stations?	No response is required. Question directed to Historic England.
HE. 1.23	**Significance of effects - heavy anti-aircraft gunsite, 350m west of Butt Farm** With reference to your comments in 4.8 of your WR [REP1-059], you state that the '*harm to the significance of the designated site will remain at "major adverse", and not "minor adverse" as suggested by the Applicants'*. Can you clarify if you consider the magnitude of effect on the heritage	No response is required. Question directed to Historic England.

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	asset as a result of the Proposed Development to be high adverse or medium adverse with reference to ES Chapter 22 [AS-092, table 22-8]?	
HE. 1.24	**Mitigation - heavy anti-aircraft gunsite, 350m west of Butt Farm** With reference to your comments [REP1-059, 4.10], which request that the maximum height, footprint, landscaping scheme and precise location of the converter stations should be fixed as part of any DCO, the ExA notes that Requirement 9 of the draft DCO [REP1-004] would secure the maximum height and footprint of the converter stations. Furthermore, the converter stations would be limited to Work Nos. 25A and 26A/ B, and the DAS [REP2-027] states that the converter stations must be located to the south of these areas. The draft DCO [REP1-004] would secure areas of permanent landscaping (Works Nos. 27A/ B, 20A/ B), which are reflected in the indicative landscaping scheme shown in ES Chapter 23 [REP2-024, Figure 23-6]. Does this address your comments regarding securing maximum parameters? If not, how would you want the parameters to be secured through the draft DCO or supporting documents, noting the outline stage of the proposals? If appropriate, can you provide any preferred drafting?	No response is required. Question directed to Historic England.
HE. 1.25	**Mitigation - heavy anti-aircraft gunsite, 350m west of Butt Farm** Given the proximity of the proposed converter stations to the scheduled monument, if a DCO was made, should Historic England be consulted on the detailed design plans that would be submitted to discharge Requirement 9? If not, why not, or if so, how should this be secured? If appropriate, can you provide any preferred drafting.	As referenced in the **Design and Access Statement (DAS) (Revision 2)** [REP2-027] a Design Panel Review process will commence post-consent. Section 5.2 of the **DAS (Revision 2)** [REP2-027] outlines that the Applicants will appoint a multi-disciplinary team of professionals, with experience in the design and build of electrical infrastructure, to provide independent and impartial expert advice on the proposed designs. Following the Design Review process, the Design Review Panel will prepare a report on the design recommendations (taking into account the requirements of landscaping, drainage and engineering design) which will be subject to review by ERYC in addition to relevant Ward Councillors. It is the Applicants view that, rather than include Historic England in the sign off of DCO Requirement 9, it would be more appropriate and productive to consult with Historic England during this earlier stage of the design process, and include Historic England in the consultation on the Design Review Panel's report. This would allow for Historic England input to be incorporated during the development of the final design, prior to it being submitted to ERYC for sign off. Should this approach be desired by Historic England, the Applicants would update the **DAS (Revision 2)** [REP2-027] and submit it to the examination at the next suitable juncture.
HE. 1.26	**Mitigation - heavy anti-aircraft gunsite, 350m west of Butt Farm** During ISH2 you stated that views of low-level clutter serving the converter stations would be screened from the scheduled monument by proposed planting, to create a sense of separation. Can you define what you mean by 'low level clutter' or low-level elements of the converter stations area? Can you provide an indicative layout drawing to identify these items? The ExA notes that following ISH2, Requirement 9 of the draft DCO [REP1-004] has been updated to secure the maximum height and footprint for each converter station. However, it still remains unclear how the draft DCO or supporting documents would ensure that the lowest level elements of the proposed converter station area would be screened by the proposed landscaping. For example, the heights of the lowest elements are not specified in the draft DCO or supporting documents. In light of this, how can the ExA and SoS have confidence that any proposed planting	As articulated in paragraph 77 of **Appendix 22-5 Onshore Infrastructure Settings Assessment** [APP-178] low level clutter can comprise elements of the converter station such as the switchgear, security fencing, the proposed access road, signage and vehicle and person movements. In general, the screening of the 'low level clutter' would leave the more architecturally coherent larger structures visible above the intervening planting, and the varying height of the trees in the woodland would effectively break up the appearance of any limited elements of switchgear that appear above the tops of the screening. This would create a clear perceptual separation by screening those elements of the development that are closest to the viewer in views of and from the monument and precluding visibility of any activity at the Onshore Converter Station site. A Landscape Mitigation Plan (LMP) has been developed, as shown in **Figure 23-6 (Revision 3)** [REP2-024]. This includes a substantial area of woodland planting, approximately 30m across, between the monument and the

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	would be of a sufficient height to mitigate the effects from these elements, and how would this be secured? The ExA notes that ES Chapter 23 [REP2-024, Figure 23-15a4] appears to show that only the proposed fencing would be permanently screened by planting, and that there would be views of the external paraphernalia at Year 10 post construction during the winter months. How would this ensure a sense of separation between the scheduled monument and proposed converter stations?	existing hedge (which will be retained). The existing hedge is around 2m in height, and includes some mature trees that appear to be 10-15m in height. The proposed woodland will take time to establish, but the assumption is that planting would achieve a height of around 8-10m after ten years (see paragraph 92 in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]). This has been modelled in to the year 10 visualisation provided as **Figure 23-15a3 (Revision 3)** [REP2-024]. This indicates how, in winter views, the proposed planting should screen the fencing, access road, signage and so on. At year 10, it is likely that the upper parts of the switchgear (typically 6.5-10m for individual items of Air Insulated Switchgear (AIS) shown equipment, however as a consequence of air clearances required AIS items may be up to 15.5m in height at locations such as road crossings) will still be visible. Growth will continue beyond year 10 such that these elements would, over time, be screened from view. Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1] states that a LMP must be developed post consent, and submitted to ERYC for their approval prior to commencement. The LMP must be in accordance with the **Outline Landscape Management Plan (OLMP)** [REP2-031], which includes reference to **Figure 23-6 (Revision 3)** [REP2-024] noted above. Requirement 11 of the **Draft DCO (Revision 6)** [document reference 3.1] states that landscape works must be implemented in accordance with the approved LMP, and also sets out measures to ensure the establishment of planting with the oversight of ERYC over a five-year period. The proposed planting shown on **Figure 23-15a3 (Revision 3)** [REP2-024], and which screens the low-level 'clutter', is adequately secured through the **Draft DCO (Revision 6**) [document reference 3.1].
HE. 1.27	**Mitigation - heavy anti-aircraft gunsite, 350m west of Butt Farm** During ISH2, the Applicants advised that the proposed landscaping had been designed to work with the historic landscape and reflect existing woodland areas. Do you consider that the proposed landscaping to the north of the converter stations would appear as woodland, or as boundary trees when viewed from the scheduled monument? Is it locally characteristic for areas of woodland to be bounded by hedgerow as shown in ES Chapter 23 [REP2-024, Figure 23-15a4]?	The landscape of the study area is characterised by hedgerows and small areas of woodland. Aerial photography of the Butt Farm site from 1945 and published on the Historic England NHLE website entry for the Butt Farm monument shows the field to the south of the battery site as occupied by scrubby woodland bounded by a hedge which included some mature trees; this area is shown as 'Bentley Moor Wood' on Ordnance Survey mapping from the first edition mapping to at least 1969 and there is precedent for this boundary treatment. The proposed screen planting to the north of the converter stations would appear as a woodland belt as shown in **Figure 23-15a3 (Revision 3)** [REP2-024]. This figure shows the proposed planting after 10 years of growth and at this point it would still appear immature. Over time, the individual trees would mature, replacing the ageing boundary trees which are within the existing hedge between the monument and the substation site. Planting proposals and visualisations are presented as illustrative of the finished scheme which will be subject to agreement in line with the design review process set out **in DAS (Revision 2)** [REP2-027]. Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1] states that a LMP must be developed post consent, and submitted to ERYC for their approval prior to commencement. This includes the number, type and location of plants, which will be within the control of ERYC and will therefore benefit from the local knowledge of their officers in addition to detailed site work to be undertaken by the Applicant's consultants.
HE. 1.28	**Public benefits - heavy anti-aircraft gunsite, 350m west of Butt Farm** How would the options proposed for interpretation and investigation of the heavy anti-aircraft gunsite [REP1-050, ISH2.10.13] be secured through the draft DCO or supporting documents?	The Public Outreach and Engagement strategy, including any agreed actions in respect of the Butt Farm site, is an element of the **Outline Onshore Written Scheme of Investigation** [APP-239], which is secured by Requirement 18 of the **Draft DCO (Revision 6)** [document reference 3.1].
HE. 1.29	**Enhancements - heavy anti-aircraft gunsite, 350m west of Butt Farm** Can you comment on the Applicants' proposed enhancements to interpretation and investigation of the heavy anti-aircraft gunsite [REP1-050, ISH2.10.13]?	No response is required. Question directed to Historic England.
HE. 1.30	**Archaeological mitigation**	No response is required. Question directed to Historic England.

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	Can you confirm if the Applicants' understanding of your concerns regarding cumulative effects [REP2-057] are correct? That is, that they were not regarding the EIA CEA, as per the methodology set out in ES Chapter 6 [APP-076] and Appendix 6-1 Onshore Cumulative Effects Methodology [APP-077], but referenced the opportunity for collaboration on landscaping between schemes? If this is not the case, why not, and what further information do you seek to address this concern? Does the Applicants' response [REP2-057] to your comments on Onshore Archaeology and Cultural Heritage [REP1-059] address your concerns regarding these matters? If not, can you explain why and suggest what could be done to resolve them?	
HE. 1.31	**Archaeological mitigation** **Historic England:** Can you comment on the acceptability of the proposed outreach and engagement activities, set out under ISH2.10.14 and ISH2.10.15 [REP1-050], including the Applicants' suggestion that Historic England would need to lead any cross-project forums? **Historic England and the Applicants:** How would you propose that any outreach and engagement activities could be secured by the draft DCO?	The Applicants will submit an amended Public Outreach and Engagement strategy in the **Outline Onshore Written Scheme of Investigation** [APP-239] by Deadline 4 to include these options which would be secured by Requirement 18 of the **Draft DCO (Revision 6)** [document reference 3.1].
HE. 1.32	**Archaeological mitigation** Are you satisfied with the wording of Requirement 18 of the draft DCO [REP1-004]? Do you consider the list of information to be included in 18(2) for each scheme to be complete? If not, could you provide details of what additional information you would wish to see included in the list and why?	No response is required. Question directed to Historic England.
HE. 1.33	**Mitigation: Indicative Landscape Plan [REP2-024, Figure 23-6]** The indicative Landscape Plan shows a pinch point along the access road, immediately adjacent to the scheduled monument next to Butt Farm and indicates that there would not be space for the hedgerow to continue along the access road to screen views of the access road (see highlighted section below). Why is this the case? *This question is also repeated in the landscape and visual interest section (see LVI.1.5). You may therefore want to link the answers to these questions*	The pinch point identified is an artefact of the graphical representation of the access road, red line boundary and hedge at small scale. It is not intended that there would be a gap in the hedgerow at this location, and it is intended that the detailed LMP would include a continuous hedge on both sides of the access road, to contain this feature and to tie in to existing hedges on either side. The hedge will need to be within the red line boundary to avoid impacting on the scheduled monument immediately to the east. No hedgerow trees would be planted, in order to preserve the openness of the setting of the scheduled monument. The LMP will be based on the **OLMP (Revision 3**) [REP2-031] and will be submitted to ERYC for their approval in line with Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1].

I.D.	Written Question	Applicants' Response
HE. 1.34	**Mitigation: Indicative Landscape Plan [REP2-024, Figure 23-6]** Meadow grassland appears to be proposed within the Order Limits between the scheduled monument and views towards the access road further south of the scheduled monument (see highlighted area below) – why is this, when hedgerow could potentially be utilised to obscure some views to the converter stations? *This question is also repeated in the landscape and visual interest section (see LVI.1.6). You may therefore want to link the answers to these questions.*	This area is within the indicative cable easement, which is identified by the pink boundary on the Landscape Plan (**Figure 23-6 (Revision 3)** [REP2-024]). Woodland planting has not been proposed as the export cables may be located within this area. The proposed woodland planting that is outside of the cable easement will screen the majority of the views towards the onshore converter stations. In addition, a hedge is proposed along the north boundary of the Order Limits, and extending along the access road. This would also help to limit views of the onshore converter stations from the scheduled monument. The detailed LMP will be submitted to ERYC for their approval in line with Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1].
HE. 1.35	**Mitigation: Indicative Landscape Plan and Outline Landscape Management Plan** To assist the ExA with its assessment, can you provide a visualisation of the access road from the scheduled monument? Could the outline Landscape Management Plan (oLMP) [REP2-031] be updated to include reference to how landscape planting would be used to mitigate the effects on the scheduled monument and any objectives or principles on how this would be achieved?	The access track is a low-level feature, which will be at existing ground level where it is closest to the monument, around 40m to the west. To the north-west, around 180m from the monument, where the land dips down, the access road will be raised approximately 1.0m on an embankment and at some locations the ground level will be reduced to ensure gradient changes to the permeant access road are suitable for the anticipated range of vehicles accessing the site including Abnormal Indivisible Loads. Further north, the access road will follow the rising ground towards the A1079, with the junction being constructed to the north of the existing 400kV pylon. The LMP (**Figure 23-6 (Revision 3)** [REP2-024]) shows the intention to establish hedges along both sides of the access road to contain this feature and tie in to other hedges in the area. Hedges are a characteristic feature of the outlook towards the west and north-west from the monument. Hedges will be established using locally appropriate species that are present in the landscape. Once established, hedges will be trimmed to around 1.5m in height, again to tie in to the nature of existing hedges to the west and north-west of the monument. The outlook in these directions will remain open as there will be no tall structures or woodland planting. The nature of the proposed hedgerow planting and the access track means that it would not be possible to provide a visualisation that would accurately represent the appearance of the access track in all views from the monument, which would change significantly as the viewer moved around the gun site, with visibility variously opened up or precluded depending on the exact location of the viewpoint. Therefore, the Applicants do not propose to offer an additional visualisation of the access road from the scheduled monument. The **OLMP (Revision 3)** [REP2-031] will be updated to reflect the discussion of how landscape planting would be used to mitigate the effects on the scheduled monument and any objectives or principles on how this would be achieved. The updated **OLMP (Revision 3)** [REP2-031] will be submitted at Deadline 4.

I.D.	Written Question	Applicants' Response
HE. 1.36	**Decommissioning** How would the draft DCO [REP1-004] secure the protection of designated and non-designated heritage assets during decommissioning?	Any archaeological remains within working areas for the decommissioning would have been disturbed during the construction phase and therefore there would be no potential for further disturbance. Requirement 27 'Onshore decommissioning' of the **Draft DCO (Revision 6)** [document reference 3.1] requires that a decommissioning plan is approved by the relevant planning authority prior to decommissioning works taking place, which would include provision for the protection of designated and non-designated assets.
HE 1.37	**Decommissioning and cumulative effects** ES Chapter 22 [AS-092, table 22-13] states that, *'cumulative effects during the decommissioning phase are assumed to be the same as those identified during the construction phase.'* Table 22-16 also states that, *'it is anticipated that the decommissioning impacts would be similar in nature to those of construction.'* Table 22-17 states that, *'Inter-relationships and the identified impacts associated with the decommissioning phase would be no greater than those identified for the construction phase.'* However, paragraph 326 suggests that the effects from decommissioning could be worse than construction, but also suggests that the effects from decommissioning are unknown. Can greater clarity be provided on the likely effects from decommissioning and ensure that these conclusions are consistent throughout the ES? On a precautionary basis, should the effects from decommissioning be assumed to have a significant adverse effect, unless it can be demonstrated otherwise?	Effects on heritage assets during decommissioning would be in all cases no greater than, and in most cases discernibly less than those experienced during construction and operation. During the decommissioning phase, there would be no direct physical effects on non-designated heritage assets because works would be contained within areas that had been previously disturbed during construction. No necessary disturbance of above ground/built heritage assets (the pillboxes close to landfall) would occur and any inadvertent direct physical effects could be precluded by standardised best practice measures. Change to setting during decommissioning would be experienced in the context of the removal of any effect that has been experienced during operation (albeit those are very minor and not harmful), so would effectively be the progressive (and relatively rapid) removal of that change. Further information on decommissioning activities can be found in **Chapter 5 Project Description (Revision 3)** [REP1-003] which states that for the onshore cables: "*it is anticipated that the onshore electrical cables would be left in-situ with ends cut, sealed and buried to minimise environmental effects associated with removal. However, given the likelihood of the cables being inside ducts, there remains a possibility to remove and recycle the cables, leaving the ducts in the ground. Access would be needed at Jointing Bays to enable this.*" (section 5.7.1.10). With regard to the Onshore Converter Station, section 5.7.2.6 of **Chapter 5 Project Description (Revision 3)** [REP1-003] states that "*No decision has been made regarding the final decommissioning plan for the Onshore Converter Stations, as it is recognised that industry best practice, rules and legislation change over time. The decommissioning methodology would be finalised immediately prior to decommissioning and would depend on the requirements of the onshore decommissioning plan approved by the local planning authority secured through the requirement in the DCO". The chapter then goes on to state that "Should the Onshore Converter Station need to be decommissioned fully, it is anticipated that a full EIA would be carried out ahead of any decommissioning works being undertaken if required by regulations at the time.*" (para 382). On this basis, the Applicants do not consider that any changes to the assessment of decommissioning effects in the ES is required.

1.14 Hydrology and Flooding

Table 1-14 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Hydrology and Flooding

I.D.	Written Question	Applicants' Response
HF. 1.1	**Local flood risk data** The extract from the ERYC online data viewer provided in Appendix D of the Applicants' Responses to Hearing Acton Points January 2025 (revision 2) [AS-155] only includes Flood Zone 3b and does not identify the risk of flooding in relation to the Proposed Development. Can you provide updated figures at an appropriate scale with the Proposed Development overlaid? This should include all sources of flooding as identified in the Level 1 Strategic Flood Risk Assessment (SFRA).	The Applicants note that the East Riding of Yorkshire Council (ERYC) Functional Floodplain data layer has been requested from ERYC, such that the Projects' elements can be overlain onto the dataset. This dataset has now been provided in Geographic Information System format, overlaid with the Projects' elements, and included as **Appendix F**. The Applicants note that by overlaying the Projects' elements with the Functional Floodplain data layer it is confirmed that none of the Temporary Construction Compounds (TCC's) or other permanent above ground infrastructure is located in the Functional Floodplain. Furthermore, the Applicants note that the consideration of flooding from all (other) sources including fluvial, tidal, surface water and reservoirs has been taken from publicly available Environment Agency national datasets, which are regularly updated, and these are discussed in **Appendix 20-4 Flood Risk Assessment** [APP-168]. Therefore, these datasets should be considered more up to date than the mapping within the Level 1 SFRA which uses a number of the same underlying dataset but at a fixed point in time. On this basis, the Applicants consider that all sources of flooding are considered based on the relevant national datasets and, as such, only the Flood Zone 3b delineation should be taken from the Level 1 SFRA.
HF. 1.2	**Climate change data for the sequential test** The Applicants' response to ISH2 agenda item 11, action point 26 [AS-155] explains the Environment Agency 2013 River Hull and Holderness Drain Flood Mapping Study has been used as to inform the sequential test including the future risk of flooding. Given this study is 12 years old, could you confirm if its findings are considered the most relevant for identifying the current and future risk of flooding for the Proposed Development? If not, please identify which other sources should be used.	While this question is not addressed to the Applicants, a response has been provided to aid the Examining Authority's understanding of the Applicants' position. As noted in paragraph 79 of **Appendix 20-4 Flood Risk Assessment** [APP-168] a data request was submitted to the Environment Agency in October 2023 and a response provided in November 2023. The outputs and results from the Environment Agency 2013 River Hull and Holderness Drain Flood Mapping Study were provided by the Environment Agency as part of this data request. As such, it is understood this is the most current detailed modelling study available and relevant to the Projects
HF. 1.3	**Flood water displacement during construction** Can you quantify the increased risk of flooding elsewhere due the proposed material stockpiles, earthworks and temporary construction compounds within Flood Zone 3 during the construction phase, [AS-155, ISH2 agenda item 11, action point 29]? It would be useful if a plan could be provided to identify where the displaced water is likely to affect.	As noted in response to Action No. 26, of the **Applicants' Responses to January 2025 Hearing Action Points (Revision 2)** [AS-155], none of the TCC's are to be located in Flood Zone 3b (refer to **Appendix F**). The Applicants note that, during construction, two TCC's are likely to be located in Flood Zone 3a, based on the Environment Agency Flood Map for Planning, as shown on Figure 20-4-3-c of **Appendix 20-4 Flood Risk Assessment** [APP-168]. These are the TCC's labelled as Section 08 – TCC-B (located to the north of Hull Bridge Road (A1035) and Section 07 – TCC-A (north of Tickton) on Figure 1c of **Appendix F** of this written response. A conservative assessment of the footprint of these TCC's, is 75m by 75m, as set out in paragraph 346 of the **Chapter 5 Project Description (Revision 3)** [REP1 -009], comprising an area of 5,625m2 for each of the TTC's. The Applicants note that the location of TCC's in Flood Zone 3 is based on the Flood Map for Planning, which is flood zone mapping ignoring the presence of defences. Given the proximity of the Projects to the River Hull, a Main River which incorporates defences, it is understood that the locations of these TCC's is likely to be protected from flooding by these defences. As such, a review of the various modelling scenarios which informed the Environment Agency 2013 River Hull and Holderness Drain Flood Mapping Study has been undertaken. A review of the Environment Agency modelling in this location notes that a number of scenarios were modelled including:

I.D.	Written Question	Applicants' Response

		• With Defences operating which considered the flood risk under existing conditions i.e. assuming all defences and water management assets were intact and operating properly;
		• Without Defences i.e. flooding unconstrained by flood defences, which are scenarios used for the development of Flood Zones 2 and 3. This included several sub-scenarios:
		  ○ All defences removed as a simplified approach whereby all defences were removed;
		  ○ Defences Reach removal where five reaches of the River Hull defences were removed in turn; and
		  ○ Single Asset failure scenarios modelled to reflect failure in a number of individual assets such as pumps, outfall and tidal barriers were assessed for individual failure.
		
		A review of the provided modelling outputs for all of the above modelling scenarios noted that during the 1 in 100 year (1% Annual Probability (AP)) and 1 in 200 year (0.5% AP) event no flooding occurs at either of the TCC's.
		
		The Applicants note that the review of the modelling data provided by the Environment Agency indicated there may be some gaps in the data. As such, a further clarification / data request has been submitted to the Environment Agency to confirm which events would result in flooding to these locations and the associated flood depths / levels.
		
		The Applicants consider that given the relatively small area that these temporary elements would occupy in the much larger flood extent there would be minimal impact on flood depths in the wider area when taking into account the proposed mitigation measures.
		
		These mitigation measures summarised in section 6.3.2.4 of the **Outline Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025] will be put in place, as part of the Surface Water Management Plan, to ensure continued drainage and to reduce flood risk. Additionally, as outlined in section 6.3.2.5 of the **OCoCP (Revision 3)** [REP1-025] any works in the floodplain will incorporate measures to minimise possible obstruction or deviation of flood water including leaving gaps in stockpiles and minimising the height of any raised structures. This would be undertaken in accordance with best practice guidance, as detailed in the **Outline Soil Management Plan** included as **Appendix A** to the **OCoCP (Revision 3)** [REP1-025], and which would be subject to agreement by the ERYC in consultation with the Environment Agency, within the final Code of Construction Practice, post consent.

HF. 1.4	**Haul road crossings of watercourses** Can you explain why the 23 off route (haul road only) temporary watercourse crossings are not included in Table 20-13 of ES Chapter 20 (revision 2) [REP1-014] and therefore how the environmental affects have been assessed?	As described in **The Applicants' Responses to January 2025 Hearing Action Points** [AS-155], the method for assessing Impact 1 Direct Disturbance of Surface Water Bodies is described in section 20.6.1.1 of **Chapter 20 Flood Risk and Hydrology** [APP- 163] (paragraph 107 of the revised document): *'For the purposes of this assessment, the magnitude of impact is assumed to be directly proportional to the total number of trenched watercourse crossings within each river water body catchment and the length of time over which temporary structures could be in place'*. As described in **The Applicants' Responses to January 2025 Hearing Action Points** [AS-155], the number of temporary haul road crossings, either in total or per catchment, does not form part of the assessment. The duration over which they would be in place is assessed, as described above, and this modifies the magnitude of impact for the different construction scenarios – as shown in Table 20-12 of **Chapter 20 Flood Risk and Hydrology** [APP- 163] i.e. for the same number of trenched crossings magnitude of impact is higher in the sequential scenario because temporary crossings would be in place longer and therefore directly disturbing surface water bodies for longer. The 23 haul road crossings are therefore not shown in Table 23-13 because their frequency does not form part of the assessment. They have been assessed on the basis of the duration they will be in place for the two scenarios, and therefore the length of time watercourses could be directly disturbed.
HF. 1.5	**Geomorphological survey scope**	No response is required. Question directed to Environment Agency.

I.D.	Written Question	Applicants' Response
	Can you comment whether limiting the scope of the geomorphological survey [APP-166] to Water Framework Directive waterbodies is appropriate for informing the assessment of likely effects from the Proposed Development? If not, please explain why, and how the Applicants might resolve this.	
HF. 1.6	**Water Environment Regulations compliance assessment scope** Can you confirm if you agree with the waterbodies identified with Table 20-3-3 of the Water Environment Regulations Compliance Assessment (revision 3) [REP1-016], the parameters identified in Tables 20-3-4 and 20-3-5 [REP1-016] and the outcome of scoping assessment? Specific consideration should be given to the general approach that the Proposed Development only affects small proportions of each catchment, habitat or area as justification for scoping out.	No response is required. Question directed to Environment Agency.
HF. 1.7	**Cumulative effects assessment** Can you comment on the Applicants' CEA in ES Chapter 20 (revision 2) [REP1-014, section 20.8], with specific consideration to the approach of identifying other schemes and the criteria used for subsequent shortlisting?	No response is required. Question directed to Environment Agency, ERYC, Beverley and North Holderness IDB and Yorkshire Water.
HF. 1.8	**Water resources** The Applicants identify aquifers, groundwater source protection zones, groundwater abstractions, surface water abstractions and drinking water safeguard zones relative to the Proposed Development [APP-164, Figures 20-1a to 20-3c]. The Applicants have submitted updated Figures 19-8a to 19-8c [REP1-013] that identify local authority managed commercial and domestic potable abstraction wells, and licensed groundwater and surface water abstractions. The figures include an additional 50m buffer. In context of this updated information, can you comment on the assessment of likely effects of the Proposed Development on these hydrogeological and hydrological receptors including any proposed mitigation? Your response should consider the details in ES Chapter 19 [APP-158, section 19.6.1.2]. In addition, could the EA comment or clarify whether it objects to the Proposed Development in the context of the updated information and the groundwater protection remarks in its Relevant Representation [RR-015]?	No response is required. Question directed to Environment Agency, ERYC and Yorkshire Water.
Landfall Zone		
HF. 1.9	**Fluvial and pluvial flood risk** **The Applicants:** The landfall site is identified at high risk of surface water flooding in Figure 20-4-4-a [APP-168]. However, paragraph 124 of the Flood Risk Assessment [APP-168] states this is considered low risk. Similarly, paragraph 118 of the Flood Risk Assessment [APP-168] states '*there would be no fluvial risk to the Landfall Zone*'. However, there are watercourses located within the landfall zone which have associated crossings WX-001 and WX-002 [REP2-014]. Could the Flood Risk Assessment [APP-168] be reviewed and clarify if the aforementioned assessment of risk is accurate?	The Applicants have reviewed the surface water flood risk in Figure 20-4-4-a of **Appendix 20-4 Flood Risk Assessment** [APP-168], as well as paragraph 124 of **Appendix 20-4 Flood Risk Assessment** [APP-168]. This has also been considered in the context of the preceding paragraphs 121 – 123 , where paragraph 122 references the area of increased surface water flood risk to the north of Hornsea Road and which coincides with the location of the watercourses with crossings labelled as WX-001 and WX-002.In this location, the relatively small area of surface water flood risk is associated with the existing land drains. Furthermore, the Applicants note that this assessment of flood risk is considered in the context that the flood risk is temporary during construction only, as highlighted by paragraph 132, which notes that the Projects are in this location and will be below ground and the land reinstated once construction is complete. As such, the Applicants can

I.D.	Written Question	Applicants' Response
	LLFA: Given the access needs for those using Cliff Road, and the immediate adjacent high risk of flooding within the landfall zone and export cable corridor, can you comment whether any mitigation would be likely to be achievable and if it is appropriately secured?	confirm that this flood risk has been assessed within **Appendix 20-4 Flood Risk Assessment** [APP-168] and does not consider there to be a disparity between the mapping and the conclusions set out in paragraph 124. The Applicants have also considered watercourses with crossings WX-001 and WX-002 in the context of the conclusions set out in paragraph 118 of **Appendix 20-4 Flood Risk Assessment** [APP-168]. It is noted that the Environment Agency mapping, included as Figure 20-4-3-a of **Appendix 20-4 Flood Risk Assessment** [APP-168], shows there to be no fluvial flood risk within the Landfall Zone. This is on the basis that the fluvial flood mapping is primarily based on the flood risk associated with Main Rivers (i.e. larger watercourses), where detailed modelling has been undertaken. Flood risk associated with smaller Ordinary Watercourses, not included in the Environment Agency modelling and mapping, is generally captured within the surface water flood mapping. In the context of the watercourses and associated crossings labelled as WX-001 and WX-002, as noted above, the Applicant confirms that the conclusions are correct and the flood risk associated with these existing land drains has been considered in section 20.4.4.1.6 of **Appendix 20-4 Flood Risk Assessment** [APP-168]. Further to the above it is concluded that the mitigation measures incorporated within the **OCoCP (Revision 3)** [REP1-025] are appropriate to address any potential temporary flood risk in this location.
HF. 1.10	**Groundwater risk for export cables** ES Chapter 5 [REP1-009, table 5-25] identifies the indicative trenchless crossing depth at the landfall zone as 20m. How has the effect of the export cables at the landfall zone on groundwater flood risk been assessed, given paragraph 192 [APP-168] states, '*the target depth for the Onshore Export Cables will be between 1.6m and 2m below ground*'?	The Applicants note that the indicative trenchless crossing depth of approximately 20m at the Landfall Zone, identified in Table 5-25 of **Chapter 5 Project Description (Revision 3)** [REP1-009] is referring to the depth of the Offshore Export Cables as they make landfall. Within paragraph 129 (paragraph 192 in the question appears to be a typo) of **Appendix 20-4 Flood Risk Assessment** [APP-168], the discussion of the target depth for the Onshore Export Cables relates to the operational depth of the cables i.e. at the point where they are connecting into the Onshore Export Cable Corridor. As such, the Applicants note there is no disparity between the values being presented in these two documents. An assessment of groundwater flood risk at the Landfall Zone has been made in **Appendix 20-4 Flood Risk Assessment** [APP-168], whereby mapping demonstrates that the whole of the Landfall Zone is situated in an area where <25% of the area is classified as being at risk of groundwater emergence. Furthermore, the geology at landfall is classified as Glacial Till (an undifferentiated aquifer). The geological records within the vicinity of Skipsea indicate the majority of the strata comprises of Clay with secondary very occasional sand bands. Clay by its nature has a low permeability therefore would act as a confining stratum in relation to the displacement of groundwater, and the aquifer within the Clay will be of limited resource and is unlikely to be one continuous groundwater body. According to borehole records the Onshore Export cabling entering landfall at 20m depth would be into this Glacial Till and it is not considered that it would then result in groundwater flooding at surface level because of the properties of the Clay. Structureless Chalk was encountered at circa 30m depth. It is likely that the underlying groundwater aquifer will be at depth within the competent Chalk. The structureless cohesive chalk by its nature will act to some extent as a confining layer so would not be a contributing factor for groundwater flooding occurring at surface if the Onshore Export Cables are at depth within this deeper chalk. On this basis, the Applicants can confirm that an assessment of the effect of the Onshore Export Cables at the Landfall Zone on groundwater flood risk been undertaken and it has been concluded that there would be no significant effects.
HF. 1.11	**Groundwater risk at transition jointing bays (TJB)**	The minimum cover depth of the concrete box TJB is 0.6m. The depth to bottom of the excavation is approximately 2.2m. Alternatively, without the concrete chamber, there will be a 0.9m minimum cover to the marker tiles and

I.D.	Written Question	Applicants' Response
	ES Chapter 5 [REP1-009, table 5-25] identifies the proposed TJBs as 5m x 20m each. Can you confirm the likely depth of the proposed TJB and signpost where the volume of subterranean impact of these TJBs to groundwater has been assessed?	approximately 2m depth to the bottom of the excavation. As described in **Chapter 20 Flood Risk and Hydrology (Revision 2)** [REP1-014], section 20.6.2.2, Impact 2 Changes to Surface and Groundwater Flows and Flood Risk, the assessment for permanent buried and above ground infrastructure - including TJBs - on surface and groundwater flows and flood risk is based on the estimated maximum area of permanent infrastructure in each river or groundwater body catchment. The Onshore Development Area is underlain by the Hull and East Riding Chalk Water groundwater body, which covers an extensive area of almost 2000km2. Permanent infrastructure associated with the Onshore Development Area would occupy 0.02% to 0,04% of the groundwater body depending on which scenario is taken forward. The TJB component would affect an even smaller area of the groundwater body. The extremely small area of the groundwater body that would be affected would be unlikely to significantly alter the movement or level of groundwater in the wider groundwater body or affect gross patterns of groundwater flow or flood risk. This is a negligible impact and of minor adverse effect which is not significant in Environmental Impact Assessment (EIA) terms as assessed in **Chapter 20 Flood Risk and Hydrology (Revision 2)** [REP1-014].
Outline Code of Construction Practice		
HF. 1.12	**oCoCP content and quality** Can you comment on the details provided in the oCoCP (revision 3) [REP1-025] related to flood management, the drainage strategy, surface water management plan and watercourse crossings including: • If the level of detail is sufficient to frame the necessary mitigation of the potential effects during construction and operation of the projects. • If there is reasonable certainty of the quality and content of the future detailed CoCP, whether the approval bodies identified in Tables 3-2 and 3-3 of the oCoCP (revision 3) [REP1-025] would be appropriate. • If the measures listed for temporary culverts in section 6.3.2.6 of the oCoCP (revision 3) [REP1-025] would be appropriate for permanent culverts, as suggested in paragraph 205 of the same document.	No response is required. Question directed to the Environment Agency, Beverley and North Holderness IDB and Lead Local Flood Authority (LLFA).
HF. 1.13	**Surface waterbody discharge rate** Can you clarify whether the proposed discharge rates to receiving waterbodies would be no greater than existing during the construction and operation phases, including where waterbody catchments are altered? If so, it would be useful to update paragraphs 178 and 184 of the oCoCP (revision 3) [REP1-025], and any other relevant paragraphs and application documents, to ensure this is clarified.	As detailed within the **Outline Drainage Strategy (Revision 3)** [REP2-033] in section 1.5.7 the Projects intention is to restrict surface water run off to worst case greenfield run off rates where practicable, to maintain pre-development flows. However, low discharge rates may cause a blockage risk. The blockage risk will be fully assessed at detailed design stage and minimum orifice sizes / discharge rates / mitigation measures will be agreed with the relevant Drainage Authority at this time. If a blockage risk is identified this would be discussed with the relevant Drainage Authority and any discharge rates required above the greenfield run off rates would be agreed with the relevant Drainage Authority at detailed design stage. As detailed in paragraph 179 of the **OCoCP (Revision 3)** [REP1-025], the **Outline Drainage Strategy (Revision 3)** [REP2-033] will form the basis of the detailed drainage scheme and would be submitted to the LLFA at ERYC for approval prior to the commencement of construction of the Projects, in consultation with the Environment Agency, IDBs and the relevant sewerage and drainage authorities. As secured by Requirement 16 of the **Draft DCO (Revision 6)** [document reference 3.1]. The detailed Drainage Strategy would include details of any discharge rates, these would be maintained at pre-development rates as stated in paragraph 180 of the **OCoCP (Revision 3)** [REP1-025] and paragraph 70 of the **Outline Drainage Strategy (Revision 3)** [REP2-033] unless otherwise agreed with the relevant Drainage Authority at the detailed design stage in relation to an identified blockage risk. The Applicants do not

I.D.	Written Question	Applicants' Response
		propose to update paragraphs 178 and 184 which do not apply to discharge rates of the **OCoCP (Revision 3)** [REP1-025].
Drainage Matters		
HF. 1.14	**Infiltration testing** Paragraph 60 of the Outline Drainage Strategy revision 3 [REP2-031] states, '*site investigation and infiltration tests for the site have been undertaken. The desktop studies suggest that the underlaying strata on site will be unsuitable for the disposal of surface water to ground via infiltration. However, this will be reviewed once results of the site investigation are available*'. Can the Applicants confirm when the outputs from the site investigation will be available and if infiltration is found to be feasible, how this will be reflected in the Outline Drainage Strategy [REP2-031]?	Results for the soil infiltration are available and identify a soil infiltration rate of 8.84x10-8m/s - infiltration rates of < 1x10-6 m/s are considered unsuitable for disposal of surface water to ground via infiltration. These results are considered representative of the firm to stiff cohesive deposits that were encountered across the Onshore Substation Zone within the site investigation. Groundwater monitoring is ongoing onsite but current results indicate that groundwater levels are between 0.5 to 10.0m below ground level across the Onshore Substation Zone. Therefore, based on results of the soil infiltration, cohesive nature of the soils and shallow groundwater levels the site is not considered suitable for soil infiltration. The results of the Infiltration testing do not impact on the **Outline Drainage Strategy (Revision 3)** [REP2-033] which has assumed 100% discharge to watercourse. The **Outline Drainage Strategy (Revision 3)** [REP2-031], will be updated at Deadline 8 to include the results.
HF. 1.15	**Accommodating drainage features constructed within the Order Limits associated with the export cable corridor** Are you satisfied that ground and surface water treatment and attenuation features could be constructed within the export cable corridor, assuming a worse case that the proposed haul road would be 100% impermeable?	No response is required. Question directed to Beverley and North Holderness IDB and LLFA.
HF. 1.16	**Drainage works outside the Order Limits** Your response to ISH2 agenda item 11, action point 31 [AS-155] explains discharges for the land drainage scheme and surface water management plan may be required outside the Order Limits. Can you signpost where the environmental impact for the works outside the Order Limits has been assessed in the ES?	As detailed paragraph 12 of the **Outline Drainage Strategy (Revision 3)** [REP2-033] '*If a location falls outside the Order Limits because there is an optimal location within the same field, identified through consultation and voluntary agreement with the landowner, or upgrade or repair is required due to re-routed flow, a separate consent would be required with the relevant drainage authority. As stated in* ***Other Consents and Licenses (Revision 3)*** *[REP1-023] an Environmental Permit for water discharge would be agreed with the Environment Agency. If the discharge was into an ordinary water course an 'ordinary water course consent' from the IDB or LLFA would be required. Any discharge location, outside of the Order Limits would only be developed if a voluntary agreement with a landowner was likely to be obtained, because the outfall location would have a beneficial impact on the land drainage system on their land, located adjacent to the Order Limits. The Applicants are confident that a drainage solution could be delivered within the Order Limits if landowner consent was not forthcoming.*' As the Applicants cannot identify outfall locations outside of the Order Limits ahead of the detailed design stage an EIA for any works outside the Order Limits could not be undertaken as part of the Application. Therefore, the requirement for a separate 'Environmental Permit' or, 'Ordinary Water Course Consent' has been included in the **Outline Drainage Strategy (Revision 3)** [REP2-033]. A separate consent application to the Environment Agency, LLF or IDB for an Ordinary Water Consent would require an assessment of the impact on the drainage ditch into which an outfall would discharge and agreement of any appropriate mitigation measures. The Applicants would review any proposed locations and prepare a consenting strategy identifying any further consents and licences that may be required through consultation with the relevant stakeholders, should outfall locations located outside the Order Limits be identified. This would be the same approach a landowner would be required to take should they be making alterations to their field drainage outfalls. Locations outside of the Order Limits would only be proposed if they were advantageous to the overall drainage of a field affected by the Projects, voluntary agreement with the landowner was obtained and there were no significant environmental constraints identified. As a responsible developer the Applicants fully understand, they do not have the ability to undertake any works outside the Order Limits without the

I.D.	Written Question	Applicants' Response
		relevant consents in place and if they cannot be obtained, a solution will be developed within the Order Limits. Paragraph 12 of the **Outline Drainage Strategy (Revision 3)** [REP2-031], will be updated at Deadline 8 to clarify this. It should be noted that the Environmental Statement has assessed the worst case that any outfall would be located within the Order Limits, which as previously stated is deliverable. Therefore, potential locations outside of the Order Limits (based on landowner feedback and separately permitted) are outside the scope of the examination. The '*alteration of an ordinary watercourse or a culvert or other form of drainage infrastructure in a manner that would be likely to affect the flow of an ordinary watercourse*' is covered by the Protective Provisions for Drainage authorities in Schedule 15, Part 4 of the **Draft DCO (Revision 6)** [document reference 3.1].
HF. 1.17	**Converter station access road culvert sizing** Paragraphs 37 and 38 of the Outline Drainage Strategy revision 3 [REP2-031] explain watercourses would pass below the proposed permanent access road to the proposed converter station and a suitably sized culvert would need to be provided to maintain existing flows. Would it be useful for the Applicants to commit to an expected minimum design standard? If so, what would this be? (For example, no increased risk of flooding for all storm events up to 1% annual exceedance probability plus an allowance for climate change.)	No response is required. Question directed to LLFA.
HF. 1.18	**Drainage and landscape sections** Can you update Appendix A of the Design and Access Statement [REP2-027] to include the following: • a cross section through the proposed attenuation pond with the same orientation as the cross-section C-C • proposed finished ground levels to all cross-sections • the indicative location of swales and permeable paving • the indicative widths of the labelled features eg biodiverse grassland, sustainable drainage area.	The Applicants will update Appendix A of the **Design and Access Statement (Revision 2)** [REP2-027] to include the required information for Deadline 8.
HF. 1.19	**Post-construction discharge volume** Can you confirm the post-construction surface water discharge volume would be no greater than the pre-existing volume for the proposed converter substation and access road development areas, and signpost where this is secured?	Post construction discharge volumes will be no greater than pre-existing volumes as the Projects are compensating for all storage lost (from the introduction of hardstanding areas) by incorporating the principles of SuDS, mimicking existing surface water conditions via the restriction of discharge rates and provision of attenuation measures. The **Outline Drainage Strategy (Revision 3)** [REP2-033] has considered the maximum discharge volume that would be generated from the Onshore Substation Zone including the Access Road assuming 100% hardstanding as a conservative approach at this stage. The final design would seek to reduce the areas of additional hardstanding, reducing the discharge volumes. As detailed in paragraph 179 of the **OCoCP (Revision 3)** [REP1-025], the **Outline Drainage Strategy (Revision 3)** [REP2-033] will form the basis of the detailed drainage scheme and would be submitted to the LLFA at ERYC for approval prior to the commencement of construction of the Projects, in consultation with the Environment Agency, IDBs and the relevant sewerage and drainage authorities, as secured by Requirement 16 of the **Draft DCO (Revision 6)** [document reference 3.1]. The detailed Drainage Strategy would include details of any discharge rates, these would be maintained at pre-development rates as stated in paragraph 70 of the **Outline Drainage Strategy (Revision 3)** [REP2-033] unless otherwise agreed with the relevant Drainage Authority at the detailed design stage in relation to an identified blockage risk. As detailed in the Applicants response to HF1.13. Paragraph 70 of **the Outline Drainage Strategy (Revision 3)** [REP2-033], will be updated to clarify this at Deadline 8.

1.15 Infrastructure and Other Users

Table 1-15 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Infrastructure and Other Users

I.D.	Written Question	Applicants' Response
Infrastructure and other users		
IOU 1.1	**Written Ministerial Statement** Does the WMS from the SoS for DESNZ '*Oil and Gas Overlaps with Offshore Wind Projects*' (UIN HCWS504) (24 May 2024) have any implications for the Proposed Development in relation to the assessment of marine infrastructure and other users? If so, what are they or, if not, why not?	The Oil and Gas Overlaps: Offshore Wind Projects Written Ministerial Statement (WMS) is primarily focused on the topic of the co-location of offshore wind leasing areas and issued licences from the 33rd oil and gas licensing round. The key update provided in the WMS is '*To give greater reassurance to affected offshore wind developers that oil and gas licensees will take account of their developments, and to promote co-existence, the North Sea Transition Authority has introduced a new clause in relevant licences following discussions with the Crown Estate and Crown Estate Scotland. The new clause will require the oil or gas licensee to have a co-location agreement with the affected offshore wind developer in place before any operational activity can take place in that licence area, which includes seismic surveying, drilling exploratory wells or installing subsea or surface infrastructure.*' This co-location clause provides assurances to the Applicants that any oil and gas operators that have received licences within the Offshore Development Area of the Projects will be required to enter into a co-location agreement with the Applicants prior to any operational activities taking place. As noted in section 16.6.1.2.1 of **Chapter 16 Infrastructure and Other Users (Revision 3)** [REP1-011] it is the expectation that crossing and proximity agreements would be reached with existing oil and gas operators. As such, the clause detailed in the WMS for future co-location agreements being required provides further evidence that the expectations of crossing and proximity agreements being reached are appropriate.
IOU 1.2	**NPS EN-3** ES Chapter 16 [REP1-011] refers to effects from interactions with other offshore wind farms, including the crossing of the export cables for the Hornsea Project Four OWF. Which paragraph(s) of NPS EN-3 or the EIA Regulations do you consider relevant to the assessment of this matter?	The Applicants position is as follows: • Chapter 16 was included in the Environmental Statement (ES) because of National Policy Statements (NPSs) rather than the EIA Regulations. The EIA Regulations do not include a requirement for inclusion of Chapter 16 in an ES, as it does not align with the factors specified in Regulation 5. Despite this, assessments similar to Chapter 16 have been historically included in ESs for offshore wind projects due to established custom and practice. • The core necessity for Chapter 16 arises from EN-3's sections discussing 'offshore infrastructure and activities', which could have been assessed independently but were incorporated into the ES for convenience • It is as a result of that custom and practice that Chapter 16 was included in the Applicants' scoping report and as a consequence in the scoping opinion. • Having been included in the scoping opinion, it is a requirement under Regulation 14(3) that the ES is based on the most recent scoping opinion. This is the only way in which the EIA Regulations are engaged in respect of Chapter 16. • Chapter 16 has addressed the offshore infrastructure and activities referred to in EN-3 paragraphs 2.8.196 to 2.8.203 relating to assessment. Chapter 16 treats other offshore wind farms as if they are within that wording, for convenience, though on a strict reading of EN-3 the Applicants do not consider offshore wind farms are included within the ambit of these paragraphs. In particular, questions of siting and design would clearly be a special case. • Despite this, the Applicants accept that interactions with other offshore wind farms are a relevant consideration for the Examination and the SoS and they have followed good practice in assessing them in Chapter 16. (Wake effects assessments, however, have never been regarded as required as part of an offshore wind application. By

I.D.	Written Question	Applicants' Response
		withdrawing reference to a wake assessment, the Applicants have rejoined the long standing consensus on that point.) ○ With that preamble, the direct answer to the ExA's question is that on a strict reading of the NPSs, the inclusion of the assessment of offshore wind farms in Chapter 16 ultimately arises from the general advice in Part 5 of EN-1 (paragraph 5.1.2) that the generic impacts highlighted in EN-1 and technology specific NPSs like EN-3 are not exhaustive and that other impacts can be considered. This in turn reflects the ability of the SoS to take account of any matter he considers important and relevant in the final decision (section 104(2)(d) Planning Act 2008). ○ The only reason Chapter 16 is included in the ES is because the Applicants went beyond the ambit of Regulation 5 and chose to include it in their scoping report which then led to the engagement of Regulation 14(3)(a).
IOU 1.3	**The Crown Estate Leasing** Provide a summary of the process for licensing rounds for offshore wind farms and how licences are obtained. What considerations does The Crown Estate take account of when issuing a lease for an offshore wind farm? Setting aside wake loss, are there other matters which The Crown Estate considers during the leasing process, which are also considered as part of the DCO application process? Can a copy of The Crown Estate's Round 4 Information Memorandum be submitted into the Examination?	While this question is addressed to the Crown Estate, the Applicants have provided a response to aid the Examining Authority's (ExA) understanding of the Applicants' position. The Crown Estate (TCE) has undertaken multiple offshore wind leasing rounds in England and Wales, with four main rounds launched between 2001 and 2019, including Round 4. The Applicants understand that Leasing process for Round 4 consisted of several structured stages: *Pre-Qualification Questionnaire (PQQ)*: This initial stage evaluates potential bidders based on their financial capability, technical expertise, and legal compliance. Successful bidders, having satisfied the predefined criteria, qualify for the subsequent Invitation to Tender (ITT) stages. I*nvitation to Tender Stage 1 (ITT Stage 1):* Assesses the financial and technical robustness of projects proposed by pre-qualified bidders. Projects passing this assessment progress to ITT Stage 2. I*nvitation to Tender Stage 2 (ITT Stage 2):* Involves a competitive bidding process where eligible bidders submit option fees for their projects. Awards are determined via daily bidding cycles until a minimum of 7GW up to a possible maximum of 8.5GW of capacity is allocated. *Plan-Level Habitats Regulations Assessment (HRA)*: Conducted over approximately 12 months following the tender process to assess environmental impacts, ensuring projects comply with relevant environmental legislation. *Agreement for Lease:* Upon successful bidding, The Crown Estate enters into a Wind Farm Agreement for Lease with developers, enabling the construction and operation of offshore wind projects for up to 60 years. Prior the PQQ stage, the Crown Estate also carried out stakeholder engagement and strategic refinements. Stakeholder engagement was carried out in three stages. Stage One involved early engagement with statutory and non-statutory stakeholders from November 2017 to February 2018, which focused on spatial constraints and leasing area input. Stage Two, lasting from July to December 2018, involved gathering feedback on proposed leasing models and refining tender plans based on stakeholder comments. This resulted in several changes, including detailed drafting of PQQ criteria. During the final consultation stage (January - August 2019), further seabed regions refinement and leasing design were shared for feedback. The process for Round 4 laid down a 7.5km buffer from existing projects. This was an increase from the 2017 offshore wind extension leasing round of 5km. The 7.5-kilometre buffer was introduced specifically for existing projects (i.e. projects that already have an Agreement for Lease or Lease from The Crown Estate (including the 2017 offshore wind extensions projects). The Applicants are submitting the **Offshore Wind Leasing Round 4 - Bidders Information Day: Q&A Summary** [document reference: 13.10] (October 2019) to help the ExA understand the substantial level of

I.D.	Written Question	Applicants' Response
		engagement between TCE and the offshore wind sector in designing the Round 4 process. This includes a question relating to the 7.5km buffer. Despite opportunities for stakeholders, including existing projects, to make representations in respect of any wake effects or concerns with the proposed 7.5km buffer being insufficient in any way, the Applicants are not aware of any such representations or concerns to have been raised.
IOU 1.4	**EIA Regulations** EIA Regulation 14(3)(a) states that an ES must, '*where a scoping opinion has been adopted, be based on the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)'.* The ExA has heard the views of all parties in relation to your removal of wake loss effects from the originally submitted ES and notes your view that wake loss does not represent a material consideration in the assessment of the application [REP2-058]. Given that the relevant scoping opinion [APP-232] explicitly states that, '*turbine spacing and potential wake-wake interactions'* should be considered in the ES, can you demonstrate how the ES currently complies with the EIA Regulations, given that it now makes no reference to wake loss and does not provide any explanation as to why this is the case.	The Applicants would make two main points in relation to this question. First a general one regarding the interpretation of the EIA Regulations and second a point regarding the quote from the scoping opinion the ExA has provided. The Applicants agree that they are bound by Regulation 14(3)(a) and consider that the revised ES (**Chapter 16 Infrastructure and Other Users (Revision 3)** [REP1-011]) complies with this. This is because wake effects are not environmental effects within the meaning of regulation 5(2). It is notable that (prior to the original version of the ES for the Projects) no offshore wind application (to the Applicants' knowledge) has been submitted with a wake effects assessment or reference to a wake effects assessment. The Applicants submit that this reflects the widespread acceptance that wake effects are not an EIA issue (It also reflects the widespread acceptance that the National Policy Statements (NPS)s did not require wake effects assessments). The Applicants previously provided an explanation as to why the reference to wake loss has been removed from the ES in response to point 3 of Table 4-1 in T**he Applicants' Responses to January 2025 Action Points (Revision 2)** [AS-155]. Turning to the point the ExA has quoted from the scoping opinion, the Applicants note that the interpretation of the **Scoping Opinion** [APP-232] as referring to wake loss caused by one wind farm on another is, in the Applicants' opinion, not correct. An explanation of why this is so, is provided below. Section 2.1 Marine Physical Processes of the relevant **Scoping Opinion** [APP-232] states that '*careful consideration should be given to potential enhanced mixing of the water column due to the Dogger Bank South arrays both alone, and in-combination, with the other Dogger Bank OWF developments. Baseline characterisation surveys should include the natural cycle of water column stratification, biogeochemical fluxes, and primary productivity. The Applicant should also consider turbine spacing and potential wake-wake interactions'*. The Scoping Opinion is referring to marine physical processes and specifically the potential effects on the Flamborough Front, which is a is a 320km-long zone located off the East Riding of Yorkshire coast that forms in spring and summer months as a result of temperature stratification of the water bodies. A full description of the Flamborough Front is presented in section 8.5.12 of **Chapter 8 Marine Physical Environment** [APP-080]. In a marine physical process context, the wake referred to is that potentially caused by the foundations on the current flow where they present an obstacle to the passage of currents locally. The wake is caused by a deceleration of flow immediately upstream and downstream of each foundation and an acceleration of flow around the sides of each foundation. Depending on the spacing of foundations within the Array Area, there is potential for wakes caused by different turbines to overlap cumulatively altering the tidal current speeds. The main potential impact on the Flamborough Front as a result of wake effects is a change to near-field mixing and the potential for destabilising local water column stratification. The wake effects on the Flamborough Front are assessed in section 8.7.4.3 of **Chapter 8 Marine Physical Environment** [APP-080]. At a minimum turbine spacing of 830m within the Array Areas, the potential for wake-wake effects is considered low.

I.D.	Written Question	Applicants' Response
		Therefore, the Applicants consider that the current ES does comply with the EIA Regulations.
IOU. 1.5	**NPS EN-3 wake loss** You state [REP2-058] that the *'the only fair and objective reading'* of NPS EN-3 paragraph 2.8.44 *'is that existing offshore wind farm projects were not regarded as 'other offshore infrastructure'* given the separation of *'other offshore infrastructure'* in section 8 of the NPS. Could an alternative interpretation of this be that *'other offshore infrastructure'* was separated to identify and assess effects from interactions with other **existing** offshore infrastructure (rather than providing direction for assessing site selection for a proposed offshore wind farm as contained within the previous paragraphs), which could therefore include other offshore wind farms? If not, why not?	The Applicants are not sure that they understand the question the ExA is putting. The overarching section in which paragraph 2.8.44 appears is "Factors influencing site selection and design" (heading on page 33). There are then a series of 9 sub-headings (starting with Offshore Energy SEA and ending with Green belts) which have different points made relevant to siting and design. One of those is 'Seabed licensing' which explains the seabed licensing process including the fact that Round 4 is completed (which includes the Projects) and states (in paragraph 2.8.25) that "project developers should seek to maximise their capacity within the technological, environmental and other constraints of the project". The Applicants submit that this sub-section and this paragraph is highly relevant to this wake effects issue. This is the obvious place for the Secretary of State to have set down policy in relation to newly licensed sites taking account of wake effects on existing or emerging projects. Not only is it silent on this (as is the entire EN-3) but it urges developers to maximise their capacity (which in any event is normal practice i.e. offshore wind farms have always been designed to maximise capacity without regard to other projects (save where they were within a TCE buffer requiring commercial agreement). When the section on 'Other offshore infrastructure and activities' is reached then the Applicants submit that the natural (and textual) reading of this section is that it does not apply to existing or emerging offshore wind projects. The Applicants do not follow the alternative interpretation the ExA is putting and suggests this is addressed in an issue specific hearing. Paragraph 2.8.44 states that it is addressing siting and design which is in accordance with the intent of this whole section of EN-3.
IOU. 1.6	**NPS EN-3 wake loss** Do you consider that existing offshore windfarms are relevant to NPS EN-3 paragraph 2.8.345 as '*other offshore industries*'? If not, why not? If so, has the site selection and site design of the Proposed Development been made with a view to avoiding or minimising disruption or economic loss? Are there any design solutions which could resolve concerns regarding wake loss? Explain your answers.	The Applicants' view is that paragraph 2.8.345 does not relate to existing offshore wind farms. (Note also that none of the DBA/DBB/DBC Projcos, Hornsea 3 and Hornsea 4 can be said, yet, to be existing as they are not operational). The chapter within EN-3 which this paragraph appears is entitled "Offshore wind". When paragraph 2.8.345 refers to 'other offshore industries' the most natural meaning to give this is that it does not relate to offshore wind farms as they are part of the same industry. Furthermore, there is persuasive context to reinforce this. First, that there is already a site selection mechanism pursuant to TCE's seabed licensing rounds (which have been expressed explained and referred to in paragraphs 2.8.20 to 2.8.27 in relation to setting the ground rules for site selection). Whilst not stated in EN-3, TCE liaises regularly with DESNZ when designing new licensing rounds. Second, that it is generally known and accepted that when designing a new offshore wind farm it is standard practice for developers not to take into account wake effects on other projects (Save where a site is inside a TCE buffer and agreement is required). The design of new projects to maximise Annual Energy Production (AEP) is fundamental to the commercial case for a new project. It is a complex technical issue balancing a range of considerations. If mitigation of wake effects on other wind farms were introduced as a new consideration that would be a major change, which would require the most careful consideration as the Applicants have highlighted in AS155-3 (page 23). It would be in conflict with the advice in paragraph 2.8.2 to maximise capacity and would be likely to have a disproportionate impact on the AEP of the new project. Whilst the Applicants' answer to the first question is 'no', it responds below to the further questions. Site selection was made pursuant to TCE's Round 4 licensing rules. These included a buffer of 7.5km as explained in response to IOU 1.3, which was increased from the buffer for the 2017 Extensions round. These rules were set with a view to reducing and managing disruption between projects and economic loss. The Applicants do not consider there are any acceptable design solutions which would resolve the concerns regarding wake loss or mitigate for any potential impacts.

I.D.	Written Question	Applicants' Response
		Site design has followed standard industry practices. It has been shown by numerous studies, e.g. the Offshore Wind Leasing Programme Array Layout Yield Study[32] [AS-014] that site design variations undertaken to reduce the impact of one farm on another result in reductions in total energy yield. Thus, such modifications would materially inhibit the UK's stated renewables targets. Furthermore, any modification which would have a material effect on an existing wind farm would require such a large decrease in generation at the farm under design as to be completely disproportionate. Only marginal differences in impact can be achieved and even then at significant cost to the new farm. Such design modifications have been considered by Mona in the **Mona Offshore Project** [document reference: 13.11] with similar results to the Array Layout Yield Study by Frazer Nash: mitigation attempts end with lower total energy production, either via increased internal wake losses, or via reductions in installed capacity.
IOU. 1.7	**NPS EN-3 wake loss** In the context of NPS EN-3 paragraphs 2.8.200 and 2.8.344, can you demonstrate how you have worked with the operators of existing offshore wind farms that could have been affected by the Proposed Development during the pre-application and pre-examination stages to minimise negative impacts on annual energy yield from wake loss, given that concerns were first raised in the pre-application stage and were initially scoped into the ES.	The Applicants do not consider that paragraphs 2.8.200 and 2.8.344 apply to the application. It should be noted that DBA, DBB, DBC, Hornsea 3, and Hornsea 4 are not yet operational, though the Applicants acknowledge that they will be in due course. (The other projects that are part of the Orsted IPs are operational). The Applicants have set out their overall position on these EN-3 paragraphs i.e. that they either do not apply to other offshore wind projects or, if they do, then the advice in paragraph 2.8.342 to the SoS to approach issues pragmatically should be followed. That pragmatism will vary depending on which other offshore industry or activity is involved. The Applicants submit that a pragmatic approach for other offshore wind farm projects would be to acknowledge two key points. First, that wake effects were taken into account by TCE in setting the 7.5km buffer distance and the Projects have respected that buffer. Second, that as referenced in IOU 1.6, the Applicants do not consider that mitigation steps are available which would not reduce overall energy yield. Third, it has never been the practice of offshore wind developers to seek to reduce wake effects on other projects. Accordingly, the Applicants have not worked with the operators of other wind farms to seek to reduce wake effects, except in the sense that all the major UK offshore wind developers will have participated (or had the opportunity to participate) in engagement and consultation with TCE on the design of Round 4. Any departure from that approach would represent a fundamental change to offshore wind development in the UK and would need substantial consultation and the clearest guidance as to what the policy objective was intended to be. See the Applicants submissions on this in REP2-058 (bottom of page 17 onwards). For the avoidance of doubt, the Applicants have worked and continue to work with the Projcos and the Orsted IPs in relation to other interactions with the Projects, following normal good practice.
IOU. 1.8	**Wake loss** The Ørsted IPs [REP1-086] and Projco IPs [REP1-071] refer to the need to consider the overall net effects from wake loss on annual energy production in relation to climate change. The ExA notes your responses on this matter [REP2-058], but do you consider that wake loss could be of relevance to the EIA Regulations in terms of assessing the impact of a project on climate change (such as the contribution to the abatement of fossil fuel generation within the UK grid during the operational phase)? Explain your response. The ExA notes that net effects from wake loss do not appear to be	Prior to recent post-application submissions,, wake effects have not been taken into account within Greenhouse Gas (GHG) assessments in offshore wind farm Environmental Impact Assessments (EIAs) and multiple offshore wind DCOs have been consented on that basis. The GHG assessment presented within **Chapter 30 Climate Change** [APP-222] provides a robust evaluation of the Projects' contribution and effect on climate change. Even if based on the worst case scenario, the impact of wake loss on other existing or emerging projects would still be marginal in the context of total energy generation and emissions

[32] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010125/EN010125-000798-10.23 Array Layout Yield Study (Wake Loss Report_Fraser Nash 2023).pdf

I.D.	Written Question	Applicants' Response
	considered in ES Chapter 30 [APP-222] or ES Chapter 30 [APP-224]. The ExA also notes that technical notes setting out the effects of wake loss on net greenhouse gas emissions have been submitted to other offshore wind farms examinations, including Mona Offshore Wind Farm, and therefore requests that one is submitted for the Proposed Development.	displacement. The fundamental conclusion of the assessment—that the Projects will make a significant contribution to reducing UK GHG emissions would remain unchanged. In any event, if any wake loss was to be quantified for the purposes of a GHG assessment, the Applicants would require the baseline energy output assumptions used by Interested Parties and their key parameters, which are not presently available. The Mona submission [document reference: 13.11] relied on a prior assessment submitted by Orsted in relation to their own projects. The Applicants propose to submit a technical note which takes account of the Projcos's assessment in relation to their projects which, as the Applicants understand, the Projcos IPs are intending to submit at Deadline 4.
IOU. 1.9	**Wake loss** Can you provide an assessment and evidence to demonstrate the extent of suggested wake loss and effects on annual energy production from the Proposed Development on Hornsea Project 3 and Hornsea Project 4 OWFs which are referenced in your Deadline 1 submission [REP1-086]? Can you provide this information in kWh and as a percentage of annual energy production? Can you advise the installed capacity and the generating capacity of each offshore windfarm, and confirm what load factor you use to calculate the generating capacity? What is the operational lifespan of each offshore wind farm and how long would wake loss likely be a concern? Can you set out whether you consider any potential effects from wake loss would be significant in EIA terms and how you have derived this conclusion? Do you consider that any effects from wake loss on Hornsea Project 3 or Hornsea Project 4 would affect their operational viability? If so, can you provide evidence to demonstrate to what extent this would be the case? Provide this information at no later than Deadline 4 (25 April 2025) if you are unable to provide it by Deadline 3.	No response is required. Question directed to Ørsted Interested Parties.
IOU. 1.10	**Wake loss** The ExA understands that you intend to provide an assessment of the effects from wake loss from the Proposed Development on annual energy production for Dogger Bank A, Dogger Bank B and Dogger Bank C OWFs at Deadline 4 [REP1-071]. Can you provide this information in kWh and as a percentage of annual energy production? With that submission, can you set out whether you consider any potential effects from wake loss would be significant in EIA terms and how you have derived this conclusion? Can you provide the installed capacity and the generating capacity of each OWF, and confirm what load factor you use to calculate the generating capacity? What is the operational lifespan of each OWF and how long would wake loss likely be a concern? Are you able to provide evidence to demonstrate your stance [REP2-071] that the Proposed Development would have an effect on the operational viability of Dogger Bank A, Dogger Bank B or Dogger Bank C OWFs and to what extent this would be?	No response is required. Question directed to Projco IPs.
IOU. 1.11	**Wake loss** Notwithstanding your position that wake loss effects do not form a material consideration in the assessment of this application, what percentage and kWh of annual energy production loss did your assessment of the effects from wake loss on Dogger Bank A offshore wind farm show? How	The Applicants have removed all reference to this assessment from their application material with the intention that the ExA and IPs proceed on the basis it had never been referred to. Rhyl Flats submitted a short opinion letter from DNV (3 paragraphs), not a wake assessment. It opined that "*DNV expects the additional wake loss at the Rhyl Flats wind farm to be in the region of up to 2%*". It is not really possible to

I.D.	Written Question	Applicants' Response
	did you determine that this would have a negligible effect? How would these effects compare with the likely effects on Rhyl Flats as a result of Awel y Môr Offshore Wind Farm?	use this opinion as a benchmark when considering other projects. The applicant in Awel y Mor stated that the actual wake loss could be significantly lower, in practice. No actual wake assessment was carried out.
IOU. 1.12	**Wake loss** What resolution do you seek regarding wake loss and if appropriate, how would you wish to see this captured in the draft DCO or any supporting documents? If the ExA and SoS were to determine that wake loss was a relevant consideration under NPS EN-3, can you comment on whether a requirement along the same lines as Requirement 25 of The Awel y Môr Offshore Wind Farm Order 2023 (requiring a wake loss assessment post-consent) would be justified and would meet the relevant legal and policy tests?	Whilst the question is not directed at the Applicants, who will respond as appropriate to submissions received from the Orsted IPs, and the DBA, DBB, and DBC Projcos, the Applicants would make the following points: The resolution to this issue is for the Projcos and Orsted IPs to accept that the question of wake effects was resolved through TCE's Round 4 leasing process and the 7.5km buffer which was fixed. This approach has been generally accepted by the offshore wind sector, until the wholly unexpected outcome of the Awel y Mor decision. New projects should continue to be designed to achieve the maximum AEP, if they have respected TCE's buffer. The implications of a requirement of the type imposed in the Awel y Mor DCO were not properly considered in the Examination. Requirement 25 was imposed by the SoS in a form recommended by the ExA in its report, which neither the applicant nor Rhyl Flats had seen. Its drafting was not consulted on by the SoS prior to their decision. The Applicants submit that any such requirement, if imposed, would fail the tests in EN-1, particularly in relation to certainty, enforceability and overall reasonableness. The lack of any specific DESNZ policy in relation to wake loss and guidance as to how it might be assessed and taken into account is of relevance to the drafting and benefit of a DCO requirement which might seek to control design parameters similar to that included in the Awel y Môr DCO in order to address the Projcos' stated concern. It is also unclear how any requirement would work in the absence of guidance that sets out what constitutes an effect which merits attempts at mitigation, or what change against a baseline assumed mitigation might need to deliver against the impact any mitigation would have on the new generation delivered by the Projects. There is considerable doubt as to how such a requirement would be discharged and how it could be enforced by the SoS, thereby failing two of the relevant tests. The Applicants have highlighted that the theoretical mitigation options available would reduce the overall AEP in aggregate. In other words that any mitigation imposed would have a significantly more detrimental impact on the energy generation from the Projects than any benefit that may be accrued by the Projcos, leading to an overall net reduction in AEP. Such a requirement would be unnecessary to make the development acceptable in planning terms, and wholly unreasonable.
IOU. 1.13	**Update to ES Chapter 16: Infrastructure and other uses Figure 16-2 [AS-010]** Can you update figure 16-2 to ensure that all the offshore infrastructure is correctly colour coded to reflect the current situation of offshore wind farm projects and their status? For example, Outer Dowsing is in examination (shown as in pre-application), Sheringham and Dungeon Extensions are consented (shown as in planning), and Dogger Bank D is in the pre-application stage (shown as in planning). Also, can you clarify what is meant by 'Government Support on Offer' on the key?	An updated version of Figure 16-2 of **Chapter 16 Infrastructure and Other Users Figure 16-1 to Figure 16-6 (Revision 4)** [document reference: 7.16.1] has been submitted at Deadline 3 which contains the requested changes. 'Government Support on Offer' refers to projects that have secured a Contract for Difference with the UK Government.
IOU. 1.14	**Oil and gas licensing** Can you provide an update on the 33rd oil and gas Licensing Round and any potential projects that could affect the Proposed Development (or vice versa), noting the comments from INEOS UK SNS Limited [RR-025] and INEOS UK SNS Limited on behalf of ONE-Dyas UK Limited [RR-026]? Have any additional oil or gas blocks been opened since submission of the application that could be	A total of 13 new oil and gas blocks from awarded by the North Sea Transition Authority in the 33rd Oil & Gas Licencing Round wholly or partly overlap with the Offshore Development Area, and are presented in Figure 16-3 of **Chapter 16 Infrastructure and Other Users Figure 16-1 to Figure 16-6 (Revision 4)** [document reference: 7.16.1] submitted at Deadline 3. As noted in the response to IOU 1.1 above, the *Oil and Gas Overlaps: Offshore Wind Projects*[33] WMS ensures that the operators awarded these blocks will be required to have a co-location agreement with the Applicants in place before any operational activity can take place in their respective licence areas. As such, the

[33] https://hansard.parliament.uk/commons/2024-05-24/debates/24052447000010/OilAndGasOverlapsOffshoreWindProjects

<table>
<tr><th>I.D.</th><th>Written Question</th><th>Applicants' Response</th></tr>
<tr><td></td><td>affected by the Proposed Development? If so, what are the potential effects and how would the Proposed Development mitigate them?</td><td>assessment conclusions detailed in section 16.6.1.2.1 of Chapter 16 Infrastructure and Other Users (Revision 3) [REP1-011] remain valid for any projects arising from the awarding of these new licence blocks.</td></tr>
<tr><td>IOU. 1.15</td><td>Other potential infrastructure

Can you provide an update on the proposed third Eastern Green Link HVDC cable and the fourth Eastern Green Link HVDC cable, and whether any updates or changes affect the findings of your ES?

Can you also provide an update on the proposed Continental Link Multi-Purpose Interconnector in planning by National Grid, and whether any updates or changes affect the findings of your ES?</td><td>Eastern Green Link HVDC Three and Four

Public consultation on proposals for Eastern Green Link HVDC Three (EGL3) and Eastern Green Link HVDC Four (EGL4) began in May / April 2024 respectively, with a scoping report for the project being released in conjunction with Eastern Green Link HVDC Four (EGL4) in late July 2024, which presented indicative offshore routes for each project (now presented in Figure 16-4 of Chapter 16 Infrastructure and Other Users Figure 16-1 to Figure 16-6 (Revision 4) [document reference: 7.16.1] and submitted at Deadline 3). As noted in Chapter 16 Infrastructure and Other Users (Revision 3) [REP1-011], the indicative EGL3 / EGL4 routes would cross the Projects' Offshore Export Cable Corridor. The assessment findings detailed in section 16.6.1.3 of Chapter 16 Infrastructure and Other Users (Revision 3) [REP1-011] for physical impacts on electrical infrastructure remain valid for EGL3 and EGL4, with any commercial and technical agreements with EGL3 and EGL4 expected to be in place ahead of the commencement of construction and crossing and proximity agreements would be agreed post-consent during the Projects' pre-construction period.

Continental Link Multi-Purpose Interconnector

No further publicly available information has been released regarding the project since the Projects DCO submission in June 2024. As such, there are no updates to make to Chapter 16 Infrastructure and Other Users (Revision 3) [REP1-011] at this time.</td></tr>
<tr><td>IOU. 1.16</td><td>Ministry of Defence submarine practice and exercise area (PEXA)

Can you provide details of the extent, purpose and current status of the submarine PEXA listed on admiralty charts in the region of the Order Limits into the Examination? Do you consider that the Proposed Development is likely to have any interactions with the PEXA which would lead to a significant effect(s), or would require mitigation?</td><td>No response is required. Question directed to Ministry of Defence.</td></tr>
<tr><td>IOU. 1.17</td><td>Ministry of Defence PEXA

What mitigation could be put in place to avoid any effects on the submarine PEXA identified?</td><td>The Applicants await the Ministry of Defence's (MOD) position in relation to the interactions of the submarine PEXA. Mitigation will be proposed if the MoD confirm there are interactions with the PEXA which could lead to a significant effect.</td></tr>
<tr><td>IOU. 1.18</td><td>Co-location, crossing and proximity, co-operation and co-existence agreements

The Applicants: Can you provide the following information?

• A table that can be updated routinely during the Examination on discussions regarding progress towards any co-location, crossing and proximity, co-operation and co-existence agreements between both existing and proposed offshore infrastructure, which includes expected timescales for completion of such agreements.
• If such agreements are not completed before the close of the Examination, can you explain how protection for these assets could be secured through the draft DCO?
• The Projco IPs [REP2-071] suggest that proximity agreements have not been discussed with them, and that in place of a proximity agreement a requirement would be necessary to secure one. Can you provide an update and explain how you intend to progress this matter?

BHP Petroleum Great Britian Limited and the Applicants: Both parties have reported a lack of engagement with each other regarding the management of asset crossings and proximity</td><td>
<table>
<tr><th>Interested Party</th><th>Summary of Discussions</th><th>Timeframe for Completion</th></tr>
<tr><td>The Projco IPs:

Dogger Bank Offshore Wind Farm 1 Projco Limited (DBA Projco) and Dogger Bank Offshore Wind Farm 2 Projco Limited (DBB Projco)</td><td>The Projects order limits overlap with the order limits for the DBA/DBB DCO offshore and have the potential to interact with the DBA and DBB projects nearshore cables.

The Applicants made contact with DBA Projco and DBB Projco on 10/3/25 to initiate discussions on proximity agreements in relation to the order limit interactions in the nearshore environment.</td><td>End of examination</td></tr>
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I.D.	Written Question	Applicants' Response		
	agreements [REP1-070] and [REP2-057]. What are you plans to liaise with each other on this matter and can you provide an update in the above format?	Orsted Hornsea Project Four Limited	The Projects cross Orsted H4 offshore in proximity to the cable landfall. There is also the potential for overlap of offshore construction activities between Dogger Bank South Offshore Wind Farms and Hornsea Four. The Applicants are engaged with Orsted on the form of commercial agreement required to manage the onshore and offshore interactions between respective projects. Draft Heads of Terms were issued to Orsted in October 2024 and comments on those HoTs were received from Orsted on 7th March 2025 and are now being reviewed by the Applicants.	End of examination
		BHP Billiton Petroleum Great Britian Limited (BHP)	BHP are responsible for an existing decommissioned pipeline (PL264, PL258, PL261, and PL255) which overlaps with the proposed Dogger Bank South wind farm area. The Applicants made contact with BHP on 1/6/23, 19/6/23, 25/1/24, 1/5/24, 4/2/25, 3/3/25 to discuss interactions with an existing BHP decommissioned pipeline located within the Projects order limits. No responses were received to previous communications. However, in response to contact made on the 3/3/25, BHP and the Applicants met on 18/3/25 to discuss the interactions and any requirements for crossing and proximity agreements. A draft Crossing and Proximity agreement was issued to BHP following this meeting and is now under review by BHP.	Post consent
		Net Zero North Sea Storage Limited ('NZNSS')	Net Zero North Sea Storage Limited (NZNSS) are developing the Northern Endurance Partnership project. The Projects export cable corridor will cross the Northern Endurance Partnership CO_2 offshore pipeline proposed Northern Endurance Partnership CS025 carbon storage licence area. The Applicants have been in ongoing discussions with NZNSS since 2023 to discuss interactions between the respective projects. A template crossing and proximity agreement was issued to NZNSS by the Applicants in December 2023 and comments are still awaited. The Applicants welcome comments from NZNSS at the earliest opportunity.	Post consent

I.D.	Written Question	Applicants' Response		
		INEOS UK SNS Limited	INEOS UK SNS Limited is the operator and co-owner of the Cavendish field, which is located in UKCS Block 43/19a, ceased production in 2018 and is currently being decommissioned. Due to the potential for construction proximity to the Cavendish methanol supply line and the Cavendish export pipeline (decommissioned), INEOS UK SNS wish to engage on agreeing appropriate co-location arrangements. The Applicants are engaged with INEOS UK SNS Limited and will continue to engage in relation to any agreements required to manage interactions with existing assets.	Post Consent
		ONE-Dyas UK Limited	INEOS UK SNS Limited is the licence administrator and co-licensee of 2 licences in respect of UKCS Blocks 43/12a, 43/13b, 43/12b, 43/13c, 43/14b, 43/17a, 43/18a and 43/19d awarded as part of the 33rd Offshore Licensing Round by the North Sea Transition Authority. ONE-Dyas UK Limited is the other co-licensee. The Applicants are engaged with INEOS UK SNS Limited and will continue to engage in relation to any agreements required to manage construction proximity to these licence areas.	Post Consent
		Kellas North Sea 2 Limited	Kellas North Sea 2 Limited operates the Esmond to Trent Wye Manifold gas pipeline (decommissioned) located in the area proposed for the DBS West and DBS East Export Cable Corridor. The Applicants have been in ongoing discussions with Kellas since 2023 to discuss interactions between the respective projects. A template crossing and proximity agreement was issued to Kellas by the Applicants in January 2024 and comments are still awaited. The Applicants welcome comments from Kellas at the earliest opportunity.	Post consent
		The Applicants maintain that reciprocal crossing and proximity agreements which contain obligations on both the Applicants and the owner of an existing asset is an industry standard approach which deals with the interactions between assets and/or works which interface offshore and is intended to provide protection to each asset owner for any damage or losses suffered as a consequence of the carrying out of works by the other party. These agreements are specific to the works proposed and are entered into when appropriate levels of detail pertaining to the works are understood. The agreements will also cover approval mechanisms for both the initial crossing works undertaken and also mechanisms for any future works which may be undertaken for maintenance purposes by either the Applicant or		

I.D.	Written Question	Applicants' Response
		a third party asset owner. For these reasons crossings and proximity agreements are preferable to protective provisions.

1.16 Landscape and Visual Interest

Table 1-16 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Landscape and Visual Interest

I.D.	Written Question	Applicants' Response
Landscape and visual interest		
LVI. 1.1	**NPS EN-5** The Policy Compliance Assessment Tables [APP-227] do not appear to set out how the Proposed Development would accord with NPS EN-5 paragraph 2.14.2, notably: how adverse effects have been address through the mitigation hierarchy; how the Proposed Development provides environmental improvements in line with the Environmental Improvement Plan and environmental targets; and, how you have co-ordinated construction planning for the proposal with other similar projects in the area on a similar timeline. Can you update the document to address these matters?	**How adverse effects have been addressed through the mitigation hierarchy?** In relation to landscape and visual effects, the mitigation hierarchy as set out in NPS EN-5 paragraph 2.14.2 ("*avoidance, reduction and mitigation of adverse impacts through good design*") has been applied as follows: • **Avoid** – Site selection has been subject to a process of options appraisal that has sought to understand the potential for harms to all environmental receptors as well as engineering concerns. These exercises are set out in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. Section 4.10 sets out the site selection for Onshore Substation Zone, including features that siting sought to avoid. Consultation on these exercises was carried out through Expert Topic Group (ETG) meetings and through Statutory Consultation, as detailed in the **Appendix 23-1 Landscape and Visual Impact Assessment Consultation Responses** [APP-194]. • **Mitigate** – Mitigation will be both design-led and applied. A series of overarching design principles have been developed that outline how design should be considered and delivered at the Onshore Converter Stations. These respond to the variety of technical and environmental constraints that have been raised during the Development Consent Order (DCO) process. The overarching design principles outlined in Table 4-1 page 59 & 60 of the **Design and Access Statement (DAS) (Revision 2)** [REP2-027] inform the design consideration for each area and create a framework that promotes good design throughout the report. These principles inform the Indicative landscape mitigation plan shown in Plate 4-36 page 104 of the **DAS (Revision 2)** [REP2-027]. Further details of landscape and visual mitigation are set out in Section 23.3.4 of **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. • **Compensate** – As noted in the **Outline Landscape Management Plan (OLMP) (Revision 3)** [REP2-031], opportunities will be explored to deliver offsite planting within the wider area. This could include additional hedgerow or tree planting to help strengthen the landscape structure of the area, as well as to deliver wider biodiversity net gain. Planting would need to be delivered by voluntary agreement with landowners. The Applicants will seek opportunities to partner with relevant organisations, such as the Humber Forest, in delivering offsite landscaping. **How the Proposed Development provides environmental improvements in line with the Environmental Improvement Plan and environmental targets?** As set out in the Applicants Response to PPC.1.4 the Projects, which seek to mitigate climate change through generating power by renewable offshore wind while providing biodiversity net gain, where possible and reinstating the temporary loss of habitat, are fundamentally in conformity with the goals of the Environmental Improvement Plan. The apex goal of Thriving plants and wildlife (Goal 1) is supported by a number of sub goals including: • Improving environmental quality which includes goals on clean air (Goal 2), clean and plentiful water (Goal 3) and managing exposure to chemical and pesticides. • Improving our use of Resources which includes goals of maximising resources and minimising waste (Goal 5) and sustainable resource use (Goal 6), • Improving our mitigation of climate change by mitigating and adapting to climate change (Goal 7) and reducing the risk of harm from environmental hazards (Goal 8).

I.D.	Written Question	Applicants' Response
		• Improving biosecurity (Goal 9). The Applicants have mitigated potential effects from the construction and operation of the Projects on air quality and clean air as detailed in **Chapter 26 Air Quality** [APP-206] and in relation to the potential for chemical spills in **Chapter 20 Flood Risk and Hydrology (Revision 2)** [REP1-014] and **Chapter 19 Geology and Land Quality** [APP-158] with control measures detailed in an Outline Pollution Prevention Plan in **Appendix D** of the **Outline Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025]. Waste is considered in the **Appendix 19-3 Onshore Waste Assessment** [APP-162] and commits the Projects to the principles of the waste hierarchy. Climate change is considered in **Chapter 30 Climate Change** [APP-233] and biosecurity and ecological mitigation is included in the **Outline Ecological Management Plan (OEMP)** (Revision 4) [REP2-029] and the **Appendix 18-10 - Biodiversity Net Gain Strategy** [APP-157]. **How you have co-ordinated construction planning for the proposal with other similar projects in the area on a similar timeline?** Each Environmental Statement (ES) chapter has considered cumulative impacts with other, neighbouring projects during construction, this has included a review of the construction programmes where they are publicly available to consider where they may overlap. Construction impacts are managed through the **OCoCP (Revision 3)** [REP1-025] and the **Outline Construction Traffic Management Plan (OCTMP) (Revision 2)** [AS-020]. Where the Projects directly interact with another constructed or consented Project, a crossing agreement will be progressed, where required and a detailed construction programme for that crossing will be agreed with the asset owner. The Applicants are also in regular communication with neighbouring developments including Jocks Lodge, Dogger Bank D, Continental Link, Hornsea Offshore Wind Farm 4 (Orsted) and National Grid (Birkhill Wood Substation). Engagement meetings have focused on sharing information on siting/routeing, baseline data sharing, use of shared accesses, crossings of infrastructure, and opportunities to co-ordinate during construction phases.
LVI. 1.2	**Residential Visual Amenity Assessment** The Applicants consider [REP1-050] that given the distance and the existing and proposed screening, impacts on views from nearby residential properties of the converter stations would not be so great as to potentially breach the residential visual amenity threshold, and therefore a Residential Visual Amenity Assessment is not necessary. What is your opinion and do you agree with the Applicants?	No response is required. Question directed to ERYC.
LVI. 1.3	**Visualisations** Following submission of additional visualisations [REP2-024], do you have any further comments?	No response is required. Question directed to ERYC.
LVI. 1.4	**Lighting** Do you have any outstanding concerns regarding the effects from lighting from the Proposed Development during construction or operation?	No response is required. Question directed to ERYC.
LVI. 1.5	**Mitigation: Indicative Landscape Plan [REP2-024, Figure 23-6]** The indicative Landscape Plan shows a pinch point along the access road and indicates that there would not be space for the hedgerow to continue along the access road to screen views of the	The pinch point identified is an artefact of the graphical representation of the access road, red line boundary and hedge at small scale. It is not intended that there would be a gap in the hedgerow at this location, and it is intended that the detailed Landscape Management Plan would include a continuous hedge on both sides of the access road, to contain this feature and to tie in to existing hedges on either side. The hedge will need to be within the red line boundary to avoid impacting on the scheduled monument immediately to the east. No hedgerow trees would be

I.D.	Written Question	Applicants' Response
	access road (see highlighted section below). Would this result in a large gap in the hedgerow and if so, why is this the case? Has the effects from this been considered in the ES? *This question is also repeated in the Historic Environment section (see HE.1.33). You may therefore want to link the answers to these questions.*	planted, in order to preserve the openness of the setting of the scheduled monument. The Landscape Management Plan will be based on the **OLMP (Revision 3)** [REP2-031] and will be submitted to East Riding of Yorkshire Council (ERYC) for their approval in line with Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1].
LVI. 1.6	**Mitigation: Indicative Landscape Plan [REP2-024, Figure 23-6]** Meadow grassland appears to be proposed within the Order Limits between the scheduled monument and views towards the access road further south of the scheduled monument (see highlighted area below) – why is this, could hedgerow or a continuation of the proposed woodland be utilised to mitigate views to the converter stations in this location? *This question is also repeated in the Historic Environment section (see HE.1.34). You may therefore want to link the answers to these questions.*	This area is within the indicative cable easement, which is identified by the pink boundary on the Indicative Landscape Plan, **Figure 23-6** [REP2-024]. Woodland planting has not been proposed as the export cables may be located within this area. The proposed woodland planting that is outside of the cable easement will screen the majority of the views towards the Onshore Converter Stations. In addition, a hedge is proposed along the north boundary of the Order Limits, and extending along the access road. This would also help to limit views of the Onshore Converter Stations from the scheduled monument. The detailed Landscape Management Plan will include the final layout and will be submitted to East Riding of Yorkshire Council (ERYC) for their approval in line with Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1].

I.D.	Written Question	Applicants' Response
LVI. 1.7	**Landscape mitigation** In your summary of oral representations from ISH2 [REP1-049], you state that advanced planting at the converter stations is in the Commitments Register [REP2-025]. Can you signpost to this commitment, or if it is not, update the Commitments Register as required?	This is included in the **OLMP (Revision 3)** [REP2-031] in section 1.5.3 which states that '*Where practical, landscape mitigation planting will be established as early as possible in the construction phase.*' It should be noted planting cannot be undertaken prior to receiving DCO consent but the commitment is to start it as soon as reasonably practicable, rather than waiting until construction works have been completed and reinstatement is taking place. The Landscape Management Plan (LMP) is secured by Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1] and is also included in Co66 and Co76 of the **Commitments Register (Revision 2)** [REP2-025].
LVI. 1.8	**Landscape mitigation** Draft DCO [REP1-004] Requirement 5 requires that reinstatement works must be carried out as soon as reasonably practical and in any event within 12 months of completion of a relevant phase. Could the reinstatement works be time limited to within a maximum of 6 months of completion of a relevant phase, which was the timeframe specified in the Awel y Môr offshore wind farm DCO? How is the 'former condition' determined?	Please note, the Applicants assume that the ExA is referring to DCO Requirement 25, relating to temporary works in **Draft DCO (Revision 6)** [document reference 3.1]. All trenching works between Jointing Bays will be reinstated within two years from the start of the construction period (point at which a habitat is removed) or within 6 years i.e. the maximum construction period. The Applicants do not propose to restrict this to 6 months, as the wording already states, 'as soon as reasonably practical' and in some cases the full 12 months may be required to allow reinstatement to take place in the appropriate season. For example, soil must not be handled between November and March, as detailed in the **Outline Soil Management Plan** (**Appendix C** of the **OCoCP (Revision 3)** [REP1-025]) and planting of hedgerows, trees, which are likely to be bare root stock should be undertaken from autumn to early spring, whereas wildflower seeds and grasses should be planted in the spring. The 12 months allows some flexibility when considering a particularly wet winter or dry summer. The 'former condition' would be determined by comparing the reinstated land with the condition prior to the commencement of works, set out in a '*schedule of condition*' as detailed in the **OCoCP (Revision 3)** [REP1-025], secured by Requirement 19 of the **Draft DCO (Revision 6)** [document reference 3.1]. As detailed in the **Outline Soil Management Plan** (**Appendix C** of the **OCoCP (Revision 3)** [REP1-025]) there will be a responsible person on-site for soil management to supervise soil management throughout the construction period, including reinstatement. In addition, an Agricultural Liaison Officer (ALO) will work with landowners and their agents throughout the construction period to maintain consistent dialogue and a soil specialist will be appointed by the Applicants (in addition to the ALO) to monitor soil handling during construction and reinstatement. DCO Requirement 25 also states that reinstatement must be approved by the relevant planning authority in consultation with the Marine Management Organisation (MMO) or drainage board, as required. The wording in the Deed of Grant with the landowners also states: '*the Applicants will, as soon as reasonably practicable following the exercise of the Rights reinstate the Interested Parties property to a standard no worse than as evidenced by the Schedule of Condition in accordance with the Regulations*'.
LVI. 1.9	**Landscape mitigation** In the Change Request 2 cover letter [AS-152], you state that the changes represent the preferred option from a landscape and visual impact perspective, as the changes allow, *'greater opportunities to integrate mitigation planting into nearby woodlands to the north and west and provide more effective screening in the east'.* However, Figure 23-6 [REP2-024] now appears to show less enhancement of the ancient woodland to the east, less permanent landscaping to the north-east and less woodland planting to the south-east. Furthermore, the band of woodland screening views of the converter stations from the south appears to be narrower at the eastern end. How does this reduction in landscape mitigation affect the findings of the landscape and visual impact assessment and has this been reflected in instances where this would change the prepared visualisations? If it has not been reflected in the visualisations but should, can you update them as necessary?	The changes to the Indicative Landscape Plan (**Figure 23-6** [REP2-024]) reflect the changes to the Onshore Converter Stations, which has led to a substantial reduction in the footprint of the Onshore Converter Stations as a result of Change Request 2. There is now much less infrastructure proposed in the eastern part of the Onshore Substation Zone, and the changes to the proposed landscape planting should be considered in this context. As noted in paragraph 101 of the **Project Change Request 2 - Onshore Substation Zone** [AS-152] document, '*no new or different Landscape and Visual related likely significant effects are anticipated as a result of the proposed change*'. This remains the case when considering the updated Indicative Landscape Plan. As well as the 'reductions' identified by the Examining Authority, the revised landscape plan also introduces new woodland screen planting around the SuDS area to the immediate east of the Onshore Converter Stations. The **Tree Preservation Order and Hedgerow Plan (Revision 5)** [document reference 2.18] submitted at Deadline 3 also shows hedgerows which would be retained rather than removed as a result of Change Request 2. These hedgerows would form part of the proposed landscaping within the Onshore Substation Zone.

I.D.	Written Question	Applicants' Response
		The changes made to the Indicative Landscape Plan continue to be led by the Design Principles and seek to provide appropriate mitigation to key views while returning useable land to agricultural use. Enhancement of the ancient woodland (Bentley Moor Wood) will primarily take place within the woodland. Proposed measures are set out in Section 1.6.2.3 of the **OEMP (Revision 4)** [REP2-029]. These measures do not rely on additional planting alongside Bentley Moor Wood. The purpose of woodland planting to the north is to provide screening to views from Butt Farm. There are no adjacent receptors to the north-east, so the need for mitigation is reduced particularly given the removal of permanent infrastructure from the eastern part of the Substation Zone. Longer views from the north-east, e.g. from Victoria Road, are filtered by existing trees around Victoria Road and along the A1079. Woodland planting to the south-east, including the screening plantation to the south, has been pulled back to enable more useable land to be returned to agricultural use. The additional woodland planting to the east of the Onshore Converter Stations has been added to provide layered screening of views across agricultural fields, which is in keeping with the character of the surrounding landscape. The purpose of the woodland planting to the south is to provide screening to views from Bentley village, and there has been no substantive change to the proposed woodland between the Onshore Converter Stations and the village. All of the 'year 10' visualisations submitted at Deadline 2, **Chapter 23 Landscape and Visual Impact Assessment Figure 23-1 to Figure 23-17 (Revision 3)** [REP2-024] have already been updated to include the screen planting as shown on **Figure 23-6** [REP2-024].
LVI. 1.10	**Landscape monitoring** The outline Landscape and Ecological Strategy for East Anglia Two OWF [REP13-007] referred to an '*adaptive planting management scheme*' for tree and shrub planting in parts of the Order Limits. This sought to address the quality and annual growth of different blocks of tree and shrub planting, with monitoring against agreed objectives, options to suspend or extend the management periods for discrete areas of such planting (or zones) and target-specific measures to improve such areas, in cases where the planting did not establish satisfactorily for any reason. This was intended to de-risk the timely delivery of planting, achieve optimum levels of plant growth and condition and provide greater confidence that effective screening from the tree planted areas would be achieved before the end of the adaptive planting management period. Should this be applied to the Proposed Development, particularly for the converter station area? If not, why not?	The Applicants have reviewed the Landscape and Ecological Strategy for East Anglia Two and confirms that an adaptive approach can be applied to the monitoring and management of the landscape planting, to further secure the establishment of the proposed screening. The **OLMP (Revision 3)** [REP2-031] will be updated at Deadline 8 to include these references.
LVI.1.11	**Outline Landscape Management Plan** The outline Landscape and Ecological Strategy for East Anglia Two [REP13-007] included the following principles for the detailed Landscape Management Plan: • A detailed scheme of tree and shrub planting and aftercare. This will include details of soil restoration and ground preparation, species choice, stock size, spacing, protection and a program of weed control and aftercare. • A scheme of protection to demonstrate how new tree and hedge planting will be protected against deer, rabbits / hares etc. The detail will also indicate a variety of access gates within the detail for badgers or other creatures that may have, for instance, established routes through the restored areas.	The Applicants have reviewed the Landscape and Ecological Strategy for East Anglia Two and confirms that, while it is considered that these points are largely implicit in the content of the **OLMP (Revision 3)** [REP2-031], in the interests of clarity these principles can be added. The **OLMP (Revision 3)** [REP2-031] will be updated at Deadline 8 to include these references.

I.D.	Written Question	Applicants' Response
	• A process to deal with incidents of ash die back, where relevant to the onshore development area, including removal of diseased specimens and re-planting of replacement native species (non-ash species). • Details of local provenance suppliers of plant material for inclusion within the specification. • Details of the implementation and maintenance of landscaping, including management of trees, hedgerows and grassland in the longer term. Should these (or similar) be included within the oLMP [REP2-031]? If not, why not?	
LVI.1.12	**Outline Landscape Management Plan** The oLMP [REP2-031] notes that '*opportunities will be explored'* to deliver offsite planting within the wider area, but that this would need voluntary agreement from landowners. What weight should the ExA and SoS give to this? Was this taken into account in the landscape and visual impact assessment? How would any offsite planting be maintained?	As noted in the **OLMP (Revision 3)** [REP2-031], paragraph 30, "*Planting would need to be delivered by voluntary agreement with landowners.*" Any long-term management of off-site planting would also need to be delivered by voluntary agreement with landowners. Off-site planting would not be secured through the DCO. As such, the Landscape and Visual Impact Assessment (LVIA) has not taken any account of off-site planting, in order to consider the 'worst case'. The Applicants consider that the ExA and SoS should make their determination on the basis of the findings reported in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] and **Project Change Request 2 - Onshore Substation Zone** [AS-152] secured through the DCO.
LVI.1.13	**Outline Landscape Management Plan** There is limited information in the oLMP [REP2-031] or the DAS [REP2-027] regarding landscaping of the access road to the converter stations. Can you update the documents to provide landscape design parameters for the access road, including the entrance to the converter stations from the main highway, information on the proposed swales or filter drains and how the diversion of the Walkington Footpath Public Right of Way would be dealt with from a landscape perspective. Would the access road surface be constructed from permeable materials, given the limited volume of traffic which would use the access road during operation of the Proposed Development? If this is not possible, why not?	The Applicants will add the design parameters and additional information regarding the access road and PRoW diversion into section 4.1.3.6 of the **DAS (Revision 2)** [REP2-027] at Deadline 8. Consideration has been given to making some or all the access road permeable. The permanent road would be used during the Construction, Operation, Maintenance and Decommissioning. The road will be lightly trafficked during operation, but during construction the road will be subjected to substantial loads of up to 230 tonnes. The road design should therefore be suitable for all load cases throughout the life. For this reason, a permeable road may be unsuitable, but this will be further considered as part of the detailed design process. For worst case envelope design (space/drainage), an impermeable road has been assumed at this stage, as detailed in the **Outline Drainage Strategy (Revision 3)** [REP2-033].
LVI.1.14	**Above ground installations** Other than features associated with the converter stations, would there be any other permanent above ground installations associated with the onshore elements of the Proposed Development, notably in relation to Work No. 34B of the draft DCO [REP1-004]? If there would be further above ground structures, how have these been assessed in the landscape and visual assessment?	The Projects do not include any permanent above-ground infrastructure within Work No. 34B of the **Draft DCO (Revision 5)** [REP1-004]. All above-ground infrastructure within this area will be consented by National Grid Electricity Transmission (NGET) as part of the Birkhill Wood Substation planning application. The Birkhill Wood Substation is included in the cumulative LVIA (Table 23-22 in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]), which considers the effect of above-ground infrastructure in this area. Other than features associated with the Onshore Converter Stations, the only permanent above-ground features will be manhole covers at Jointing Bays and marker posts installed along the Onshore Export Cable Corridor, as noted in **Chapter 5 Project Description (Revision 3)** [REP1-019].
LVI.1.15	**Maximum design parameters** **The Applicants**: Requirement 9 of the draft DCO [REP1-004] would secure the maximum height and footprint of the converter stations. How does the draft DCO ensure that all the other maximum design parameters assessed in the ES would not be exceeded?	The maximum heights and footprints are now included in the **Draft DCO (Revision 5)** [REP1-004], submitted at Deadline 2. **Chapter 5 Project Description (Revision 3)** [REP1-009] and Project Change Request 2 [AS-152] are certified documents and include the maximum parameters related to onshore and offshore which were assessed in the ES and cannot be exceeded in the detailed design. It would be impractical to include all parameters included in the Project Description within the DCO and is not the approach followed by other Offshore Wind Farm DCOs. Furthermore, Requirement 9 of the **Draft DCO (Revision 6)** [document reference 3.1] provides that the Applicants must submit details of certain works in relation to the Onshore Converter Stations to the relevant planning authority

I.D.	Written Question	Applicants' Response
	The Applicants and ERYC: Should all maximum parameters assessed in the ES be secured by the draft DCO?	for approval prior to commencement of these works. The Onshore Converter Station designs, secured by Requirement 9 of the Draft DCO (Revision 6) [document reference 3.1] must be in accordance with the **DAS (Revision 2)** [REP2-027], which was updated at Deadline 2 to include the revised maximum parameters for **Project Change Request 2** [AS-152].
LVI.1.16	**Trees** ES Chapter 23 [APP-192] confirms that hedgerow trees cannot be replanted over the cable easement. The oLMP [REP2-031] states that all trees which need to be removed would be replaced. 1 How would the removal of trees during construction be monitored? 2 Where would trees that could not be replaced over the cable easement be replaced? 3 How would the new locations for the trees be determined, and would the local planning authority be consulted on this? 4 How would this be secured?	1 Anticipated tree removals are shown on the Preliminary Tree Impact Plans in the **Arboricultural Survey Report, Preliminary Arboricultural Impact Assessment and Outline Arboricultural Method Statement (Revision 2)** [AS-036]. Impacts along the Onshore Export Cable Corridor are identified as 'possible' as the exact location of open-cut trenching will be determined on site and post consent. Prior to the commencement of construction, a detailed Arboricultural Method Statement would be developed based on the Outline Arboricultural Method Statement contained in the **Arboricultural Survey Report, Preliminary Arboricultural Impact Assessment and Outline Arboricultural Method Statement (Revision 2)** [AS-036]. This includes for the appointment of an Arboricultural Clerk of Works (ACOW) who would, among other responsibilities, "*provide advice on avoiding impacts to trees*" (paragraph 115). The ACOW would therefore monitor removal of trees during construction. The role of the ACOW is described in Section 6.2.18 of the **Arboricultural Impact Assessment** [AS-036], which states that ACOW must be consulted on tree removal, or where advice is required in relation to trees, groups of trees or woodlands. 2 Paragraph 16 of the **OLMP (Revision 3)** [REP2-031] states that "*locations for tree planting will be identified in the final LMP*". The final LMP will be approved by the relevant planning authority prior to commencement of the relevant phase of works in accordance with Requirement 10 of the **Draft DCO (Revision 6)** [document reference: 3.1]. Locations will be as close as practicable to the location of the removed tree, but cannot be established at this time due to the uncertainty of the exact location of the cables. 3 As noted above, locations for tree planting will be identified in the final LMP, which will be submitted to ERYC for approval prior to commencement of the relevant phase of works in accordance with DCO Requirement 10. Where necessary, the final LMP will include provision for the locations of replacement trees to be determined on site by the ACOW. 4 The replacement of trees is secured through the final LMP which is subject to approval by the relevant planning authority in accordance with Requirement 10 of the **Draft DCO (Revision 6)** [document reference: 3.1].
LVI.1.17	**Replacement trees and hedges** The oLMP [REP2-031, paragraph 14] confirms that where removal of trees and hedgerows would be necessary to facilitate construction, these would be replaced within two years along the onshore export cable corridor. Can you clarify what would be the trigger for reinstatement to begin and where this would be secured? If necessary, update the oLMP to include this trigger.	The **OLMP (Revision 3)** [REP2-031] states at paragraph 14 "*The Projects commit to reinstating the landscape along the Onshore Export Cable Corridor and Onward Cable Connection to the proposed Birkhill Wood National Grid Substation within two years between Jointing Bays.*" The commitment is to reinstatement of landscape within two years of the commencement of construction at that location, i.e. between any two jointing bays. Reinstatement would begin as soon as construction works were completed at that location. If construction works were completed during the months of April to September, then planting will take place in the following planting season (October to March). Replacement is secured through the Landscape Management Plan which will be submitted to ERYC for their approval prior to commencement of the relevant phase of works in accordance with Requirement 10 of the **Draft DCO (Revision 6)** [document reference 3.1]. The Applicants consider that no further measures are necessary to secure this 'trigger'.
LVI.1.18	**Replacement trees and hedges**	As detailed in GD.1.4 before planting any new trees or shrubs in the pipeline wayleave / easement, written permission would be obtained from the pipeline operator. This has formed part of pre-application discussions on crossing

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	The oLMP [REP2-031] states that '*Planting of trees has been avoided within the indicative areas for the onshore cables and 400kV connection. Planting of trees within 6m of the pipelines has also been avoided. It is assumed that planting hedges over these features will be acceptable, subject to consultation with the owners of these assets.*' Has replanting of trees been discussed with the owners of these assets and does the landscape and visual assessment assume that such mitigation would be in place? If not, why not?	agreements and protective provisions with statutory undertakers, where relevant and they have been made away of the proposed design as part of the statutory consultation. General industry practice and guidance provided by pipeline operators (National Gas and Ineos) permits, planting of shallow rooting hedges and ground plants (e.g. blackthorn, broom, elder, hazel, etc) , if necessary (for screening purposes or to mark boundaries) directly across the pipeline. **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] assumes that landscape planting is in place, as shown in the Indicative Landscape Plan (**Figure 23-6** [REP2-024]).
LVI.1.19	**Replacement trees and hedges** It appears that the same commitment for replacement tree and hedgerow planting within two years is not made for the onward cable route to the Proposed Birkhill Wood National Grid Substation, landfall or the converter station zone. Why is this?	The **OLMP (Revision 3)** [REP2-031] states at paragraph 14 "*The Projects commit to reinstating the landscape along the Onshore Export Cable Corridor and Onward Cable Connection to the proposed Birkhill Wood National Grid Substation within two years between Jointing Bays.*" The commitment is to reinstatement of landscape within two years of the commencement of construction at that location, as noted in the response to LVI.1.17. It is not possible to make this commitment in relation to the Substation Zone or for the Temporary Construction Compounds (TCC's) including the Transition Joint Bay (TJB) TCC in the Landfall Zone, as the works themselves may take longer than two years at these locations. Requirement 10 of the Draft DCO (Revision 6) [document reference 3.1] requires that "*implementation timetables for all landscaping works, including proposals for reinstatement*" must be included in the final LMP. The **OLMP (Revision 3)** [REP2-031] paragraph 36 confirms that "*landscape mitigation planting will be established as early as possible in the construction phase*." Requirement 25 of the **Draft DCO (Revision 6)** [document reference 3.1] states that reinstatement works must be carried out as soon as reasonably practicable and in any event within 12 months of completion of a relevant phase. As noted in the response to LVI.1.8, the Applicants do not propose to adjust this to 6 months.
LVI.1.20	**Trees** Have you identified any locations or receptors where the restrictions on planting trees over the cable easement would lead to views of the convertor station remaining? If so, signpost the ExA to this assessment and any proposed mitigation.	**Chapter 23 Landscape and Visual Impact Assessment** [APP-192] takes account of the Indicative Landscape Plan shown in **Figure 23-6** [REP2-024]. The Indicative Landscape Plan has been designed to provide sufficient mitigation while taking account of the cable easements. For example, the woodland planting to the north of the Onshore Converter Station(s) is placed to the north of the existing hedge, as the area to the south is within the cable easement. Therefore, there are no locations or receptors where the restrictions on planting trees over the cable easement would lead to views of the Onshore Convertor Station(s) giving rise to significant effects.
LVI.1.21	**Replacement hedgerows** Are the growth rates of replacement hedgerows accounted for in the ES in terms of landscape and visual effects? If not, why not, and if it was would it affect the conclusions?	The growth rates of replacement hedgerows have not been accounted for in the ES. **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] considers the effects of the Projects at year 1, when hedges are newly planted, and year 10, when it is assumed hedges would have reached the point at which they would be trimmed regularly. This would be the case even for slow growth as hedges will only need to reach 1.5-2m in height before trimming commences. At year 1, it is assumed that the mitigation effect of all planting is minimal. At year 10, it is assumed that hedges would be being managed, and would be around 1.5m in height. The growth rates of hedges would not therefore alter the LVIA conclusions.
LVI.1.22	**Cumulative effects** Paragraph 7.26 of the Third Edition Guidelines for Landscape and Visual Impact Assessments (GLVIA3) suggests that cumulative landscape effects should be considered in terms of consequences for key landscape characteristics and how compatible the development would be with key landscape characteristics such as scale and pattern.	The detailed assessment of cumulative effects is contained in Table 23-22 in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. This clearly sets out, in relation to each of the developments being considered, whether cumulative effects would affect landscape character or visual amenity. Paragraphs 395 to 400 summarise this assessment. Paragraph 395 includes a summary bullet which notes whether effects are on landscape or views in each case. For example, the first bullet point notes "*significant cumulative effects on Landscape Character and sequential views*".

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	ES Chapter 23 [APP-192] offers limited justification for your determination of the likely significant cumulative effects, and draws attention to where it considers there would or would not be significant effects. ES Chapter 23 [APP-192, paragraphs 395 to 400] does not clarify whether any significant cumulative effects would be in relation to landscape character, visual amenity, or both. Furthermore, paragraph 7.36 of GLVIA3 suggests that the most significant cumulative visual amenity affects may need to be illustrated by visualisations to indicate change in views and visual amenity. Consideration must also be given to the way in which sequential views would be experienced with regards to cumulative effects. No such consideration appears to have been offered in ES Chapter 23. In addition, despite significant adverse cumulative effects being identified, ES Chapter 23 does not propose any additional mitigation measures. Paragraph 7.41 of GLVIA3 suggests ways in which mitigation can reduce cumulative effects. In light of the above, can you review the cumulative effects identified in ES Chapter 23 [APP-192] with regard to GLVIA3 guidance and provide a more comprehensive assessment of these effects, with consideration of mitigation to address any significant effects?	The Applicants have previously responded to the potential need for cumulative visualisations, in the response to Agenda Item 9, point 2, in **The Applicants' Responses to January 2025 Action Points** [AS-155], page 43. This concluded that there were limited suitable viewpoints that would usefully show the schemes considered in the LVIA. The location of cumulative developments is shown in **Appendix 6-1 - Onshore Cumulative Effects Assessment Methodology** [APP-077]. In response to Written Question BGC.1.10, the Applicants are committed to updating Figure 6-1-1 of **Appendix 6-1 Onshore Cumulative Effects Assessment Methodology (Revision 2)** [document reference 7.6.6.1] at a smaller scale to show the cumulative developments considered in the onshore Cumulative Effects Assessment. This has been submitted at Deadline 3. As also noted in the Applicants' response to the same question, the LVIA considers sequential effects experienced by a visual receptor as they move through the landscape. These sequential effects are described in Table 23-22 of **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. Paragraphs 7.39 to 7.41 of Third Edition Guidelines for Landscape and Visual Impact Assessments (GLVIA3) discuss mitigating cumulative effects. Paragraph 7.39 notes that significant cumulative effects "*cannot necessarily be addressed by measures related only to the main project being considered.*" Paragraph 7.40 of GLVIA3 suggests that cumulative effects may be addressed by siting and design, and "*conventional use of planting or screening*". Siting of the Onshore Converter Stations was influenced by the desire to reduce cumulative effects, for example through adopting co-location of the Onshore Converter Stations (see **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017], paragraph 92). The Indicative Landscape Mitigation Plan in Figure 23-6 [REP2-204] was developed to mitigate key views from sensitive receptors within the study area, who would also be potentially affected by other developments. The mitigation design therefore seeks to address cumulative landscape and visual effects. Paragraph 7.41 of GLVIA3 suggests further measures including "*partnership working between developers and the consenting authority*", "*community compensation/offset packages*" and "*consenting authority action*". It is assumed that in the context of these Projects, 'consenting authority' should be read as a reference to the local authority, rather than the Examining Authority. The Applicants are working to reduce effects by promoting a single application for their Projects (Dogger Bank South East and Dogger Bank South West), which has optimised the project design e.g. by reducing the Order Limits e.g. by sharing a haul road and TCC's. The Applicants are open to working with the local authority to understand how they could potentially contribute to packages of solutions for the area. The Applicants have also committed to exploring compensation/offset measures to address landscape and visual impacts in the wider landscape through, for example, partnership working with the Humber Forest (see **OLMP (Revision 3)** [REP2-031], paragraph 30). However, as discussed in the Applicants' response to LVI.1.12 any off-site planting would not be secured through the DCO. As such, the LVIA has not taken any account of off-site planting, in order to consider the 'worst case'.

1.17 Land Use and Agriculture

Table 1-17 -Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Land Use and Agriculture

I.D.	Written Question	Applicants' Response
Land use and agriculture		
LUA.1.1	**Cumulative effects assessment** The method of screening for CEA appears largely based on spatial overlap with other projects [REP2-022, Table 21-16]. How does this appropriately assess cumulative impact of agricultural land loss, for example at a regional level?	The total agricultural area within the Onshore Development Area that would be potentially impacted during the construction phase of the Projects represents 0.2% of the available agricultural land within East Riding of Yorkshire. With regards to permanent land take within the Onshore Substation Zone (Onshore Converter Station, SuDS basin and landscaping), this represents 0.02% of the available agricultural land within East Riding of Yorkshire. Please note, these figures are based on a worse case agricultural area within the Onshore Development Area, prior to the acceptance of the **Project Change Request 2** [AS-152], which has reduced the Order Limits at the Substation Zone. The Cumulative Effect Assessment (CEA) has considered projects where there is a spatial overlap with the Onshore Development Area, such as Hornsea 4 Offshore Wind Farm Project, Proposed Birkhill Wood National Grid Substation and Creyke Beck Solar Farm, which would result in areas of permanent agricultural land loss at a similar level to the Projects. As such, it is considered that the overall impact would be minimal with regards to loss of agricultural land and would not contribute cumulatively to a significant loss of agricultural land at a regional level. Although there are no further Project level mitigation measures that could be applied to reduce the cumulative loss of agricultural land, the Projects have sought to minimise the total area of agricultural land that would be lost as far as reasonably practicable.
LUA.1.2	**Updated guidance** Confirm, with justification, if the 2000 Ministry of Agriculture, Fisheries and Food (MAFF) guidance being superseded by the Good Practice Guide for Handling Soils in Mineral Workings by the Institute of Quarrying (2021) has an impact on the Proposed Development and its associated impact assessment and mitigation. If it does, please update the application documents to reflect this.	Although the Ministry of Agriculture, Fisheries and Food (MAFF) (1988) Agricultural Land Classification of England and Wales: Guidelines and Criteria for Grading the Quality of Agricultural Land (Revised Guidelines) has been superseded by The Institute of Quarrying (2021) Good Practice Guide for Handling Soils in Mineral Workings, both sets of guidance (and others) have been used to inform the assessment within **Chapter 21 Land Use (Revision 3)** [REP-022] and included within **Appendix A Outline Soil Management Plan** of the **Outline Code of Construction Practice (Revision 3**) [REP1-025]. As such, there has been no impact upon the assessments undertaken within **Chapter 21 Land Use (Revision 3)** [REP-022] and the proposed mitigation measures discussed.
Agricultural land		
LUA.1.3	**Agricultural land sensitivity** Can you explain why the sensitivity of ALC grade 3a is differentiated between temporary and permanent land take in Table 21-6 of ES Chapter 21 [REP2-022] and why this is inconsistent with Table 2 of *Institute of Environmental Management & Assessment Guide: A New Perspective on Land and Soil in Environmental Impact Assessment* and Table 3.11 of *Design Manual for Roads and Bridges, LA 109 Geology and Soils* [AS-155, agenda item 13, action point 43]? Explain why reference to temporary and permanent land take in this way is appropriate given that they are also used to define the magnitude of impact in Table 21-8 [REP2-022].	It is acknowledged that the inclusion of temporary and permanent land take of Agricultural Land Classification (ALC) Grade 3a land within Table 21-6 of **Chapter 21 Land Use (Revision 3)** [REP2-022] was inconsistent with the referenced guidance. Table 21-6 will be updated in **Chapter 21 Land Use (Revision 4)** [document reference 7.21] to reflect this additional information and submitted at Deadline 8, as the update does not affect the outcome of the assessment.
LUA.1.4	**ALC survey** The survey samples for the proposed converter station appear to have been undertaken during the winter season (January 2024) [REP1-025, Appendix A]. Could seasonal soil wetness have affected	The ALC guidelines and criteria for grading the quality of agricultural land MAFF (1988) involve the assessment of long-term limitations based on long-term climatic data, as such the grades are independent of "particularly wet winters" or current management practices. The indicators used to inform any wetness limitations are developed as a

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	the results and the ALC? If so, explain to what degree and how you plan to address this in the assessment.	product of many years of seasonal oxidation and reduction of minerals in the soil profiles, so short term weather extremes have limited bearing on any ALC results.
LUA.1.5	**Private agreements** In order to reduce the significance of effect to minor adverse, in the Applicants' response to ISH2 agenda item 13, action point 42 [AS-155] and ES Chapter 21 (Revision 3) [REP2-022], you advise private agreements or compensation with landowners in line with the compulsory purchase compensation code would be used as mitigation. What assurance can the Applicants provide the ExA that these agreements will be in place prior to the end of the Examination and can therefore be relied on? If they are not in place, how would this effect the conclusions of the ES?	The Applicants cannot guarantee that private agreements with all landowners would be in place prior to the end of examination, however if no voluntary agreement is reached then the compulsory purchase process can be used prior to the start of construction This would not affect the conclusion of **Chapter 21 Land Use (Revision 3)** [REP2-022] as this assumption has been made as part of the assessment.
LUA.1.6	**Sterilised and impractical land** Please identify the locations which you believe would become sterilised or impractical to farm, and have not been included within the Applicants' assessment, as referred to in your Relevant Representations [RR-001], [RR-002] and [RR-054] and Written Representations [REP1-068] and [REP1-069]. Your answer should include: a plan identifying the location; the quantum area of land affected; a Land Plot reference number (or nearby Land Plot reference number) from the submitted Land Plans (revision 2) [PDA-004]; and appropriate justification to explain the aforementioned effects.	No response is required. Question directed to Albanwise Ltd, Albanwise Synergy Ltd and Ullyotts (Rural) Limited on behalf of J L White & Son and Butt Farm Caravan, Camping & Glamping Site and any other Interested Parties.
LUA.1.7	**Proposed cable depth** Your response to written representations [REP2-057, section 2.4], explains there would be a minimum of 1.2m depth below the subsoil interface and the uppermost part of the proposed cable duct. The same response then refers to an Option and Deed of Grant that would entitle the depth between the restored surface to the top of the protective tile, to be reduced to 1.1m. These statements appear contradictory therefore can you clarify: • What would be the minimum depth between the restored surface and the protective tile? • What would be minimum depth between the restored surface and the uppermost part of the proposed cable duct? • How would these depths be verified during and post construction? • Can you signpost where the minimum depths and verification is secured?	The Applicants wish to clarify that the minimum depth, below agricultural land would be 1.1m between the restored surface and the uppermost part of the proposed cable duct and 0.9 m between the restored surface and the protective tile to align with the wording in the Deed of Grant. A minimum depth of 1.2m below the subsoil interface was incorrectly stated in our response to REP2-057, section 2.4. This parameter, added to the **Design and Access Statement (DAS) (Revision 2)** [REP2-027] at Deadline 2 (in Table 4-4 (p.110)) is where restrictions are not present rather than a minimum depth. The minimum depth for agricultural land of 1.1m is not currently included in any document submitted with the application, but has been designed to allow ploughing to take place above the cable ducts. The Applicants therefore propose to update Table 4-4 in the **DAS (Revision 2)** [REP2-027] and Table 5-27 of **Chapter 5 Project Description (Revision 3)** [REP1-009] to include this detail at Deadline 8, which would be how the minimum depth is secured by the DCO as these documents are certified. Please note, this would only be for agricultural land as there may be some, limited land uses where a shallower depth is more appropriate. Land interests will be provided with as built drawings of the Project(s) final design once all construction works are complete to accompany the Deed of Grant. These will accurately record the GPS location and depth at the time of laying. In addition, **Appendix A OSMP (Revision 2)** of the **Outline Code of Construction Practice (Revision 3)** [REP1-025] includes details of all proposed soil management measures and is secured by Requirement 19 of the **Draft DCO (Revision 6)** [document reference 3.1]. Section 4.7.9 specifically sets out how the Contractor would be required to reinstate the top soil, this states that a 'written and photographic record of re-instated topsoil depth is to be made in all enclosures'. Please note, the Soil Resource Assessment Survey Results are included in Appendix A-1 of the OSMP and already include details of soil depth within the Order Limits.
LUA.1.8	**Soil restoration** Your response to written representations [REP2-057, reference REP1-073:15] suggests soil reinstatement along the onshore export cable corridor might not be undertaken post construction	This related to the Applicants response to the Written Representation REP2-057, REP1-073:15 from the East Yorkshire Concrete Products Limited and Mr Alexander Douglas Robinson. Please note, the hyperlink link in LUA.1.8 is incorrect.

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	where the Applicants and landowner agree reinstatement wouldn't be required. Can you explain how this is consistent with the finding of various chapters in the ES which are reliant on this mitigation measure to reduce the significance of effect? In your response, consider how the reinstatement could be verified (for example through the submission of independent verification reports and georeferenced photographic evidence to ERYC).	**Appendix A OSMP (Revision 2)** of the **Outline Code of Construction Practice (Revision 3)** [REP1-025] includes details of all proposed soil management measures and is secured by Requirement 19 - Code of construction practice of the **Draft DCO (Revision 6)** [document reference 3.1]. Section 4.7 provides details of how the soil would be reinstated. In addition, the **Outline Code of Construction Practice (Revision 3)** [REP1-025] has been updated in section 5.17 to state: '*Following completion of the Onshore Export Cable Corridor, the working area will be reinstated to a state commensurate with condition prior to the commencement of works, set out in a schedule of condition or subject to landowner agreement'.* The restoration of land is secured by Requirement 25 of the **Draft DCO (Revision 6)** [document reference 3.1] which enables the land to be restored to a condition as approved by the relevant planning authority i.e. ERYC. The wording in the Deed of Grant states: '*the Applicants will, as soon as reasonably practicable following the exercise of the Rights reinstate the Interested Parties property to a standard no worse than as evidenced by the Schedule of Condition in accordance with the Regulations or (where in the opinion of the parties (both acting reasonably) reinstatement is not reasonably possible or the parties agree in writing that reinstatement is not required) will pay in accordance with the Compensation Provisions proper compensation to the Interested Party for any physical damage (including crop loss) caused to the proper."* This is for situations where there is a permanent infrastructure which cannot be reinstated, or for a situation where the landowner, for some reason may not want reinstatement to take place on their land for example they have had a separate planning consent for works on the same site, which are imminently about the commence. However, as detailed in LUA.1.8 this would only be in exceptional circumstances as the ES and Requirement 25 of the Draft DCO does rely on all agricultural land for temporary construction being reinstated following construction and this must be agreed with the East Riding of Yorkshire Council (ERYC). Therefore, this will not affect the conclusions of the ES.
LUA.1.9	**Restrictive covenants** Do you have any comments related to the rights and restrictive covenants in Schedule 7 of the draft DCO [REP1-004]? In your response, please consider if any restrictive covenants would inhibit continuation of agricultural activities.	No response is required. Question directed to Albanwise Ltd, Albanwise Synergy Ltd, Ullyotts (Rural) Limited on behalf of J L White & Son and Butt Farm Caravan, Camping & Glamping Site, East Yorkshire Concrete Products Limited and Mr Alexander Douglas Robinson and any other affected party.
LUA.1.10	**Restrictive covenants** Where the proposed restrictive covenants of the draft DCO [REP1-004, Schedule 7] require the landowner to obtain written consent from the undertaker, could you confirm: • Would there be any cost to the landowner in applying for the consent? • Would there be time limits for the undertaker to respond to such a request? • If the landowner requires specialist advice to prepare an application, how would this be funded? • Would there be a right to appeal a refusal and what would be the process?	Where the proposed restrictive covenants of the **Draft DCO (Revision 6)** [document reference 3.1] require the landowner to obtain written consent from the Applicants, the landowner would be entitled to recover any reasonable costs incurred in applying for consent to undertake works that may contravene the restrictive covenants set out in the draft DCO or voluntary Deed of Grant. The Draft DCO protects landowners against delays by the Applicants in providing consent in a timely manner *"(such consent not to be unreasonably withheld or delayed if the proposed surfacing would not cause damage to relevant part of the authorised project nor make it materially more difficult or expensive to maintain the authorised project)".* Any dispute in relation to this consent will be subject to the arbitration provisions in Article 47 and Schedule 16 of the **Draft DCO (Revision 6)** [document reference 3.1]. The wording in the Deed of Grant further protects landowners against being able to recover reasonable costs, it states: *"The Grantee will pay to the Grantor in accordance with the Compensation Provisions all reasonable and proper liability fees charges disbursements costs and expenses ("Costs") incurred by the Grantor in connection with incidental to consequent upon and (where appropriate) in contemplation of:*

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		• *any application for the Grantor's consent required under the terms of this Deed provided always that the Grantee will not be responsible for the payment of any Costs in the event that such consent is unlawfully withheld or imposed subject to an unlawful condition;* • *Clause 7 states the compensation will be assessed in advance by an agent instructed by the Grantor ("Grantor's Agent") and agreed and paid under the Compensation Code;* • *the compensation figure will be submitted by the Grantor's Agent to the Grantee for the Grantee's approval within 10 working days of receipt of the compensation figure, the Grantee will confirm whether the compensation figure is agreed;* • *either party may at any time refer the dispute or difference to be determined by an Expert using the procedure set out in the Deed of Grant."*
Agri-environmental stewardship schemes		
LUA.1.11	**Ecological assessment** ES Chapter 21 (revision 3) [REP2-022, paragraph 130] suggests that ecological losses associated with impacts on land subject to agri-environmental stewardship schemes are assessed in ES Chapter 18 [PDC-002]. The ExA is unable to find any references to agri-environmental stewardship schemes in that Chapter. Could you provide a specific signpost to this assessment?	Is the ExA referring instead to paragraph 143 of **Chapter 21 Land Use (Revision 3)** [REP2-022] which states "*All existing habitats have been identified in **Appendix 18-2 Habitat Survey Report (Revision 2)** [PDC-004] and their temporary or permanent loss is assessed in **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019].*" As detailed in this wording, temporary or permanent habitat loss is assessed in **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019], this would include any habitat which has been specifically created as part of an agri-environmental scheme (e.g. wildflower margins) as they would have been identified in **Appendix 18-2 Habitat Survey Report (Revision 2)** [PDC-004] or will be identified in pre-construction surveys and reinstated following construction. Therefore agri-environmental schemes are not assessed as a receptor within **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019], impacts on the features of the schemes form the ecological baseline habitats and are inherently assessed within Chapter 18 **Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019].
LUA.1.12	**Assessment baseline** The EIA has been undertaken with a baseline identified at the time of the surveys and desktop assessment. ES Chapter 21 identifies several agri-environment stewardship schemes that are actively improving land within the Proposed Development area with some ongoing until at least December 2028 [AS-155, agenda item 13, action point 48]. Can you explain how this changing baseline environment is assessed, and how any additional mitigation could be identified and secured?	In accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance on the lifespan of ecological reports and surveys, the validity of habitat surveys is generally agreed to be up to three years. For the Projects, a factor to consider is whether there have been significant changes to the habitats present since the initial habitat surveys were undertaken. This could include change due to site management such as the presence of agri-environment stewardship schemes within the Onshore Development Area or, a highly mobile protected species being identified in different areas. **Appendix 18-2 Habitat Survey Report** [APP-145] is based on habitat survey information collated in 2022 and 2023. As such, the lifespan would be until 2026. After this period, as stated within **Appendix 18-2 Habitat Survey Report** [APP-145], should site conditions change an update may be required. The Applicants would undertake a validation exercise as part of the pre-construction surveys to ensure the habitat survey data is still correct through pre-construction habitat surveys in accordance with the methodology outlined in **Appendix 18-2 Habitat Survey Report** [APP-145]. This would ensure that any changes in baseline are recorded up to the start of construction. The pre-construction habitat survey information would form the basis for the reinstatement of existing habitat post construction and included in the written ecological management plan to be approved by the relevant planning authority prior to commencement of any phase of works as secured through Requirement 12 of the **Draft DCO (Revision 6)** [document reference 3.1]. Should any changes be required to the proposed reinstatement in accordance with the requirements of the Landscape Management Plan, then the Landscape Management Plan would be updated before submitting for approval by the relevant planning authority prior to commencement of any phase of works as secured through DCO Requirement 10. The ECoW would be responsible for producing a report to confirm habitat reinstatement or enhancement requirements have been carried out in accordance with the Ecological Management Plan and the Landscape

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		Management Plan post construction. In addition, should any physical element of an agri-environment stewardship scheme not related to habitats be identified prior to construction **the Outline Code of Construction Practice (Revision 3)** [REP1-025] states: *"Following completion of the Onshore Export Cable Corridor, the working area will be reinstated to a state commensurate with condition prior to the commencement of works, set out in a schedule of condition or subject to landowner agreement".* Therefore, it would be reinstated as secured by Requirement 25 of the **Draft DCO (Revision 6)** [document reference 3.1].
LUA.1.13	**Operation phase assessment clarification** Can you clarify why the proposed onshore converter station is shown within a countryside stewardship scheme in ES Chapter 21 Figures (revision 2) [AS-113, Figure 21-3c] while paragraph 172 [REP2-022] states, *'The Onshore Converter Station (s) would not be located within an area under an existing agri-environmental scheme and so there would be no change during the operational phase*?' Please update the application documents as necessary.	The Onshore Converter Station(s) are currently located within an area under two existing mid-tier Countryside Stewardship Scheme (CSS) by two separate land owners, as shown on **Figure 21-3c (Revision 2)** [AS-113]. The first landowner has a CSS agreement which expires at the end of 2025 and covers the area of the Onshore Converter Stations. The second landowner has a CSS agreement which covers the Onshore Export Cable Corridor leading into the Onshore Substation Zone, the onward haul road and the start of the onward cable connection to the proposed Berkhill Wood National Grid Substation as well as the north east corner of the Onshore Substation Zone. This CSS agreement is due to expire at the end of 2028. As such, at the time of operation, the earliest of which being 2030 for and an In Isolation scenario, both these CSS agreements would have expired and where possible the land within the Onshore Substation Zone would be returned to agriculture. As a result, there would be no change during the operational phase. **Chapter 21 Land Use (Revision 3)** [REP2-022] will be updated to reflect this additional information and submitted at Deadline 8, as the update does not affect the outcome of the assessment.
LUA.1.14	**Agri-environment stewardship schemes policy** Can you comment on the implications of the Proposed Development for agri-environment stewardship schemes and delivery of the Government's 25-year Environment Plan and other related strategies?	No response is required. Question directed to Natural England.

1.18 Marine Archaeology

Table 1-18 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Marine Archaeology

I.D.	Written Question	Applicants' Response
MA.1.1	**Direct impact on potential heritage assets – assessment of significance** ES Chapter 17 [APP-133, paragraph 235] acknowledges that, '*although measures will be taken to reduce, as far as possible, the potential for impact to previously undiscovered heritage assets it is still possible that unexpected discoveries may be encountered during construction*'. Paragraph 238 then concludes that, '*…effects may be considered non-significant in EIA terms (ie anticipated to be no worse than negligible magnitude and minor adverse significance)'.* **Applicants**: How can the impact be assessed as negligible when there remains potential for encounter? **Historic England:** Do you consider the assessment conclusions to be appropriate? If not, explain why not?	As acknowledged in section 17.6.1.2 of **Chapter 17 Offshore Archaeology and Cultural Heritage** [APP-133], whilst it is not possible to eradicate the risk of unexpected discoveries entirely during construction (or during the subsequent phases of operation or decommissioning), the programme of pre-construction investigation, survey and assessment (as set out in the **Outline Written Scheme of Investigation (WSI) (Offshore)** [APP-246] is designed to reduce that risk as far as possible. The probability of encountering archaeological material during activities is reduced. The use of a formal protocol for archaeological discoveries or watching briefs during construction will identify anything which might remain so that any archaeological material which is encountered can be appropriately recorded and mitigated. Appropriate recording and conservation of finds, for example, to be determined on a case-by-case basis, in consultation with Historic England and proportionate to the importance of the discovery, will ensure that the cultural significance of that find is not lost. The Applicants discussed this topic with Historic England during a meeting to consider the Statement of Common Ground on 5th March 2025. During this meeting, both the Applicants and Historic England agreed that, in practice, the magnitude of the effect will not be fully understood until after the potential heritage asset has been encountered and the impact has occurred. However, with the measures set out in the **Outline WSI (Offshore)** [APP-246] the residual impact can be managed and mitigated to the lowest practicable level so that changes in cultural significance are unlikely to be material considerations in the decision-making process. This will be captured in an updated Statement of Common Ground which, will be discussed with Historic England, prior to submission at Deadline 4. The 'most likely' impact to occur would correspond to the discovery of an isolated find (i.e. such as an anchor or similar item of debris picked up during a pre-lay grapnel run) and, as finds would be recorded, conserved and curated (e.g. for display in a local exhibition or a museum) as necessary this impact would have an effect of negligible magnitude (i.e. the asset's fabric and / or setting is changed in ways which do not materially affect its cultural significance). However, the Applicants agree with Historic England and acknowledge that, although the probability would be low, impacts of higher magnitude could still occur. It is important to consider that this is true of all industries operating within the marine environment and is, by no means, an idiosyncrasy which is specific to the Projects. As such, and as the impact assessment (section 17.6.1.2 of **Chapter 17 Offshore Archaeology and Cultural Heritage** [APP-133]) concludes, effects may be considered non-significant in Environmental Impact Assessment (EIA) terms. As any effect of major or moderate significance is considered to be significant in EIA terms, then the clarification is offered that the residual effect is anticipated to be no worse than minor adverse significance.
MA.1.2	**Cumulative effects assessment - mitigation approach** ES Chapter 17 [APP-133, paragraph 345] states that, '*for the projects, avoidance through micro-siting, where possible, or further investigation of the eight A2 anomalies is recommended as mitigation. Whilst this mitigation varies to that recommended for Hornsea Project 4, the objective is the same, to ensure avoidance of known heritage assets as far as possible*'. Can you explain the difference in approach to mitigation taken for the Hornsea 4 OWF and why you consider your approach for the Proposed Development to be more appropriate?	The archaeological assessment of marine geophysical data for Hornsea Project Four was undertaken by MSDS Marine. The archaeological assessment of marine geophysical data for Dogger Bank South (DBS) Offshore Wind Farms was undertaken by Wessex Archaeology. Both are experienced, professional and accredited specialists in the archaeological assessment of marine geophysical data with a strong track record in the provision of archaeological services to the offshore renewables sector. However, geophysical anomalies of possible archaeological interest identified by Wessex Archaeology for DBS Offshore Wind Farms, do not correlate to geophysical anomalies of possible archaeological interest identified by MSDS Marine where the projects spatially coincide. These differences in interpretation reflect differences in the

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		geophysical data, acquired at different times, at different resolutions, rather than indicating any errors with the interpretations themselves. There are no 'known' heritage assets (i.e. wrecks or aircraft crash sites, for example) within this area of spatial overlap. These interpreted anomalies, therefore, all relate to anomalies of 'possible' archaeological interest. The recommendation for the eight anomalies seen in the DBS Offshore Wind Farms geophysical data by Wessex Archaeology is avoidance through micro-siting, or further investigation. For the eight anomalies seen in the Hornsea Project Four data, only one is recommended for avoidance, and is assigned a small (15m) Archaeological Exclusion Zone (AEZ). Five are determined of low potential and are unlikely to be of archaeological significance. Should any finds be discovered at these locations during construction and site preparation activities these would be reported through an appropriate protocol for reporting archaeological discoveries. For the remining two anomalies, which are both large magnetic anomalies, without surface expression, it is recommended that these be reviewed during future, post-consent assessments. For both DBS Offshore Wind Farms and Hornsea Project Four, these recommendations will be further informed through the acquisition, and archaeological assessment, of high-resolution, pre-construction survey data, to be undertaken post-consent once the project design is refined. These surveys will provide full coverage of construction footprints and will further reduce the potential for unexpected discoveries, and the effects on potential heritage assets. If features of archaeological interest are identified during these surveys, they will be subject to avoidance or further investigation. As such, although the recommendations for the individual anomalies are different, the approach to post-consent delivery of further investigation, survey and assessment to inform micro-siting and avoidance of heritage assets is the same. Therefore, neither approach is more appropriate as the intended outcomes are the same.
MA.1.3	**Assessment of geophysical data – buffer zone** **Applicants:** ES Appendix 17.2 [APP-136, paragraph 1.1.8] confirmed that, *'survey data were not obtained from the buffer, and only from the corridor itself'*. Considering the likely use of jack-up vessels and anchoring events within the construction buffer, and consequently the potential for disturbance to potential heritage assets, can you justify why surveys would not be required for the buffer zone? Do you propose to undertake surveys at a later stage? If so, how are they secured? **Historic England:** Do you consider detailed surveys should be undertaken for the buffer area? If not, explain why not.	Marine geophysical data have not been acquired from the construction buffer for the purposes of the EIA. However, surveys would be required should the construction buffer be utilised for activities such as the use of jack-up vessels and vessel anchoring. This is secured through the **Outline WSI (Offshore)** [APP-246] which states that, prior to the acquisition of pre-construction geophysical data, a review of all the data acquired to date be undertaken by a suitably qualified and experienced archaeological contractor. This will clarify the suitability of existing data, will include clarification of data gaps and will help to frame specific objectives to inform the scope of further survey work. The **Outline WSI (Offshore)** [APP-246] also states that the specification of any proposed marine geophysical surveys will be subject to advice from the retained archaeologist to ensure that archaeological input is provided at the planning stage, to enable archaeological considerations to be taken into account and to ensure that the data will be sufficiently robust to enable professional archaeological interpretation and analysis.
MA.1.4	**Outline Written Scheme of Investigation (oWSI) (Offshore) - further geoarchaeological assessment and analysis** Recommendations are made in the oWSI (Offshore) [APP-246] for further geoarchaeological assessments and analysis including reference to planned surveys for 2024 ([APP-246, paragraph 120]). 1. Can you clarify the proposed timescales for any additional survey work and whether any results would be provided during the Examination? 2. Are you proposing to include any conclusions into an updated oWSI (Offshore)?	1 The geoarchaeological assessment is ongoing and Royal HaskoningDHV are currently providing specialist marine geoarchaeological advice to the Applicants to inform geotechnical surveys, and the acquisition of samples for geoarchaeological assessment planned for 2025 within the DBS East Array Area. Geotechnical survey was undertaken in the DBS West Array Area in 2024. This survey was similarly subject to advice by a specialist marine geoarchaeologist at Royal HaskoningDHV. Following geoarchaeological review of the logs, a limited number of samples have been requested for retention by the Applicants' geotechnical contractor by Royal HaskoningDHV. Further stages of assessment will take place following the completion of the survey within the DBS East Array Area in 2025 so that geoarchaeological assessment of samples from all campaigns can be taken forward as a combined work package.

I.D.	Written Question	Applicants' Response
	In addition, could the oWSI (Offshore) be amended to include indicative timescales of all proposed additional surveys?	As such the results will not be available within the timescales of the Examination. 2 There is no intention to update the **Outline WSI (Offshore)** [APP-246]. Historic England will be provided with a method statement to inform consultation in advance of the 2025 survey. Thereafter, an assessment report, setting out the results of the geoarchaeological review of the logs from the 2024 and 2025 surveys, will be issued directly to Historic England for review and to inform consultation on further phases of work (anticipated Q4 2025). 3 The timescales for further surveys are currently unknown. However, a timetable for further site investigations is an essential requirement of any post-consent / pre-construction archaeological written scheme of investigation, as secured through the following conditions: • DCO Schedule 10, Part 2, 15 (1)(e)(viii); • DCO Schedule 11, Part 2, 15 (e)(viii); • DCO Schedule 12, Part 2, 13 (1)(e)(viii); • DCO Schedule 13, Part 2, 13 (1)(e)(viii); and • DCO Schedule 14, Part 2, 11(1)(e)(viii). These conditions require that this timetable for all further site investigations must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order Limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities. Whilst it is not, therefore, proposed to amend the **Outline WSI (Offshore)** [APP-246] with indicative timescales for all proposed additional surveys, a timetable for these surveys will be provided once known. This is further secured through the requirement for a specific WSI for pre-commencement surveys and archaeological investigations, and pre-commencement material operations which involve intrusive seabed works, which is required by: • DCO Schedule 10, Part 2, 15 (2); • DCO Schedule 11, Part 2, 15 (2); • DCO Schedule 12, Part 2, 13 (2); • DCO Schedule 13, Part 2, 13 (2); and • DCO Schedule 14, Part 2, 11(2).

1.19 Marine and Coastal Processes

Table 1-19 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Marine and Coastal Processes

I.D.	Written Question	Applicants' Response
MCP.1.1	**Changes to bedload sediment transport due to cable installation at landfall** A summary of the likely significant effects on the marine physical environment is provided in ES Chapter 8 [APP-080, Table 8-67]. With reference to '*changes to bedload sediment transport due to cable installation activities at landfall*', the significance of effect pre-mitigation has been assessed as minor adverse. No indication has been given of any proposed mitigation, though the residual effect is considered to be negligible adverse. Section 8.7.3.9 of ES Chapter 8 [APP-080] would not appear to reference or provide an explanation of the reduction of the significance of effect from minor adverse to negligible adverse. Can you explain?	The proposed mitigation was to ensure the intertidal exit pits were located at a sufficient distance from the cliff to ensure they would not enhance coastal erosion. This was discussed in section 8.7.3.9.5 of **Chapter 8 Marine Physical Environment** [APP-080], but the detail was inadvertently omitted from Table 8-67 of the same chapter. Since DCO submission, the Applicants have committed to a trenchless solution for cable installation at the landfall with duct exit pits located below the mean low water spring water level (see **Project Change Request 1 – Offshore and Intertidal Works** [AS-141]). Therefore, the proposed mitigation is now secured through changes to the Projects design.
MCP.1.2	**Baseline characterisation - sediment transport pathways** In your RR [RR-039], you raised concerns that only limited information is currently available on sediment transport pathways for the majority of the export cable corridor and array area and that additional information would aid the understanding of the baseline characterisation and assessment of potential changes to sediment transport pathways arising from the proposed built structures. The Applicants responded to your RR [AS-048, reference RR-039: B19] and, in addition, confirmed at ISH2 [EV5-008] that they have acquired site-specific high-resolution data and consider that these would be more appropriate than regional models to identify mobile sediment features. Are you content with the Applicants' explanation in relation to the baseline characterisation of sediment transport pathways and that a sufficient assessment has been undertaken and provided in this regard? If not, why not?	No response is required. Question directed to Natural England.
MCP.1.3	**Cable protection in the nearshore** With reference to the discussions held at ISH2 in relation to proposed cable protection requirements in the nearshore, and with regard to NE's Deadline 2 submission [REP2-064], can you provide further evidence that the proposed limited height of 50cm would not disrupt or significantly change nearshore or longshore sediment transport pathways towards the Humber Estuary SAC or Spurn Point? In addition, can you clarify where the maximum height of 50cm cable protection within the 10m depth contour is secured in the draft DCO?	The assessment of changes in nearshore sediment transport pathways due to the presence of cable protection measures is based on a conceptual approach. The scale of the cable protection measures is extremely small in comparison to the spatial scale (horizontal resolution of 0.1-5km) of the wave and hydrodynamic models which are used to drive sediment transport models. Therefore, modelling these features is not common practice for Offshore Wind Farm developments, and there are no existing studies to draw from. There is also limited academic research focusing on sediment transport around cable protection measures as this is considered a minor effect when compared with wind turbine structures. It is expected more data will become available as the survey data from post-construction monitoring plans is shared publicly. However, this is not available now to inform this assessment. In the absence of modelling and monitoring data, the assessment presented is based on geomorphological expert judgement. The principal source of sediment supply to the Humber Estuary and Spurn Point is not from the thin veneer of seabed sediment overlying glacial till in the nearshore located 40km away, the principal supply of sediment to Spurn Point and the Humber Special Area of Conservation (SAC) is from the vast volumes of sediment eroding out of the Holderness cliffs which extend approximately 40km northward from Spurn Point and which can retreat by up to 10m in a single storm. These large volumes of sediment are transported alongshore by the prevailing wave regime which dominates sediment transport in the nearshore. In a study at Easington, HR Wallingford (2011) showed that

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		most of the longshore transport from wave breaking occurs close to the shoreline, within approximately 25om of the cliff line. Seaward of this, the wave-driven sediment transport is effectively zero. The Applicants have committed to a trenchless landfall technique and to not installing cable protection measures within 35om of the Mean Low Water Springs (MLWS) (approximately 10om from the base of the cliffs). Therefore, the cable protection measures will not be located within the wave breaking zone where sediment transport potential is the greatest and there will be no change to sediment supply to the Humber Estuary. In addition, the Applicants intend to submit a technical note at Deadline 5 of examination to provide further details regarding the potential effects of cable protection measures on sediment transport in the nearshore environment. Regarding the maximum height of 50cm of cable protection measures within the 10m depth contour, as noted in paragraph 189 of **Chapter 14 Shipping and Navigation** [APP-121] the Applicants would follow the guidance contained in MGN 654 in relation to cable protection, namely that cable protection would not change the charted water depth by more than 5%, unless otherwise agreed with the Maritime and Coastguard Agency and Trinity House. Given 5% of 10m is 50cm, the Applicants are therefore constrained to a maximum cable protection height of 50cm in the 10m depth contour. In depths shallower than this, the height of protection would need to be proportionally lower. This commitment is secured within the following conditions of the Deemed Marine Licence (DML)s: • DML 1 & 2 – Condition 15; • DML 3 & 4 – Condition 13; and • DML 5 – Condition 11.
MCP.1.4	**Cable protection in the nearshore** The SoCG between the Applicants and the EA [REP1-029, paragraph 18] suggests that the cable protection measures for the nearshore environment are not currently agreed. No further information is provided in the submitted RR [RR-015] on this matter. Can you provide further details on the issues raised and the work required to resolve this? Can the issue be resolved before the close of the Examination? **EA:** Do you have any comments on the updated Coastal Erosion Technical Note [AS-116]?	Cable protection measures in the nearshore were discussed in the Benthic Ecology / Marine Physical Environment – Pre-ES Expert Topic Group on 29th January 2024. In this meeting the EA noted they agreed with Natural England's advice regarding cable protection measures in the nearshore environment, specifically the request for no cable protection measures to be installed in depths less than 10m below the Lowest Astronomical Tide. The Applicants intend to further discuss this matter with EA prior to the submission of an updated Statement of Common Ground (SOCG) at Deadline 4. As noted in the response to MCP.1.3 above, commitments in relation to cable protection measures are secured in the following DML conditions: • DML 1 & 2 – Condition 15; • DML 3 & 4 – Condition 13; and • DML 5 – Condition 11. Further mitigation is captured within the **Cable Statement (Revision 3)** [REP2-040], including that limiting the extent of cable protection within the 10m depth contour. The Applicants have provided a further response to Natural England regarding cable protection in the nearshore in Table 2-2, REP2-064:2 of **The Applicants' Responses to Deadline 2 Documents** [document reference: 13.3] and will continue to engage with Natural England and the Environment Agency on the matter through examination to seek an agreement with all parties. In addition, the Applicants intend to submit a technical note at Deadline 5 of examination to provide further details regarding the potential effects of cable protection measures on sediment transport in the nearshore environment.
MCP.1.5	**Cable protection in the nearshore** Your response to the MMO WR in [REP2-057, reference REP1-074:2.3.1] suggests that further information about ground conditions is available to understand the requirement for cable protection for specific areas within the nearshore area but this would not appear to have been publicly shared yet. Can you signpost this or provide the information and explain whether it	See Appendix F (Burial Assessment Study (BAS) of Appendix B (Export Cable Route (ECR) Cable Burial Risk Assessment (CBRA)) of the **Cable Statement (Revision 3)** [REP2-039]. This appendix was updated at Deadline 2. Appendix B (ECR CBRA) of the **Cable Statement (Revision 3)** [REP2-039] states in section 7 (Conclusion) that for burial in the nearshore area the risk of not achieving required burial depths is "*low but burial may be difficult in subcropping and outcropping bedrock*". Should burial to sufficient depths not be possible then remedial protection may be required. The extent of remedial protection requirements in this region is difficult to assess and is likely to remain a risk until construction is completed.

I.D.	Written Question	Applicants' Response
	would allow for a refinement of the proposed cable protection requirements within the nearshore area? If not, why not?	Existing data indicate that small boulder groups are present along the route up to kilometre point (KP) 2.60. Until pre-construction surveys are completed, the Applicant will not have survey data of sufficient resolution regarding boulder size to confirm that all identified boulders can be removed or routed around. Where it is not feasible to route around or remove boulders to allow burial the Applicants would consider post-lay protection measures for these distinct areas. It is understood that a neighbouring wind farm with a parallel export cable corridor (Dogger Bank B) conducted rock placement from their KP 1.557 – 1.606 due to the presence of boulders. Hence, the Applicants can confirm that the requirement for and / or extent of any remedial cable protection in the nearshore area cannot be confirmed at the present time. There is a known risk based on survey evidence, and evidence from adjacent projects that remedial protection may be needed in the near shore area. Further information in relation to this matter will not be available until the pre-construction phase of the Projects.
MCP.1.6	**Water quality information – array area** **Applicants:** ES Chapter 8 [APP-080, paragraph 107] states that, '*site specific water quality information is not available for the Array Areas*', and reference is made to the 2010 Quality Status Report with the location of the site in the Region II 'Greater North Sea'. Can you explain why you consider the document, which was prepared 15 years ago, to remain relevant? Should further surveys be undertaken for the array area to understand and assess site specific water quality? Can you also signpost or provide a plan showing the Order Limits in relation to the Region II boundaries? **MMO and NE:** Do you accept the information provided in relation to water quality or do you consider that additional surveys should be undertaken to assess water quality within the array areas? Please explain your view.	The Quality Status Reports present patterns in water quality status and therefore are relevant in that they are generally showing downward trends in water concentrations of specific substances monitored in the marine environment. There is an updated report now available (not available at the time of assessment). However, water quality has been replaced by a focus on sediment quality data which allows for a more robust study of general pollution trends given the main effects are now considered to be substance re-release from marine sediments acting as storage for past contamination. Sampling and analysis of sediment contaminant levels was undertaken as part of the DBS benthic characterisation studies, in line with a survey methodology agreed with the relevant MMO and Natural England. The main effect on water quality associated with offshore windfarms is related to the release of any sediment bound contamination during either seabed preparation or cable installation. Therefore, the collection of site-specific sediment data is the more important thread of evidence and focus of the ES assessment. The sediment data collected as part of the site-specific survey is therefore considered to be robust and allows for an informed assessment regarding the risks to water quality. Additional survey work to collect water quality data is therefore not considered necessary. Region II boundaries are shown on the OSPAR website[34].
MCP.1.7	**Sediment contaminants sample locations** ES Chapter 8 [APP-080, tables 8-15 and 8-16] confirms the site-specific data collected for metals, polyaromatic hydrocarbons and total hydrocarbon content. Figure 8.8 [APP-081] shows the individual sample locations referenced in the tables. Can you clarify the sample locations of ST168, ST172 and ST178? Whilst they are included in the tables, they would not appear to be shown in the figure for the offshore export cable corridor and their location is currently unclear.	The Applicants thank the Examining Authority (ExA) for noting this inconsistency. The three stations have been omitted from the figure in error, although the locations can be found on Figure 4.20 of **Appendix 9-3 Benthic Ecology Monitoring Report** [APP-089]. Figure 8-8 in **Chapter 8 Marine Physical Environment Figure 8-1 to Figure 8-3** [document reference 7.8.1] has been revised and submitted at Deadline 3.
MCP.1.8	**Sediment contaminants** Paragraph 83 of the Disposal Site Characterisation Report [REP2-035] concludes that, '*site-specific information relating to sediment contaminant concentrations do indicate that elevated levels of contaminants are likely to present a risk to water or sediment quality if disturbed.*' This would appear to be at odds with the findings earlier in the report, suggesting that there is no risk with regard to sediment contaminants. Can you clarify?	The Applicants thank the ExA for noting this inconsistency. Paragraph 83 of the **Disposal Site Characterisation Report** [REP2-035] should read: *'From the information and data presented above it can be concluded that the baseline water and sediment quality for the offshore and coastal waters surrounding the Offshore Development Area is good. Site-specific information relating to sediment contaminant concentrations do **not** indicate that elevated levels of contaminants are likely to present a risk to water or sediment quality if disturbed.'* This will be amended in a future revision of the document.

[34] https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/synthesis-report/introduction/

I.D.	Written Question	Applicants' Response
MCP.1.9	**Exposure of cables post decommissioning** ES Chapter 5 [REP1-010, section 5.6.2.7] briefly explains the proposed decommissioning works at the landfall location. Noting your Deadline 2 response to ERYC [REP2-057] and the MMO [REP2-058], referencing the proposed location of the TJBs, can you clarify if cables below the cliffs, on landfall and within the intertidal zone would be left *in situ* following decommissioning of the Proposed Development? If they would remain, noting the proposed cliff erosion data set out in the Coastal Erosion Technical Note [AS-116], what is their likelihood of exposure and do you have a procedure in place for any accidental exposure post decommissioning? In addition, your Deadline 2 response in [REP2-057] and [REP2-058] explains that beach profile monitoring would not be required and that any potential risks to your assets would be monitored over the lifetime of the projects. Can you signpost or clarify how this would be secured and explain how the proposed monitoring would ensure there would be no impact on any natural coastal processes?	The production of more detailed decommissioning plans would not happen until after the Projects have been consented, hence the details of decommissioning remain to be fully resolved. Notwithstanding this, it is likely that the cables and ducts below the cliffs, around landfall and within the intertidal zone would be left *in situ* following decommissioning. This is because there would be avoidable risks associated with removing the ducts, as attempting to extract them may impact the surrounding cliff to a greater degree than leaving them in place. The Applicants note that Natural England agree with the Applicants that it has been demonstrated that the cables will remain buried at a sufficient depth to prevent exposure for the operational lifetime of the Projects (Appendix B1 - Natural England's Advice on 10.38 Coastal Erosion Technical Note [AS-116] Deadline 1 [REP1-064] – see REP1-064:1 in Table 2-6 of **The Applicants' Reponses to Deadline 1 Document**s [REP2-058]). As requested by Natural England, the **Coastal Erosion Rate Technical Note (Revision 2)** [document reference 10.37] has been updated using information from the recently published of NCERM2 for submission at Deadline 3. This note demonstrates that, on the basis of conservative assessments, it is likely that cliff recession would not reach the Transition Joint Bays (TJB)'s until 2105 at the earliest. A monitoring plan would be developed for asset integrity purposes covering the operational phase and beyond. It is likely that this monitoring would encompass inspections of the landfall on an annual basis, supported by periodic cliff recession surveys, with reviews of East Riding of Yorkshire Council (ERYC) coastal erosion monitoring data also undertaken. Through such means progress of erosion towards the TJB and, thus, any potential risk associated with exposure would be monitored. This Onshore Operational Monitoring Plan is secured by Requirement 33 in **Draft DCO (Revision 6)** [document reference: 3.1] which states that '*onshore operational monitoring plan (in accordance with the outline code of construction practice) in relation to that phase has been submitted to and approved by the relevant planning authority*'. Section 8 of the **Outline Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025] also states:' *The Principal Contractor(s) will be responsible for the operational management of the Projects following/during construction up until final handover of the Projects to the Operator(s). developed by the Applicants, prior to the operational phase.*' As, when, or if erosion of the cliff line reached the TJBs, or presented any other danger of exposure, the area would in all likelihood be made safe, awaiting full exposure. Once exposed, the ducts would be cut and capped at beach level. The TJB structure would be pre-emptively removed a few years before exposure. The full detail of the decommissioning plans, proposals and monitoring would be agreed with the relevant planning authority post-consent in line with Requirement 27 of the **Draft DCO (Revision 6)** [document reference 3.1]. Outline detail of the offshore engineering studies to be completed across the life of the Projects is presented in the **In Principle Monitoring Plan (Revision 2)** [REP2-043].
MCP.1.10	**Flamborough Front monitoring** **Applicants:** Your response to NE's RR [AS-048] is noted, however: 1. Can you justify why monitoring of potential changes to the stratification, currents and primary productivity of the Flamborough Front would not be required? 2. Why do you consider there would be a disadvantage to using remote sensing techniques? 3. Can you explain how the Proposed Development would differ from Hornsea 4 OWF, where a detailed monitoring programme was agreed between the Applicant, MMO and NE? 4. How do you seek to address the concerns raised by NE if monitoring was not agreed?	1. As outlined in section 8.5.12 of **Chapter 8 Marine Physical Environment** [APP-080], the water column in the Array Areas is categorised as being intermittently stratified and the Flamborough Front may be present for up to 40 days of the year. As this is an ephemeral feature, it would be difficult to predict the position of the front at any given time to inform the deployment of monitoring equipment (e.g. Acoustic Doppler Current Profilers). The monitoring results could therefore be misinterpreted e.g. if no front is detected at a specific location (or water depth) it does not mean the front was not present (or vice versa). There is also a high degree of variability in the existing baseline oceanographic conditions which has not been fully parameterised due to limited data availability (in part due to the difficulty capturing data from a feature that is rarely present and constantly moving). Therefore, there is no academic agreement on the definition of thresholds of change that would set the trigger points for intervention/remediation. The early outputs from highly complex oceanographic modelling of the effects of wind farms on ocean stratification (see presentations delivered in the Marine Physical Processes session of the 7th ScotMER Symposium March 2025) show localised changes in the near field (similar to that presented in section 8.7.4.3 of **Chapter 8 Marine Physical Environment** [APP-080]) and while far-field effects cover much greater distances, the magnitude of the change is very small and within the range of natural variability. Therefore, it is not clear if a monitoring program would be able to detect change and also if it would be able to distinguish between the effects of the wind turbine structure and those oceanographic changes occurring due to climate change.

I.D.	Written Question	Applicants' Response
	NE: Has the submission of Change Request 1 altered your position in relation to a requirement for a monitoring programme? If so, how? In addition, do you agree with the Applicants' assessment that the Proposed Development would only result in localised changes, while the Front is considered to be of regional importance and would therefore not be affected?	2. The existing baseline understanding of the location and duration of the Flamborough Front is based on remote sensing. The Applicants do not believe it would be a disadvantage to use remote sensing and state the following in response to RR-039:B33: *'Monitoring of the Flamborough Front can only be undertaken using remote sensing techniques. This is because, when the Flamborough Front is present, it is a 320 km-long zone separating the well-mixed cooler waters to the south from the warmer stratified waters to the north. The discontinuity in temperature is typically visible in satellite infrared imagery and this is the best method to investigate its location and structure. Trying to monitor the feature using deployment of Acoustic Doppler Current Profilers or other instruments located on the seabed or in the water column would only provide local-scale information which could not be reliably associated with any effects induced by the Projects structures.'* 3. The proposed Development differs from Hornsea 4 as Gravity Base Structures (GBS) are not being considered for any structures. The proposed monitoring approach for the Flamborough Front is discussed in the Hornsea Project 4 Clarification Note on Marine Processes Mitigation and Monitoring[35]. In Table 7 of this document the following text is included, which suggests monitoring will only be undertaken if GBS foundations are used: *"If Hornsea Four adopts any other consented foundations rather than GBS then this monitoring requirement does not apply, noting the previous remarks offered by Natural England, MMO and Cefas related to monopiles (see 4.4.1.2)."* However, the Outline Marine Monitoring Plan[36] does not make specific reference to GBS foundations. As the Applicants have committed to not using GBS foundations, it is not clear how the monitoring proposal for Hornsea 4 is comparable. 4. The Applicants will continue to consult with Natural England through the examination process to reach agreement on this matter. In addition, a technical note summarising the potential effects of the Projects on the Flamborough Front and how other offshore wind farm projects have assessed their potential impacts on the feature will be provided at Deadline 4 of examination.

[35] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010098/EN010098-001741-Hornsea%20Project%20Four%20-%20Other-%20G5.33%20Clarification%20Note%200n%20Marine%20Processes%20Mitigation%20and%20Monitoring.pdf

[36] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010098/EN010098-002294-F2.7%20Outline%20Marine%20Monitoring%20Plan%20CLEAN.pdf

1.20 Marine Conservation Zone Assessment

Table 1-20 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Marine Conservation Zone Assessment

I.D.	Written Question	Applicants' Response
MCZ.1.1	Do you agree with the Applicants' conclusion to the Phase 1 MCZ Assessment [APP-240]? If not, explain why. A cross reference to a point in a WR or Issues Log would be acceptable.	No response is required. Question directed to the Marine Management Organisation (MMO) and Natural England.
MCZ.1.2	Are you satisfied that the Applicants' proposed mitigation reduces the risk of activities associated with the Proposed Development to a level that has no significant risk of hindering the conservation objectives of the Holderness Inshore and Holderness Offshore MCZs? If so, are you satisfied with the way this is secured in the draft DCO? If not, can you explain how you consider the draft DCO should be amended?	No response is required. Question directed to the MMO and Natural England.
MCZ.1.3	Would you be able to exercise your functions to further the conservation objectives of the Holderness Inshore and Holderness Offshore MCZs if the Proposed Development was to go ahead?	No response is required. Question directed to the MMO.

1.21 Marine Mammals and Relevant HRA Aspects

Table 1-21 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Marine Mammals and Relevant HRA Aspects

I.D.	Written Question	Applicants' Response
MM.1.1	1. How do you respond to the following recent governmental policy papers, other guidance documents, statements and reports? • Reducing marine noise, published by Defra on 21 January 2025. • Joint Nature Conservation Committee (JNCC), NE and the Centre for Environment, Fisheries and Aquaculture Science positions on the use of quieter piling methods and noise abatement systems when installing offshore wind turbine foundations 2025. • JNCC guidelines for minimising the risk of injury to marine mammals from UXO clearance in the marine environment. • Defra, Impacts of underwater noise from offshore wind - ME5610. • Defra, Management of underwater noise from offshore wind - ME5611. • JNCC Impulsive noise in the Southern North Sea SAC and other harbour porpoise SACs (2022–2024, December 2024. 2. Can you consider your assessment and mitigation measures in light of the above and amend your application documents and proposals as necessary?	1 The Applicants acknowledge the policy and guidance published on the 21st January 2025. The Applicants have reviewed these documents and appropriate measures and references to the policy and guidance have been added to the **Outline Marine Mammal Mitigation Protocol (MMMP) (Revision 3)** [REP2-047] and the **In Principle Site Integrity Plan (SIP) for the Southern North Sea (SNS) Special Area of Conservation (SAC) (Revision 3)** [REP2-049] which were submitted at Deadline 2. 2 In line with this policy, the **In Principle SIP for the SNS SAC (Revision 3)** [REP2-049] was updated at Deadline 2 to state that the Projects will utilise best endeavours to deliver noise reductions for piling, where applicable, through the use of primary and / or secondary noise reduction based on the final project design. For Unexploded Ordnance (UXO) clearance, the Applicants are committed to using low order techniques as the default clearance method, which is in line with the guidance within the Department for Environment Food and Rural Affairs (Defra) Marine Noise Package, if clearance is required.
MM.1.2	**Underwater noise abatement and the draft Site Integrity Plan** Both the MMO [RR-030], [REP1-075], [REP2-061] and NE [RR-039], [REP1-067] and [REP2-067] have raised significant concerns regarding your approach to noise abatement. NE states [RR-039] it does not agree with your assessment in the ES that the mitigated impacts of permanent threshold shift from piling would be minor adverse or negligible for all marine mammals. These concerns were reasserted at Deadline 2 by both NE [REP2-067] and the MMO [REP2-061]. Will you be taking NE's advice to reduce underwater sound at source for example by reducing the maximum hammer energy or by committing to the use of noise abatement systems? The ExA notes your responses to these concerns [REP2-058] but can you explain how you intend to resolve this disagreement by the close of the Examination, especially in light of the recent Marine Noise Package released by Defra, (see question ExQ MM 1.1.)?	The Applicants have confirmed that the Projects will utilise best endeavours to deliver primary and / or secondary noise mitigation methods, if required, based on the final design and this has been added to the **Outline MMMP (Revision 3)** [REP2-047] and the **In Principle SIP for the SNS SAC (Revision 3)** [REP2-049] which were submitted at Deadline 2. The Applicants are awaiting Natural England and the Marine Management Organisation's (MMO's) review of these documents. Once the final design envelope is confirmed, the final MMMP and final SIP will be updated to reflect the specific mitigation measures that the Projects will use and will be submitted to the MMO and relevant statutory nature conservation bodies for consultation and approval in writing by the MMO as secured in **Draft DCO (Revision 6)** [document reference 3.1], Requirement 15(1)(g) for the MMMP and Requirement 16 for the In Principle SIP for the SNS SAC. Mitigation measures that the Applicants are considering are presented in section 3.1.9 in the **Outline MMMP (Revision 3)** [REP2-047], where different foundation types and installation methods is one option and noise reduction another. For this reason, noise mitigation systems, such as Noise Abatement Systems (NAS), are being included within the Projects' procurement strategy as an optional element to allow it to be called upon should it be required based on the final design parameters. As outlined in the response above, the Applicants have reviewed the recent Marine Noise Package released by Defra and updated the **In Principle SIP for the SNS SAC (Revision 3)** [REP2-049] at Deadline 2 to state that the Projects will utilise best endeavours to deliver noise reduction measures, where applicable. Therefore, the Applicants believe that they are demonstrating sufficient commitment to reducing underwater noise at the source, in response to the recent Marine Noise Package released by Defra and the JNCC *et al.* (2025)[37] position paper, should it be required.
MM.1.3	**Hammer energy**	In section 3.1.5; paragraph 129, of the **Outline MMMP (Revision 3)** [REP2-047] it states that *"the soft-start starting hammer energy would be the lowest possible starting hammer energy*" and in paragraph 132, '*it is proposed that each*

[37] JNCC, Natural England and Cefas (2025). JNCC, Natural England and Cefas position on the use of quieter piling methods and noise abatement systems when installing offshore wind turbine foundations. JNCC, Aberdeen.

I.D.	Written Question	Applicants' Response
	Can you clearly state your intentions regarding piling commencement and the percentage of the maximum hammer energy this represents within the Outline Marine Mammal Mitigation Protocol (oMMMP) [REP2-047], as per NE's point in Appendix F2 of its Deadline 2 submission [REP2-067]?	*piling event would commence with a minimum of 10 minutes at reduced hammer energy, for example 10% of the maximum hammer energy, followed by a gradual ramp-up for at least 20 minutes for all pile driving activities*'. The initial starting hammer energy and % of the maximum hammer energy this represents will be confirmed post consent with the final project design and included in the final MMMP.
MM.1.4	**Evidence regarding Passive Acoustic Monitoring (PAM) equipment** Can you provide evidence to demonstrate the proposed PAM equipment and methodology would effectively monitor the whole mitigation zone for all marine mammals, and that animals that vocalise infrequently such as baleen whales and seals have been considered? If this is not possible, can you update the oMMMP to include commencing and re-starting piling during times of good visibility only, as per NE's advice in Appendix F2 of its Deadline 2 submission [REP2-067].	In Paragraph 110, of the **Outline MMMP (Revision 3)** [REP2-047] it states that '*the PAM equipment would be appropriate to detect vocalising cetaceans in the monitoring area*'. Details on the PAM equipment to be used will be confirmed post consent and consulted on as part of the final MMMP. Other options such as night vison binoculars, infrared cameras and any new emerging technologies will also be considered if required. All approved mitigation measures and piling protocols will be agreed through consultation and presented in the final MMMP.
MM.1.5	**Cumulative and in-combination assessments** NE does not agree to scoping out permanent threshold shift from the CEA and in-combination assessments for the reasons it explains in its RR ([RR-039], NE ref F16 and F29). The ExA notes your response to these issues [AS-048], but these remain issues in NE's latest Risk and Issue log at Deadline 2 [REP2-069]. Do you intend to revisit these matters? If not, why not?	Defra have recently published their Marine Noise package, which provides a suite of new and updated policy and guidance relating to the reduction and mitigation of underwater sound, in particular the Marine Noise Policy paper (JNCC *et al.* 2025[38]) which states that '***all offshore wind pile driving activity across all English waters will be required to demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods in the first instance***'. Therefore, all offshore wind farms are required to use primary and / or secondary noise mitigation measures, and this will mitigate any risk of cumulative Permanent Threshold Shift. The Applicants consider with the new guidance in place, this issue can be resolved.
MM.1.6	**Assessment approach** ES Chapter 11 [APP-095, paragraph 45] explains that value was one of the factors used to conclude the level of sensitivity of a marine mammal receptor, then section 11.1.3.4.2 goes on to describe a value modifier that the assessor can use where appropriate. Could this assessment methodology for marine mammals therefore double count the value of the receptor in reaching a conclusion on sensitivity? Explain your response.	The value has not been double counted. As stated in Section 11.1.3.4.2, value is used as a modifier where relevant. The Applicants can confirm that value has not been used in this assessment as a modifier. All cetaceans in UK waters are European Protected Species and, therefore, are internationally important. Harbour porpoise, bottlenose dolphin, grey seal and harbour seals are also afforded international protection through the designation of protected sites. As such, all species of marine mammal can be considered to be of high value. It is important to understand that the value is not necessarily directly linked within a particular magnitude or significance of effect. A receptor could be of high value but have a low or negligible physical / ecological sensitivity to an effect, as the sensitivity of a receptor is determined through its ability to accommodate changes and its ability to recover if it is affected. The sensitivity of marine mammals is described in section 11.4.3.1.1 and Table 11-10 of **Chapter 11 Marine Mammals** [APP-095]. For example looking at vessel collision risk; section 11.6.1.6 (Table 11-86) of **Chapter 11 Marine Mammals** [APP-095] harbour porpoise has a high value, but low sensitivity and minke whale have a high value and medium sensitivity. More information is presented in sections 11.4.3.1.1 and 11.4.3.1.2 of **Chapter 11 Marine Mammals** [APP-095].
MM.1.7	**Noise propagation modelling** In the pre-application consultation, you were said to be disappointed that noise propagation modelling had not been used in the marine mammal PEIR assessments. Are you content that this has been properly addressed by the Applicants in ES Chapter 11 [APP-095] and Appendix 11.3 [AS-137]? If not, please explain why not and set out what needs to be done to address your concerns.	No response is required. Question directed to The Lincolnshire Wildlife Trust.
MM.1.8	**Procedure after breaks in piling**	In **The Applicants' Responses to Relevant Representations** [PDA-013] regarding the breaks in piling, it was stated by the MMO that '*The MMO welcomes that further discussions on this matter will take place before finalisation of the*

[38] JNCC, Natural England and Cefas (2025). JNCC, Natural England and Cefas position on the use of quieter piling methods and noise abatement systems when installing offshore wind turbine foundations. JNCC, Aberdeen.

I.D.	Written Question	Applicants' Response
	In relation to mitigation measures and breaks in piling operations, reports of pre-application discussions between you suggest a difference of opinion over the need to adhere to the JNCC guidance that a pre-piling search and soft-start procedure should be repeated before piling recommences when the delay has been more than ten minutes. The ExA notes the Applicants' response to RRs [PDA-013] stating that the oMMMP would be updated to follow the breaks in piling procedure in the JNCC guidelines for piling (2010). The ExA notes updates have been made to the oMMMP [REP2-047] since this issue was raised particularly to section 3.1.2 but is not aware that specific updates in relation to this issue have been made to section 3.1.6 'Breaks in piling'. Can the Applicants and the MMO respond as to whether this is an outstanding issue or whether it has been resolved? If it is outstanding, can you explain why and how it is intended to be resolved by the close of the Examination?	*MMMP'* (RR-030: 4.17.5). Therefore, it has been agreed that the Applicants will consult the MMO on the protocols for breaks in piling post consent in the final MMMP. Any updates to piling protocols and guidance will also be incorporated into the final MMMP, where appropriate.
MM.1.9	**Assessment of grey seal disturbance generally** NE [RR-039] disagrees with your conclusion of negligible effects on grey seals through disturbance during piling events at each of DBS East, DBS West and both projects together. It believes the magnitude of impact should be high, as up to 30.62% of the South East England management unit could be disturbed, leading to a moderate and significant impact. NE has maintained this position in its latest Risk and Issue log [REP2-069] and in Appendix F2, its comments and advice on marine mammals [REP2-067]. Do you intend to revise this assessment, and, if not, why not? How are you intending to resolve this disagreement by the close of the Examination?	The Applicants are submitting a technical note at Deadline 3 (**Marine Mammal Technical note: Significance of Effect for disturbance from piling and cumulative underwater noise** [document reference: 13.6]) showing the magnitude and significance of effect for all marine mammal species, including grey seal from all methods such as Effective Deterrent Ranges (EDRs) and dose response curve presented in sections 11.7.3.1.1.3 and 11.7.3.2.10 of **Chapter 11 Marine Mammals** [APP-095]. This technical note presents any potential cumulative disturbance from piling based on the other methods of calculating disturbance alongside the results from the interim Population Consequences of Disturbance (iPCoD) presented in **Chapter 11 Marine Mammals** [APP-095]. However, the Applicants maintain that population modelling is the best tool to understand cumulative disturbance over the long term. If the significance of effect is solely based on EDRs or dose response curve, this highlights only the short-term disturbance, therefore not considering any long-term effects, or animals returning to the area after piling. The 25km EDR for grey seal is likely to be over precautionary because it stems from a single study on harbour seal response to piling at offshore wind farms. This approach can also be over precautionary as it assumes all animals will respond the same at all developments which is highly unlikely. The displacement distance of seals could vary among the two species due to variations in hearing sensitivity and potential differences in behavioural responses; they can vary significantly across different offshore wind farm developments (e.g. due to bathymetry) and further research is still required (Madsen *et al.* 2006[39], Russel *et al.* 2016[40]). In addition, there is no dose response curve for grey seal, in sections 11.6.1.2.2.2 and 11.6.1.2.3.2 of **Chapter 11 Marine Mammals** [APP-095], the dose response curve for harbour seal (Whyte *et al.* 2020[41]) was applied to grey seal. This approach has its limitations given the different hearing sensitivities between grey and harbour seal. Ridgeway and Joyce (1975)[42], in response to pulsed sounds such as piling, indicated that grey seal are most sensitive to sounds at 20 to 25kHz in water, compared with 32kHz in water for harbour seal (Mohl, 1968[43]). This shows that the hearing frequency of greatest sensitivity differs between the two seal species. In general, marine mammals are most susceptible to auditory injury at the frequency they hear best in i.e. the greatest sensitivity. Therefore, the harbour

[39] Madsen, P.T., Wahlberg, M., Tougaard, J., Lucke, K. and Tyack, P., 2006. Wind turbine underwater noise and marine mammals: implications of current knowledge and data needs. Marine ecology progress series, 309, pp.279-295.
[40] Russell, D.J., Hastie, G.D., Thompson, D., Janik, V.M., Hammond, P.S., Scott-Hayward, L.A., Matthiopoulos, J., Jones, E.L. and McConnell, B.J., 2016. Avoidance of wind farms by harbour seals is limited to pile driving activities. Journal of Applied Ecology, 53(6), pp.1642-1652.
[41] Whyte, K.F., Russell, D.J.F., Sparling, C.E., Binnerts, B. and Hastie, G.D. (2020). Estimating the effects of pile driving sounds on seals: Pitfalls and possibilities. The Journal of the Acoustical Society of America, 147(6), 3948–3958. https://doi.org/10.1121/10.0001408
[42] Ridgway SH, Joyce PL (1975) Studies on seal brain by radiotelemetry.
[43] Mohl, B. (1968). Auditory sensitivity of the common seal in air and water. J. Aud. Res., 8:27- 38.

I.D.	Written Question	Applicants' Response
		seal dose response curve being applied to grey seal could be over precautionary, due to it being based on the hearing sensitivity of harbour seal. The final SIP and the MMMP will reduce any disturbance to harbour porpoise in the SNS SAC along with any other marine mammals, and would include details of noise reduction methods, whether primary and / or secondary are utilised to manage sounds from cumulative piling, if required.
MM.1.10	**Indirect impacts through effects on prey species** The ExA notes your response to ISH2 [AS-155] confirms there was nothing unusual in the assessment and in allocating prey species with a low value, and that this approach is consistent with other projects. The ExA also notes that at Deadline 2 NE has maintained its disagreement related to the risk of AEoI to marine mammal SAC features as a result of impacts on prey species [REP2-069].It states this is due to the fact that consideration has only been given to temporary construction impacts on prey in the RIAA rather than the indirect effects of permanent spawning habitat loss that could also occur. Can you respond to this concern from NE, explaining how you intend to resolve this disagreement before the end of the Examination?	Natural England is incorrect in that consideration within the **Report to Inform Appropriate Assessment (RIAA) Habitats Regulations Assessment (HRA) Part 3 of 4 – Annex II Marine Mammals** [APP-047] has only been given to temporary construction impacts on prey. Impacts to changes to prey resources, including permanent habitat loss, during both construction and operation and maintenance have been included. The Applicants direct Natural England and the Examining Authority to the following sections found within the **RIAA HRA Part 3 of 4 – Annex II Marine Mammals** [APP-047]: • For the SNS SAC, section 8.3.4.3 Potential Effects During Operation and Maintenance discusses the impacts of Changes to Prey Resources (section 8.3.5.3.9, page 111) including Long Term Habitat Loss (section 8.3.5.3.9.1). Section 8.3.5.5 discusses Potential In-combination Effects of Changes to Prey Availability (section 8.3.5.5.4, page 148). • For the Humber Estuary SAC, section 8.3.6.4 Potential Effects During Operation and Maintenance discusses the impacts of Changes to Prey Resources (section 8.3.6.4.9, page 205) including Long Term Habitat Loss. Section 8.3.6.6 discusses Potential In-combination Effects of Changes to Prey Availability (section 8.3.6.6.5, page 225). • For the Wash and North Norfolk Coast SAC, section 8.3.7.4 Potential Effects During Operation and Maintenance discusses the impacts of Changes to Prey Resources (section 8.3.7.4.9, page 270) including Permanent Habitat Loss. Section 8.3.7.6 discusses Potential In-combination Effects of Changes to Prey Availability (section 8.3.7.6.5, page 288). • For the Berwickshire and North Northumberland Coast SAC, section 8.3.8.4 Potential Effects During Operation and Maintenance discusses the impacts of Changes to Prey Resources (section 8.3.8.4.9, page 327) including Permanent Habitat Loss. Section 8.3.8.6 discusses Potential In-combination Effects of Changes to Prey Availability (section 8.3.8.6.5, page 343). • For the Moray Firth SAC, section 8.3.9.3 Potential Effects During Operation and Maintenance discusses the impacts of Changes to Prey Resources (section 8.3.9.3.7, page 369) including Permanent Habitat Loss. Section 8.3.9.5 discusses Potential In-combination Effects of Changes to Prey Availability (section 8.3.9.5.4, page 381). In summary, the Applicants reiterate that all impacts on prey species during all phases of the Projects have been assessed and maintain that the effects on the harbour porpoise of the SNS SAC are minimal. In section 4 of **Appendix B Sandeel Habitat Potential in the Dogger Bank SAC and the SNS SAC** [APP-050] it is concluded that the potential area of habitat affected within the sites is a small fraction of the available habitat. The habitat within the designated sites is not unique in its potential to support sandeel, with areas of similar potential surrounding the sites. In addition, the presence of sandeel is not relevant to the boundaries of either SAC which were designated on the basis of bathymetry and benthic communities (Dogger Bank SAC) and the density of harbour porpoise (SNS SAC). To help resolve this disagreement, the Applicants intend to compile all the relevant information included in the Application documents and additional documents submitted into Examination, into a single technical note (covering both marine mammals and ornithology) to provide the evidence in one place without the need for cross referencing. This document will be submitted at Deadline 4.

I.D.	Written Question	Applicants' Response
MM.1.11	**Transboundary 32 Response – The Netherlands** 1. Can you comment on whether the Applicants have adequately addressed your concerns [OD-012] in the Applicants' Responses to Regulation 32 Transboundary Consultation Responses (Revision 1) [AS-117] in relation to marine mammals? If not, explain why not and provide suggestions as to how they could be resolved. 2. Are you able to provide any information on the potential effects to migratory bats across the North Sea? For example: a. Is there any information regarding the altitude at which migratory bats fly across the North Sea? b. Is there any viable mitigation that could be considered for any potential effects to migratory bats?	No response is required. Question directed to The Netherlands Ministry of Infrastructure and Water Management; however the Applicants wish to provide further clarification on the potential effects to migratory bats. The Applicants have provided a response previously in **The Applicants' Responses to Regulation 32 Transboundary Consultation Responses** [AS-117] (OD-012: 5) which the Applicants have included again to assist The Netherlands Ministry of Infrastructure and Water Management in formulating their answer. *'….Most bat species in the UK are not known to undertake large-scale migrations and so do not spend significant time over the sea. The exception to this is Nathusius' pipistrelle Pipistrellus nathusii, which is known to undertake long-distance migrations throughout Europe, including sea crossings. Notably, evidence indicates that the migratory corridors of the species are closely associated with coastlines and change depending on environmental conditions (Voigt et al., 2023[44]). Nathusius' pipistrelles are known to migrate to the UK from Europe, as evidenced by the UK Bat Conservation Trust's National Nathusius' Pipistrelle Project (NNPP) which recorded an individual in Essex that had been ringed previously in Latvia (BCT, 2023[45]). Broad migratory flyways are known to run from Russia to Spain, following the northern coastline of mainland Europe (Pravettoni and UNEP/GRID-Adrenal, 2015[46]). Narrower migratory flyways are known to branch off the coastal broad flyway into Germany, Switzerland and Czechia. Data on the migratory routes, patterns and behaviour of Nathusius' pipistrelles across the North Sea to/from the UK is minimal, with no known number of migrating individuals. The potential migration routes highlighted by the nationwide NNPP dataset were based on the long-distance data of only ten individuals, and therefore to date there is only evidence of ad hoc movement from Europe to the UK.'* With regards to information on the potential effects to migratory bats across the North Sea, available information is very limited and the majority of the existing literature on migratory bats over the North Sea focuses on Nathusius' pipistrelles, concluding that the migratory corridors of bat species are closely associated with coastlines, and change depending on environmental conditions (DBEIS, 2022[47]; Voigt et al., 2023[44]). The focus on Nathusius' pipistrelles is reflected in offshore observations of species in the Dutch sector of the North Sea, as the species accounts for upwards of 76% of observations (out of a total 34 bats observed) at offshore platforms (Boshamer and Bekker, 2008[48]). In relation to the altitude at which migratory bats fly across the North Sea, migratory offshore Nathusius' pipistrelles have been observed flying at 1-3m over the sea, with deviation from this low altitude being observed when hunting (Ahlén *et al.*, 2007[49]). Based on this information, Nathusius' pipistrelle flight heights are expected to be generally lower than the Projects' turbine rotor swept zone which is 34m above mean sea level height. However, BEIS (2022) concluded that existing publications provide useful context but also reflect a continued lack of empirical data to support robust estimates of flight heights to better inform impact assessment.

[44] Voigt, C.C., Kionka, J., Koblitz, J.C., Stilz, P.C., Pētersons, G. and Lindecke, O. (2023). Bidirectional movements of Nathusius' pipistrelle bats (*Pipistrellus nathusii*) during autumn at a major migration corridor. *Global Ecology and Conservation*, 48, p.e02695

[45] Bat Conservation Trust (2023) National Nathusius' Pipistrelle Project. Available at: https://www.bats.org.uk/our-work/national-bat-monitoring-programme/surveys/national-nathusius-pipistrelle-survey

[46] Pravettoni, R. and United Nations Environment Programme/GRID-Adrenal (2015) Nathusius' Pipistrelle distribution and migration. Available at: https://www.grida.no/resources/7643

[47] Department for Business, Energy & Industrial Strategy (2022) UK Offshore Energy Strategic Environmental Assessment 4 (OESEA4). Available at: https://www.gov.uk/government/consultations/uk-offshore-energy-strategic-environmental-assessment-4-oesea4 (Accessed 13 March 2025).

[48] Boshamer, J. P. C. and Bekker, J. P (2008) Nathusius' pipistrelles (*Pipstrellus nathusii*) and other species of bats on offshore platforms in the Dutch sector of the North Sea. Lutra 51(1), pp.17-36.

[49] Ahlén, I., Bach, L., Baagoe, H. J. and Pettersson, J. (2007) Bats and offshore wind turbines studied in southern Scandinavia. Swedish Environmental Protection Agency.

I.D.	Written Question	Applicants' Response
MM.1.12	**HRA conclusions for the Southern North Sea SAC, Humber Estuary SAC and Berwickshire & North Northumberland Coast SAC** 1. The ExA notes there is currently disagreement between the Applicants and NE over conclusions of the RIAA for the Southern North Sea SAC in relation to harbour porpoise and the Humber Estuary SAC and Berwickshire and North Northumberland Coast SAC in relation to grey seal. The ExA also notes NE's advice in its Deadline 2 submission on marine mammals [REP2-067] that noise reduction committed to should be sufficient to demonstrate that the Applicants have contributed to reducing the disturbed area of the Southern North Sea SAC. How are the Applicants intending to resolve this disagreement with NE by the close of the Examination? 2. If the matter was to remain outstanding at the close of the Examination and if the SoS was to agree with NE and decide AEoI for the above features of these sites, what compensation could be secured?	1 The removal of the Electrical Switching Platform in the Offshore Export Cable Corridor as described in the **Project Change Request 1 – Offshore and Intertidal Works** [AS-141], has greatly reduced the number of grey seal that could be potentially disturbed from piling for the Humber Estuary SAC (as presented in section 3.1.2 of **Appendix C Marine Mammal RIAA HRA Update** [AS-144]) and for Berwickshire and North Northumberland Coast SAC (as presented in section 5.1.2 of **Appendix C Marine Mammal RIAA HRA Update** [AS-144]) resulting in no Adverse Effect on Integrity (AEoI) on either SAC for the Projects alone. For the in-combination assessment of cumulative disturbance from piling, the results from the population modelling show that there would no AEoI for the Humber Estuary SAC (section 3.2.2 of **Appendix C Marine Mammal RIAA HRA Update** [AS-144]) or for Berwickshire and North Northumberland Coast SAC as presented in section 5.2.2 of **Appendix C Marine Mammal RIAA HRA Update** [AS-144]. There would be no Adverse Effect on Integrity (AEoI) for the SNS SAC if the Projects were constructed in isolation or together (section 8.3.5.2.2.1 of the **RIAA HRA Part 3 of 4 – Annex II Marine Mammals** [APP-047]). However, the in-combination assessment for all projects and activities presented in Table 8-57 of the **RIAA HRA Part 3 of 4 – Annex II Marine Mammals** [APP-047] is very indicative as many of the activities other than piling do not have a licence in place. Therefore, the in-combination assessment presents a very unlikely and over precautionary. It is highly unlikely that all projects will be piling at the same time due to vessel constraints, programme changes, technical issues, weather delays and so on. A more accurate and updated assessment will be undertaken post-consent to inform the final SIP and ensure any potential disturbance is managed. Managing effects of disturbance for the SNS SAC will also reduce potential effects on other marine mammal species and the relevant supporting SAC populations. The **In Principle SIP for the SNS SAC (Revision 3)** [REP2-049] and **Outline MMMP (Revision 3)** [REP2-047] were updated at Deadline 2 to state that the Projects will utilise best endeavours to deliver noise reduction measures, where applicable, through the use of primary and/or secondary noise reduction during piling based on the final project design. Updated Project effects and reductions from any primary and / or secondary mitigation measures will be presented for the Projects alone, and in-combination assessments, in the final SIP for the SNS SAC post consent, where required, when the final design is confirmed and appropriate information for other projects is available. Although the SIP is only for the SNS SAC, final mitigation measures will further reduce any impacts on all other species and therefore other SACs. Noise mitigation systems, such as NAS, are being included within the Projects' procurement strategy as an optional element to allow it to be called upon should it be required based on the final design parameters. Measure to reflect the application of primary and/or secondary noise reduction for the Projects are included in the Outline MMMP and In Principle SIP and these plans are as secured in **Draft DCO (Revision 6)** [document reference 3.1], Requirement 15(1)(g) for the MMMP and Requirement 16 for the SIP for approval by the MMO after consultation with SNCBs prior to the commencement of piling. The Applicants are waiting for comments from Natural England and the MMO on the **In Principle SIP for the SNS SAC (Revision 3)** [REP2-049] and have provided responses to Natural England's advice in **The Applicants' Responses to Deadline 2 Documents** [document reference 13.3] submitted at Deadline 3. However, the Applicants feel that the measures presented are sufficient to satisfy the Defra Marine Noise Policy and JNCC *et al.* (2025)1 position and final requirements will be agreed during the completion of the final SIP that will undergo consultation with the MMO, Natural England before final approval.

I.D.	Written Question	Applicants' Response
		2 The purpose of the SIP is to ensure there is no potential for AEoI on the SNS SAC. The final SIP and final MMMP will ensure there is no AEOI on the features of these sites, therefore compensation measures will not be required. Compensation measures for marine mammal SACs due to disturbance has yet to be implemented on any DCO project because impacts have been appropriately managed through the MMMP and SIP.

1.22 Noise and Vibration

Table 1-22 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Noise and Vibration

I.D.	Written Question	Applicants' Response
NV.1.1	**Construction working hours** Section 5.2 of the oCoCP [REP1-025] states that, *'no activity where significant noise is audible beyond the Onshore Development Area will take place outside of these hours [...] apart from under the following circumstances...'*. Do you consider this statement to be in accordance with the wording of Requirement 20 of the draft DCO [REP1-004]? Clarify the definition of 'significant noise' and whether any changes may be required, either to the wording in the oCoCP or Requirement 20?	The statement in Section 5.2 of the **oCoCP (Revision 3)** [REP1-025] includes the provision "*As otherwise agreed in writing with the relevant authorities"* (last bullet of Paragraph 34). Requirement 20 of the **Draft DCO (Revision 5)** [REP1-004] states the following "*Outside the hours specified in sub-paragraph (1), construction work may be undertaken for essential activities including but not limited to*" this statement '*but not limited to'* could include activities '*where agreed with the relevant authorities'*. Therefore, both documents include provision to agree working hours with ERYC. Therefore, no updates are proposed to either document. Significant noise is defined as per the methodology set out in section 25.4 of **Chapter 25 Noise (Revision 2)** [REP1-019], where a moderate or major construction noise effect would occur (e.g. above 75 dB LAeq,T during daytime hours).
NV.1.2	**Construction working hours** The oCoCP [REP1-025] has been amended to include the following wording in paragraph 35: *'As detailed in section 6.7.2, prior to agreement of the final Code of Construction Practice (secured through Draft DCO Requirement 19), the Applicant and /or their Principal Contractor will consult with ERYC and agree a process for determining areas where, in advance of construction, core working hours may not be appropriate and a Section 61 (of the Control of Pollution Act 1974) consent must be obtained by the Principal Contractor(s) for certain activities.'*	Based on the findings of the assessments contained within **Chapter 25 Noise (Revision 2)** [REP1-019] there are no residual significant effects and therefore the Applicants do not consider there to be any sites where the core working hours are not appropriate in terms of noise and vibration. It has been agreed with ERYC that should there be any sites that they consider these working hours to not be appropriate, the Applicants are willing to commit to obtaining consent under Section 61 of the Control of Pollution Act 1974 for these sites (which will provide ERYC a mechanism for controlling working hours should they believe it to be necessary). As mentioned above, the Applicants' assessment has not identified any areas where the core hours are not appropriate. Therefore, it would be for ERYC to suggest the areas they are concerned about. The Applicants are happy to discuss this with ERYC and agree / identify areas where Section 61 consent would be required. However, this may be more effectively achieved at a later stage when there is more detail available on the proposed construction techniques / activities.
NV.1.3	**Construction working hours** Do you consider the wording of Requirement 20 of the draft DCO [REP1-004] fully aligns with the provisions made in the oCoCP [REP1-025] (covered by Requirement 19) in relation to the proposed construction working hours?	No response is required. Question directed to ERYC.
NV.1.4	**Compliance with NPS EN-1** Paragraph 5.12.6 of NPS EN-1 states that where noise impacts are likely to arise from the proposed development, the Applicant should include *'the identification of noise sensitive receptors and noise sensitive areas that may be affected'* in the noise assessment. Noise sensitive receptors are detailed in the assessment of the existing noise environment in ES Chapter 25 Noise [REP1-019, section 25.5]. However, there would not appear to be any reference to any noise sensitive areas. 1. Have any been identified? If yes, where is this explained and where are they located? 2. Clarify whether existing Public Rights of Way (PRoW) could be classified as noise sensitive areas? If not, why not?	Noise sensitive areas were included in the methodology for determining receptor sensitivity, seen in **Chapter 25 Noise (Revision 2)** [REP1-019] Table 25-6, including National Parks during the day (medium sensitivity), outdoor amenity areas during the day (including Public Rights of Way (PRoW), low sensitivity) and agricultural land (negligible sensitivity). No national parks have been identified in the noise and vibration study areas, however there are outdoor amenity areas (e.g. parks), PRoW and agricultural land in the noise and vibration study areas. These weren't reported in **Chapter 25 Noise (Revision 2)** [REP1-019] as the assessment focussed on the medium sensitivity receptors (almost all residential) as the worst case in terms of sensitivity, noting that no high sensitivity receptors/areas were identified in the study areas. Noise and vibration construction effects were concluded to be minor adverse (not significant) or lower at residential receptors. Therefore, as noise sensitive external areas (such as PRoW) are considered less

I.D.	Written Question	Applicants' Response
		sensitive than residential receptors, it was concluded that noise sensitive areas would be subject to an at most a minor adverse (not significant) and most likely lower (e.g. negligible or below) level of effect. As stated above, PRoWs are classified as noise sensitive areas with low sensitivity, as per Table 25-6 of REP1-019: *"where noise may cause short duration effects in a recreational setting although particularly high noise levels may cause a moderate effect".* Due to the temporary nature of construction and the limited amount of time people spend using a PRoW or public external area, it is considered very unlikely that significant noise or vibration effects would occur during the construction stage. Public outdoor amenity areas (or PRoWs) can potentially be affected by operational noise, but as mentioned above, due the low level of sensitivity any impacts would be less than at more sensitive residential receptors. It should also be noted that PRoWs are generally 'transient' spaces and even if they were to be subject to relatively high levels of operational noise, people are only exposed to this noise for a short period of time as they walk / pass through the affected portion of the PRoW. To provide further context, the closest (and therefore most affected by operational noise) external amenity area to the onshore converter station(s) is a PRoW (WALKF09/Walkington Footpath No.9) located at approximately 150m distance to the west of onshore converter station(s) site. Noise from the converter station(s) would be significantly below background sound levels at this location (note, external areas are only considered sensitive during the daytime). Even when assessed against the criteria used for medium sensitivity residential receptors this would result in negligible impacts. Therefore, the impact at the most affected ProW (low sensitivity) would be less than this. In summary, although public external amenity areas are potentially considered sensitive to noise (and vibration), it is considered very unlikely that significant effects would be likely to occur as a result of the development. The assessment focussed on the more sensitive receptor types (residential / educational etc.) as a 'worst case', and therefore individual public outdoor amenity spaces were not quantitatively assessed.
NV.1.5	**Baseline noise environment** The ExA notes various discrepancies between ES Chapter 25 Noise [REP1-019, table 25-16] and Noise Figure 25-1 [APP-202]. Could you review and correct as necessary any inconsistencies and confirm that an appropriate assessment of all receptors has been undertaken? Do you consider an update is required to ES Chapter 25 Noise [REP1-019] to take account of the correct baseline noise environment or the oCoCP [REP1-025] in relation to any proposed mitigation? Examples of discrepancies include (but are not limited to): 1. Impacts in relation to construction vibration have not been considered for receptors (R) R5, R37 and R51 notwithstanding the location of the receptors within the buffer for construction vibration. 2. R29 is identified in table 25-16 as residential, but figure 25-1 identifies this receptor as education. 3. R29 is identified in table 25-16 as residential, but figure 25-1 identifies receptor as education. 4. R33 is identified in table 25-16 of as residential, but figure 25-1 identifies receptor as healthcare. 5. Impacts in relation to construction vibration have been considered for receptor R34 in table 25-16, however, the receptor is not located within the vibration buffer on figure 25-1.	R5, R37 and R51 had been omitted from assessment due to the receptor building footprints being outside the study area and are therefore not listed in Table 25-16 of **Chapter 25 Noise (Revision 2)** [REP1-019]. It is noted that the construction vibration assessment has assessed vibration at the closest receptors to the relevant vibration-generating works as an initial assessment and conclusions regarding other receptors within the study area have then been made on this basis. Please refer to Paragraph 184 of **Chapter 25 Noise (Revision 2)** [REP1-019] which outlines the vibration impact assessment for potential Horizontal Directional Drilling locations, which assesses the nearest receptors (R3, R43, R66) to provide a worst case assessment and states that *"all other receptors within the 100m study area are expected to be subjected to vibration levels below 0.3mm/s, with a negligible impact."* As receptors R5, R37 and R51 are at longer distances to the works compared to R3, R43 and R66 (worst case assessment locations), the above quoted statement from Paragraph 184 can also be applied to receptors R5, R37 and R51. Regarding points 2, 3, 4 and 6 of this question, it should be noted that as all receptors included in the assessment are medium sensitivity this will not change the findings of the assessment, including proposed mitigation. In summary, the potential updates to Table 25-16 are non-material in terms of assessment, and therefore no further changes are proposed to be made, either to **Chapter 25 Noise (Revision2)** [REP1-019] or the **oCoCP (Revision 3)** [REP1-025] in relation to this question.

I.D.	Written Question	Applicants' Response
	6. R39 and R42 are identified as education and healthcare respectively in table 25-16, however, both are shown as residential on figure 25-1.	
NV.1.6	**Noise effects on tourism** Receptor R4 (Strawberry Field Holiday Park) and Receptor R39 (Butt Farm) (as shown on Noise Figure 25-1a and 25-1h [APP-202]) are identified as residential receptors. However, they are both also used for tourism purposes, including camping and caravan accommodation. Can you clarify if and how effects on tourism have been considered as part of the noise assessment? Can you explain why it was considered appropriate to include tourism uses as part of the residential classification?	The approach to scoping receptors into the noise assessment was based on the presence of permanent buildings that were available in the mapping data. Both R4 (Strawberry Field Holiday Park) and Receptor R39 (Butt Farm) have buildings that are classified as residential dwellings "RD02 – Residential Dwelling – Detached", which were assessed in **Chapter 25 Noise (Revision 2)** [REP1-019]. Tourism receptors such as camping and caravan sites were not identified as noise sensitive receptors in the assessment and therefore have not been assessed in the noise assessment. Further information is provided in NV1.7.
NV.1.7	**Noise effects on tourism** The ExA notes that the camping and caravan site at Butt Farm would be located closer to the proposed onshore converter station than the host dwelling at Butt Farm, which is identified as noise sensitive receptor R39 (as shown on Noise Figure 25-1h [APP-202]). Do you consider the camping and caravan site should be identified and assessed as a separate receptor or should the original receptor at R39 be moved closer to the onshore converter station to take account of the ancillary uses? If not, explain why not. If yes, do you consider the baseline noise environment has been appropriately assessed as part of the ES or would the application documents require updating? *You may wish to link the answer to this question with the answer to SET.1.6*	Facilities that allow for occasional overnight stays (such as the camping and caravan site at Butt Farm) were not identified as noise sensitive receptors in the noise assessment. This was based on the assumption that people using this type of facility would only be exposed to noise for a relatively short period of time (e.g. whilst staying) and this is highly unlikely to result in significant adverse impacts on their health and wellbeing, which requires significantly longer durations of noise exposure. This is similar to the approach used on other large infrastructure projects (e.g. HS2). Effects on tourism are also discussed in SET1.6. The use class for the Butt Farm camp site, according to AddressBase Plus data, is 'CL02 – Holiday/Campsite' and therefore it was not identified as a noise sensitive receptor. However, where similar facilities were designated as 'residential' they have been included in the assessment (as people are likely to be subject to longer term noise exposure). For example, the use class for the receptors of static caravans in Skipsea was 'RD01, Residential Dwelling – Caravan' and therefore these receptors were scoped into the assessment. Although the Butt Farm camping and caravan site was not included as a noise sensitive receptor in the noise impact assessment, the Applicants are aware of this facility and potential changes in noise due to the operation of the Onshore Converter Station(s) and this has been investigated. Operational noise levels at the closest (most affected) camping plot to the converter station are predicted to be below 40 dB LAeq,T. Therefore, should the criteria used to assess residential receptors were applied to the campsite, the level of impact would be identified as negligible. Furthermore, a campsite (where a person's exposure to noise is short term) is likely to be considered less sensitive than a residential property dwelling (where long term exposure to noise can occur). As the Applicants have not identified the Butt Farm camping and caravan facility as a noise sensitive receptor the baseline sound environment was not specifically identified in this location. However, if this were an identified receptor, the baseline noise data used at Butt Farm (R39) would be considered representative of the camping and caravan facility, as it is subject to the same existing sources of noise.
NV.1.8	**Construction noise – onshore converter station** Table 25-3-6 of Appendix 25.3 Construction Noise Assessment [REP1-021] identifies the predicted construction noise levels at the proposed onshore converter station site for receptors R39 and R42. As shown on Noise Figure 25.1h [APP-202]), receptors R43, R66 and R67 appear to be closer to the onshore converter station than receptors R39 and R42 but they would not appear to have been considered for further assessment. Can you explain why receptors R43, R66 and R67 were not assessed in relation to construction noise at the onshore converter station?	Only R39 is within 300m (the construction stage study area) of the onshore converter station(s). R39 is the closest receptor to the proposed onshore converter station(s) and is the worst case assessment location. R42 was outside the onshore converter station(s) construction study area but was included in the assessment as it was included in previous assessments and has been accidentally carried over. R43, R66, and R67 were not included in the assessment as they are over 300m from the Onshore Converter Station site. No changes are proposed to be made.

I.D.	Written Question	Applicants' Response
NV.1.9	**Cumulative effects assessment** ES Chapter 25 Noise [REP1-019, table 25-25] considered receptor R43 in relation to potential cumulative effects with the A164 and Jocks Lodge scheme. Can you clarify why receptors R66 and R67 have not been considered in the assessment, noting that both also adjoin the A164 and Jocks Lodge Junction Improvement works? In addition, can you clarify why receptor R47 has not been considered in the assessment of cumulative effects in relation to Creyke Beck Solar Farm (as identified in table 25-25 of ES Chapter 25 Noise [REP1-019])? For further clarification, can you explain or provide a plan showing the detailed location of the solar farm in relation to the proposed Order Limits?	The cumulative assessments generally reported the closest receptor to the relevant cumulative scheme, however in some cases multiple receptors are listed. R66 and R67 were not included in the Cumulative Effects Assessment (CEA), but including these receptors would not materially affect the outcomes of the CEA in relation to the 'A164 and Jocks Lodge' scheme as they are the same distance or further from the scheme as R43. R43 represents a worst case assessment location for the 'A164 and Jocks Lodge' scheme. Similarly, including R47 to the CEA would not materially affect the outcomes of the CEA in relation to the 'Creyke Beck Solar Farm' scheme as this receptor is the same distance from the scheme as R48. R48 represents the worst case assessment location for the 'Creyke Beck Solar Farm' scheme. For clarity, the findings of the CEA at R47 would be the same as for R48. In summary, the potential updates to **Chapter 25 Noise (Revision 2)** [REP-019] Table 25-25 are non-material in terms of assessment, and therefore no further changes are proposed to be made to the **Chapter 25 Noise (Revision2)** [REP1-019] in relation to this question. Figure 1 in **Appendix G** shows the location of Creyke Beck Solar Farm in relation to the Order Limits and the nearest noise sensitive receptors. Descriptions are also provided below: • R46 (Mouse Hill) is approximately 180m east from the scheme boundary • R47 (Jillywood Farm) is approximately 100m northwest from the scheme boundary • R48 (Poplar Farm) is approximately 100m east from the scheme boundary
NV.1.10	**Operational noise onshore converter station** You confirmed at the ISH2 on 16 January 2025 [REP1-049] that at this stage no decision has been made whether an air insulated switch gear design or gas insulated switch gear design enc.1.4would be pursued as part of the onshore converter station. Could you clarify whether there would be any difference in terms of the potential operational noise or vibration effects on surrounding sensitive receptors? Could you confirm that the worst-case scenario has been assessed as part of the Operational Noise Assessment [APP-207]?	For the noise predictions undertaken as part of **Appendix 25-5 Operational Noise Assessment** [APP-207] it has been assumed that the external noise-generating elements are air insulated switchgear (AIS). AIS represents a worst case assumption for the noise assessment. Through the AIS contributes to the general noise level and creates noise when equipment is operated, the larger electrical the equipment like transformers, reactors, filters and associated coolers etc. would be the dominant noise sources which are similar whichever type of switchgear is used. The enclosed nature of the gas insulated switchgear (GIS) conductors would make them quieter, but this would be unlikely to have a noticeable impact on combined noise level.

1.23 Offshore and Intertidal Ornithology and Relevant HRA Aspects

Table 1-23 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Offshore and Intertidal Ornithology and Relevant HRA Aspects

I.D.	Written Question	Applicants' Response
OR.1.1	**Impact on the razorbill feature of the Finchley and File Coast (FFC) Special Protection Area (SPA)** 1. What is your position in relation to the Applicants' conclusion of the razorbill assessment provided in the Report to Inform the Appropriate Assessment (RIAA) Part 4 of 4 [AS-085] for construction and operational displacement mortality impacts from the project alone, and in combination, and the Applicants' provision of a derogation case on a 'without prejudice' basis? 2. Do you agree with the Applicants' that when the Population Viability Analysis (PVA) is applied to the project alone and in combination, razorbill displacement would not represent an Adverse Effect on Integrity (AEoI) of the FFC SPA? If not, why not?	The Applicants note that the 'Finchley and File Coast' referred to in this question is not a designated SPA, and assume the response here is in reference to the 'Flamborough and Filey Coast (FFC) SPA', which was assessed in the **Report to Inform Appropriate Assessment (RIAA) Habitats Regulations Assessment (HRA) Part 4 of 4 – Marine Ornithological Features (Revision 3)** [AS-085].
OR.1.2	**Displacement, mortality and apportionment values for razorbill and guillemot on the FFC SPA** 1. Will you provide in-combination assessments for guillemot and razorbill at the FFC SPA with a displacement rate of 70% and a mortality rate of 5%, as advised by NE [AS-159 point G59]? 2. Will you provide a PVA based on 70% displacement and 10% mortality values as NE advises [AS-159, point G3]? 3. Will you run a population viability assessment for FFC SPA razorbill for the project alone and for guillemot at the Environmental Impact Assessment (EIA) scale as NE advises [AS-159, point G3]?	1. The Applicant's interpretation of Natural England's request was that the impacts for the Hornsea 4 wind farm (only) should be assessed at these rates (70% and 5%) not the whole in-combination assessment. Thus, the in-combination total would comprise all other wind farms (including the Projects) assessed at 70% and 2% and Hornsea 4 at 70% and 5%. The Applicants will be reviewing the in-combination and cumulative totals for all species in light of this request and other comments made by Natural England with a view to submitting any required updates at Deadline 4. 2. The Applicants consider this scale of displacement impact to be highly improbable and precautionary, nonetheless updated Population Viability Analysis (PVA) will be provided at Deadline 4. 3.Updated PVAs submitted at Deadline 4 will include the various additional requests made by Natural England in AS-159. However, it should be noted that some of Natural England's comments on the PVA were made mistakenly with reference to those originally submitted (APP-116) and not to the revised ones included in Annex A of **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)** [AS-085], the latter of which had addressed some of these comments (please see the Applicants responses to NE comment G5 in **The Applicants' Responses to Deadline 2 Documents** [document reference: 13.3]).
OR.1.3	**Displacement, mortality and apportionment values for razorbill and guillemot on the FFC SPA** For the assessment in the Guillemot [and Razorbill] Compensation Plan [AS-089] relating to the razorbill and guillemot features of the FFC SPA, which values of displacement, mortality and apportionment presented in the RIAA [AS-085], should the ExA rely on for its recommendation and ultimately the SoS rely on were they to decide AEoI for razorbill and guillemot on the FFC SPA? Justify your response with evidence.	The Applicants consider that the following values are appropriately precautionary for estimating auk displacement impacts and they have presented evidence in support of these in the RIAA, a summary of which is provided below: • Displacement rate – 50%; • Mortality rate – 1%; • Adult proportion from FFC Special Protection Area (SPA) in the breeding season - 55.2% (guillemot), 61.3% (razorbill); • Adult proportion from FFC SPA in the post-breeding season – 68.2% (guillemot), 69.9% (razorbill) (but note comments below); and • Adult proportions in the non-breeding seasons – 4.4% (guillemot nonbreeding), 2.7% (razorbill winter) 3.4% (razorbill spring). The 50% displacement rate and 1% mortality rate was derived from a review of studies conducted by Prof Bob Furness on behalf of the Norfolk Vanguard application, as noted on page 14 of that report (Vattenfall, 2019[50]).

[50] Vattenfall (2019) Appendix 3.3 - Operational Auk and Gannet Displacement: update and clarification. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010079-002249-Womble%20Bond%20Dickinson%20on%20Behalf%20of%20Norfolk%20Vanguard%20-%20Appendices%20to%20written%20Questions.pdf

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		This review recommended a 50% displacement rate within the wind farm, 30% in a 1km buffer and 1% mortality rate, whilst still considering these to be precautionary. The Applicants consider that there has been no robust evidence presented since to suggest that these rates (i.e. 50% displacement and 1% mortality) are not precautionary, and indeed some studies have found no compelling evidence that auks respond negatively to turbines in the breeding season (Trinder *et al.,* 2024[51]). With respect to the proportion of birds in the wind farms during the breeding season estimated to be from FFC SPA, there is disagreement between the Applicants and Natural England. The Applicants consider that a large proportion of the birds in the wind farm will not be breeding birds from FFC SPA, since the Projects are over 100km from the SPA (although within mean maximum plus 1 S.D. of 153km, the mean range which is a more representative figure is 33km; Woodward *et al.* 2019[52]) and auks do not begin breeding until they are 5 (razorbill) or 6 (guillemot) years old, so those birds will be present in the North Sea and likely foraging in areas with lower colony attendance (i.e. those areas further away from colonies) such as the Projects. On this basis the Applicants consider that the proportions of each age class in the population obtained from demographic studies provides a reasonable estimate of the proportion of individuals likely to be adults (55.2%). This has therefore been the approach taken historically on previous projects. However, there is limited direct evidence from the surveys to inform this estimate, since it is essentially impossible to judge the age of auks recorded in digital aerial images. For this reason, Natural England advocates a precautionary approach of assuming 100% are from the FFC SPA. This is a clear example where Natural England has adopted the maximum possible value despite there being no supporting evidence and it is justified purely on the basis that it could theoretically be this high. The Applicants consider that Natural England's advised FFC SPA proportions of auks from FFC SPA are also very likely to be on the high side (~70%) but acknowledge that in this case Natural England has presented the basis for their estimation. However, the Applicants consider that Natural England's guidance on post-breeding auk movements from which these rates were derived [RR-039 Annex G] does not make sufficient allowance for the year round presence of immature auks in the southern North Sea, the presence of which is evidenced in ring recovery data (Wernham *et al.,* 2002[53]). Thus, just as the breeding season proportion (100% FFC SPA adults) fails to allow for immature birds, so does the post-breeding one. Nevertheless, in the interests of reaching agreement on this assessment the Applicants have accepted these rates for the current assessment. The Applicants consider the nonbreeding season auk FFC SPA proportions, calculated as the SPA's proportion of the North Sea BDMPS populations, to be reasonable and appropriate. Taking all these rates together the Applicants consider the Projects alone annual FFC SPA displacement mortalities to be 123 guillemot and 44.7 razorbill.
OR.1.4	**Displacement, mortality and apportionment values for auks** Can you comment on whether applying rates greater than 50% displacement and 1% mortality to the auks at risk is justified in combination with the estimation of seasonal abundance and apportioning, as has been queried by the Applicants [AS-158]?	No response is required. Question directed to Natural England.
OR.1.5	**Seasonal abundance, apportioning and displacement risk for guillemot**	No response is required. Question directed to Natural England / RSPB.

[51] Trinder M, O'Brien S.H. and Deimel J. (2024) A new method for quantifying redistribution of seabirds within operational offshore wind farms finds no evidence of within-wind farm displacement. Front. Mar. Sci. 11:1235061. doi: 10.3389/fmars.2024.1235061
[52] Woodward, I., Thaxter, C.B., Owen, E. and Cook, A.S.C.P. (2019) Desk-based revision of seabird foraging ranges used for HRA screening. BTO research report, (724).
[53] Wernham, C.V., Toms, M.P., Marchant, J.H., Clark, J.A., Siriwardena, G.M. & Baillie, S.R. (eds) 2002. The Migration Atlas: movements of the birds of Britain and Ireland. T. & A.D. Poyser, London. Wetlands International 2012. Waterbird Population Estimates – Fifth Edition. wpe.wetlands.org.

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	Can you respond to the Applicants' statement in the RIAA [AS-085, paragraph 236] that based on NE's guidance to estimate seasonal abundance and apportioning for guillemot? *'…over 73% of the FFC SPA guillemot population is apparently present on all UK wind farms through the course of the year and at risk of displacement, despite the fact that offshore wind farms actually make up approximately 6% of the area within 300km of the FFC SPA…. It is not difficult to envisage that, with the addition of a small number of wind farms the current assessment methods could predict more birds are at risk of displacement than are present in the population.'*	
OR.1.6	**Seasonal abundance, apportioning and displacement risk for razorbill** Can you respond to the Applicants' comment in the RIAA [AS-085, paragraph 314] that based on NE's guidance to estimate seasonal abundance and apportioning for Razorbill? *'…suggests that 40% of the FFC SPA razorbill population is apparently present on UK wind farms through the course of the year and at risk of displacement. This highlights the precautionary basis of the methods used to estimate seasonal abundance and apportioning since offshore wind farms make up approximately 6% of the area within 300km of the FFC SPA… Indeed, it is not difficult to envisage that, with the addition of a small number of wind farms the current assessment methods could predict more birds are at risk of displacement than are present in the population.'*	No response is required. Question directed to Natural England / RSPB.
OR.1.7	**Cumulative displacement impacts on auks** Can you respond to NE's continued advice [AS-161] that you should provide an assessment of cumulative displacement impacts on auks between the arrays?	The Applicants have provided a response to this request from Natural England in **The Applicants' Responses to Deadline 2 Documents** [document reference: 13.3]. This response is reproduced below for convenience. *The Applicants maintain their position that the suggestion from Natural England that the assessment should consider displacement of auks beyond the advised 2km buffer is unprecedented and unwarranted. There is no additional reason why birds in this region would be subject to displacement any more than those located around all other wind farm boundaries.* *Natural England had stated that Trinder et al (2024) is not an appropriate source of evidence on auk displacement as it focuses on within wind farm effects. While it is correct that the novel feature of this study was the investigation of responses to turbines, it is incorrect to state that the study did not consider, analyse or discuss displacement beyond the wind farm. Section 2.3 of Trinder et al. (2024) describes the spatial modelling methods used to investigate large scale redistribution effects (i.e. those across the whole study area which extended more than 10km from the wind farm boundary in some directions) and section 3.1.2 presents the results of these analyses. This analysis found that of the five species considered, only gannet presented a clear and consistent pattern of avoidance of the wind farm. The other four (guillemot, razorbill, puffin and kittiwake) showed no consistent evidence of displacement from the wind farm. When these results are considered alongside the absence of any apparent displacement responses to the turbines (section 3.2) it is clear that the study, conducted over two breeding seasons, makes a strong case for there having been no detectable displacement from the wind farm for these four species. It is therefore inappropriate of Natural England to dismiss the findings of this study on these grounds that it is not informative about displacement from the wind farm. While it is correct that Trinder et al. (2024) does not attempt to quantify a displacement rate from the wind farm or buffer, it is clear from the results presented that the rate is zero.* *As Natural England note elsewhere in their comments (R&I ref: G2,G3), there was considerable variation between the two years of baseline data. This is a common feature of wind farm baseline data and seabird surveys generally; seabird distributions are highly variable through*

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		time. The Trinder et al. (2024) study was specifically designed as a robust method for investigating displacement that was not subject to the confounding problems of natural variations. *The Peschko et al. (2024) study was conducted using data collected in the German North Sea during the nonbreeding season, in contrast with the Trinder et al. (2024) study which was conducted in the breeding season. The different results may therefore reflect variable responses at different times of year. However, Szostek et al. (2024) analysed the same dataset used by Peschko et al. (2024) and obtained different results: in autumn guillemot were estimated to avoid the wind farms by up to 6-12km while in winter this was 0.4-2km. Furthermore, there are aspects of the German studies which may have influenced both analyses. The wind farms present are primarily earlier generation ones, with smaller, more closely spaced turbines than are under consideration at DBS. The wind farms are also mainly distributed around the periphery of German waters with central areas free of wind farms, thus the survey data collection does not extend equally in all directions around them (i.e. areas beyond German waters are under represented). There is a possibility that this has influenced the results obtained and given greater emphasis to the central areas. A curious aspect of the Peschko et al. (2024) study is also the similarity in their results for guillemot with that from a previous study by the same research group on red-throated diver, conducted in the same area (Garthe et al. 2023[54]). Figure 4 from each of these papers, one for guillemot, one for red-throated diver show remarkably similar patterns of apparent wind farm avoidance. This is surprising as no previous study has suggested these two species respond to the same extent to wind farms (red-throated diver are considered to be a much more sensitive species, as observed in their responses to anthropogenic disturbance generally). It is unclear why this similarity has been found, but it suggests that the study site and analysis methods may have influenced the results.* *Natural England have also cited a review of wind farm studies (Lamb et al. 2024) as providing evidence of displacement. While this review and analysis was comprehensive and robust in itself, it is almost wholly reliant on the robustness of past studies of between year distribution changes. But, as Natural England has noted, these distributions change from one year to the next without any wind farm effects. Thus, the results reported by Lamb et al. (2024) are similarly reliant on individual studies which share the same problem: they all compare distributions between years, and these are an unreliable basis for understanding wind farm effects. Notably Zuur et al. (2018) attempted to reanalyse the data from some of the studies included in Lamb et al. (2024), and found that they lacked sufficient statistical power to permit detection of changes.* *These studies were conducted using boat-based survey methods which are now almost completely replaced by digital aerial methods, at least in part because seabirds respond to the survey vessel, influencing the results. It is also clear from the map of wind farm locations (Fig 1 of Lamb et al. 2024) that the included studies were predominantly conducted at small scale, early generation wind farms with closely spaced turbines, located in coastal waters of the southern North Sea. These wind farms are not representative of the current rounds of wind farms, not least as there are many fewer seabird breeding colonies in the southern North Sea close to these wind farms so most data for species such as auks will be for the nonbreeding seasons. During these periods seabirds are under very different constraints than in the breeding season and it is therefore highly likely that any responses would also be different at this time.* *All these factors taken together (limited statistical power, superseded survey methods, nonbreeding locations, small scale inshore wind farms) mean that the results in Lamb et al. (2024) should be considered as being of reduced applicability for assessing auk displacement in the current context.*
OR.1.8	**Displacement matrices** Will you follow NE's advice [AS-159] to update Appendix 7.12.12.12 [APP-115] to present all displacement matrices to reflect the updated figures including upper and lower confidence intervals?	The Applicants have already commented on this request from Natural England in the **Response to Natural England's Relevant Representations (Appendix G & H)** [PDB-006]: *While the mean estimates for East and West can be summed to obtain the combined total, and an updated assessment will be provided mid-November 2024 using this approach (as Natural England has requested), it remains the case that the measures of uncertainty (SD and 95% c.i.) are more robustly obtained from the combined analysis rather than the sum of the individual values for East and West.*

[54] Garthe S, Schwemmer H, Peschko V, Markones N, Müller S, Schwemmer P, Mercker M (2023) Large-scale effects of offshore wind farms on seabirds of high conservation concern. Sci Rep 13:4779. https:// doi. org/ 10. 1038/ s41598- 023- 31601-z

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		Thus, since it is not appropriate to sum the 95% confidence interval estimates, the original estimates (e.g. as presented in **Technical Appendix 12-5a-c - Seasonal Peak Abundance (All, Sitting, Flying)** [APP-108]) are unchanged and the displacement matrices in Appendix 12-12 [APP-115] remain valid and there is no need to update these matrices.
OR.1.9	**PVAs** 1. Are NE and the RSPB satisfied with the PVAs undertaken for kittiwake from the FFC SPA and presented by the Applicants in the RIAA [AS-085]? Can you explain your response? 2. Can the Applicants respond to NE's advice [AS-159] that you should: a) Check the results of all PVA scenarios run for the assessment? b) Use the most recent population estimate for kittiwake at the FFC SPA as the starting population for PVAs run for this population? c) Clearly present the inputs and outputs for all PVA scenarios so that the specification and parameterisation of the models can be fully understood and assessed, including the log files for all PVA scenarios undertaken? d) Consider realistic assessments of current and future seabird population trends, considering all relevant evidence, when assessing the significance of the predicted impacts of the projects, such as the approach taken by Sheringham and Dudgeon Extension Projects Offshore Wind Farm (OWF) Development Consent Order (DCO) application in considering a range of potential future growth rates?	1. No response is required. Question directed to Natural England and RSPB. 2. The Applicants would first note that Natural England do not appear to have reviewed the revised PVA that were provided in Annex A of **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)** [AS-085], but have instead only considered the originally submitted **Appendix 12-13 - Population Viability Analyses** [APP-116] which have been superseded. a) The Applicants will check the results to ensure these are correct and provide a response at Deadline 4 if applicable. However, the Applicants are confident that the PVA as presented in AS-085 are correct but irrespective, given Natural England's position on kittiwake at FFC SPA is that this population is already subject to Adverse Effect on Integrity (AEoI) due to in-combination impacts, the results of the PVA will not materially affect Natural England's conclusions. So this aspect should not be the cause of any delay in Natural England finalising their position on the applications' impacts on ornithological interests. b) The Applicants have already used the most recent FFC SPA kittiwake population estimate in the PVA provided in Annex A of **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)** [AS-085]. c) The Applicants have already provided the complete list of inputs to the PVA, both in the original submission [APP-116] and in **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)** [AS-085]. The Applicants suggest that the 'complete outputs' would not be helpful in this case since these comprise very large tables of detailed outputs for every year of simulations, and this is not the Applicants' understanding of Natural England's request. The Applicants would also note that, for example, the PVA submissions for Sheringham Shoal and Dudgeon Extension Projects Offshore Wind Farm (OWF) (SEP and DEP) do not provide any of the input parameters in their public submissions, which has made it very difficult for the Applicants to compare these in the manner suggested by Natural England. d) The Applicants have provided a response on this point to Natural England (R&I ref: G49 RR ref: G62 in **The Applicants' Responses to Deadline 2 Documents** [document reference: 13.3]) which is reproduced below: Natural England's standard advice on conducting PVA is to omit density dependent regulation: *'where there is limited information on population regulation for the focal population, it is recommended that a density independent model is used instead.'* (Parker *et al.*, 2022). Yet, in their comments Natural England is asking the Applicants to consider how density dependent effects may affect the results from their density independent models. Thus the two pieces of advice are contradictory. It would be very straightforward and robust to quantify the effects of density dependence on the populations being modelled by simply including this in the PVA. This approach would permit both the Applicants and Natural England to *'consider realistic assessments of current and future seabird population trends, considering all relevant evidence, when assessing the significance of the predicted impacts of the projects'* without recourse to doing this in a purely qualitative manner. PVA was developed precisely as a tool for understanding population dynamics and future trends in order that different scenarios could be explored, and that includes the natural regulatory mechanisms which affect all wild populations and prevent the sort of unconstrained growth which Natural England's comments appear to be directed at.
OR.1.10	**In-combination totals for kittiwake at the FFC SPA** Can you respond to NE's concern that in-combination totals for kittiwake at the FFC SPA appear to be lower than expected [AS-159]?	The Applicants will review the kittiwake in-combination totals against those presented in other recent wind farm applications and if an update is required this will be submitted at Deadline 4. However, in advance of this review the Applicants note that in-combination tables often vary between applications due to differences in presentation of factors such as avoidance rates, and these are often explained in the accompanying text. Furthermore, the Applicants are of the opinion that revising these tables will have no material effects on the assessment conclusions and note Natural England has made no suggestion to the contrary. Furthermore, the Applicants note that Natural England (AS-159) states: '*since Hornsea Project Three Natural England's position has been that the in-combination total of collision mortality across consented*

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		plans/projects has already exceeded levels which are considered to be of an AEoI to Kittiwake at FFC SPA, and that any additional mortality arising from these proposals would only reinforce this conclusion'. Therefore, the question of what the in-combination total impact is has become somewhat less important and each new project is now required to provide compensation for their impacts and this has put the emphasis back on to the project alone impacts.
OR.1.11	**FFC SPA seabird assemblage feature** 1. Can you signpost where in the RIAA [AS-085] and its Appendix A [APP-049] reference to the seabird assemblage qualifying feature, other than the puffin component feature, of the FFC SPA and the rationale for not screening it into the assessment is set out? 2. Can you respond to NE's request to check the calculations of displacement impacts on puffin at FFC SPA [AS-161]? 3. Can you comment on the RSPB's suggestion [RR-049] and WR [REP1-087] that an AEoI of this feature could not be ruled out for the Proposed Development alone and in-combination through a combination of collision mortality and displacement mortality?	1. The seabird assemblage of the FFC SPA has not been assessed as an entity in its own right within the RIAA. This follows common practice for SPA assemblage features, since these comprise multiple species with variable potential impacts and making up variable proportions of the assemblage population. It is therefore extremely challenging to attempt an assessment on this type of feature. Typically, for seabird colony SPAs, the species listed in the assemblage are either listed (and can be assessed as named features) or are also listed as named features and assessed individually. The species named in the assemblage that are not named features are puffin, shag, cormorant, fulmar and herring gull. Of these, puffin has been assessed in the same manner as the named features, shag, cormorant and fulmar are not considered at risk of impacts at the Projects and have been screened out of the assessment generally and the Projects are beyond the foraging range of herring gull (mean maximum foraging range plus 1 S.D. = 85.6km). Therefore, while the assemblage appears to be omitted, in fact the relevant components of it have been assessed in detail on a species by species basis. 2. Natural England (As-159) has stated that: '*Natural England advises that the Applicant check and correct the figures presented for impacts on puffin at FFC SPA, however we acknowledge this discrepancy is unlikely to lead to a material change in the impact assessment conclusions'*. The discrepancy between the Applicants' estimated annual impact on puffins from FFC SPA (1.4) and Natural England's (1.7) is the basis for their position that this is not a material difference and therefore the Applicants do not propose to update this. 3. It is difficult to comment on this statement by the RSPB as there is no additional information provided as to why they have reached this conclusion for the assemblage as a feature in its own right, as opposed to the individual species that it incorporates (for which the RSPB does provide further details). However, as noted above this is not considered to represent a material factor, since all the species which do have potential connectivity with the FFC SPA have been assessed individually.
OR.1.12	**Kittiwake and auk compensation quantum** The Examining Authority (ExA) notes that Appendix H1 to NE's Deadline 1 Submission, NE's Advice on Seabird Compensation Calculations [REP1-065], maintains its advice that the Hornsea 3 Stage 2 method should be used for all compensatory measures where it is necessary to calculate the requirement in terms of the number of breeding pairs as it is considered the most ecologically realistic. 1. Can you provide a response to the Applicants' statement [REP1-049] and [AS-158] that the Hornsea Three Stage 2 method recommended by NE to be used to calculate the scale of kittiwake and auk compensation required is unsuitable as: i) the method is not freely available in full such that it can be readily replicated; ii) it is unnecessarily complicated and extremely difficult to interpret; and iii) results in double-counting of the effects of mortality and thus an overestimation of compensation quantum? 2. Can you provide a response to the Applicants' concern in their Deadline 2 cover letter [AS-158] that the Hornsea 3 stage 2 method was developed for kittiwake, a species for which there is demographic information available which is not available for auks.	1. No response is required. Question directed to Natural England and the RSPB. 2. The Applicants would like to point out that Natural England have acknowledged that the complexity of the issues around selecting an appropriate compensation calculation methodology in Appendix H2 - Natural England's Advice on Offshore Ornithology Compensation Deadline 2 [AS-160]: '*We acknowledge that identifying a robust and proportionate approach to quantifying the compensation requirements for offshore windfarms impacting seabird SPAs has proved challenging. Multiple methods have been used but there is no clear consensus on the most appropriate method to use. On behalf of Collaboration on Offshore Wind Strategic Compensation (COWSC), Natural England has commissioned the British Trust for Ornithology (BTO) to carry out a review of existing approaches to compensation calculations, and if possible to make recommendations to COWSC regarding the most appropriate method to use for black-legged kittiwake. The BTO review will also consider whether the recommendations are relevant to other seabird species'.*

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<tr><th>I.D.</th><th>Written Question</th><th>Applicants' Response</th></tr>
<tr><td>OR.1.13</td><td>Kittiwake and auk compensation quantum

Can you provide a response to NE's Appendix H1 to NE's Deadline 1 Submission, NE's Advice on Seabird Compensation Calculations [REP1-065], which states that the Hornsea 4 method could be used where it is not possible to populate the Hornsea 3 stage 2 method adequately due to limited demographic information regarding the species under consideration provided that the calculations are updated using philopatry data to account for the need of the colony to sustain itself.</td><td>The Applicants note that Appendix H2 to the Natural England Deadline 2 Submission Natural England's comments and advice on Offshore Ornithology Compensation [AS-160] states that NE have "commissioned the British Trust for Ornithology (BTO) to carry out a review of existing approaches to compensation calculations, and if possible to make recommendations to COWSC regarding the most appropriate method to use for black-legged kittiwake. The BTO review will also consider whether the recommendations are relevant to other seabird species." The Applicants welcome this review and reiterate their position on the issues with the Hornsea 3 stage 2 method generally, and the fact that notwithstanding these issues, the demographic data are not available to enable its use for auks.</td></tr>
<tr><td>OR.1.14</td><td>Kittiwake and auk compensation quantum

The ExA notes comments from NE in its Deadline 1 submission Appendix H1 [REP1-065] regarding the recommended use of the Hornsea 3 and 4 methods and the use of the 95% upper confidence limit predicted impact value as opposed to the central impact value. Can the Applicant submit a list into the Examination of OWFs for which kittiwake or auk compensation has been required, setting out the justification for the final compensation calculation method used which was accepted by the SoS, including whether the compensatory measures were scaled against the 95% upper confidence limit predicted impact value or the central impact value.</td><td>Regarding kittiwake, the method used to calculate compensation requirement consented for OWF projects is variable and often reflects the scale of impact for respective projects – with those with a smaller impact typically applying the 95% upper confidence interval (UCI) to their collision risk calculations, and those with larger impacts applying the mean value. The application of the 95% UCI is much less significant for projects with low impacts (of sometimes less than one bird) as the precaution inherent with this approach does not result in considerable additional compensation requirements. However, the use of 95% UCI for OWF projects with larger impacts may result in the excessive compensation for many hundreds, if not thousands of seabirds.

Calculation approaches are challenging to ascertain through publicly available documents and are often not transparent, though the Applicants are able to provide details for some recently consented OWF projects in the North Sea. Additionally, many of the discussions on calculation methods have historically been conducted in private consultation meetings between developers and SNCBs for which minutes are not made public. This presents a challenge in understanding the narrative on calculation approaches for various consented OWF projects. However, an examination of compensation documents can in some cases reveal which approaches have been taken - these are provided on a project-by-project basis (for kittiwake) in the table below.

<table>
<tr><th>OWF Project</th><th>Project Kittiwake Impact</th><th>Collision Risk Approach</th></tr>
<tr><td>Sheringham Shoal & Dungeon Extension</td><td>6.36</td><td>95% UCI</td></tr>
<tr><td>East Anglia ONE North</td><td>0.7</td><td>95% UCI</td></tr>
<tr><td>East Anglia TWO</td><td>0.8</td><td>95% UCI</td></tr>
<tr><td>Hornsea 3</td><td>73</td><td>Mean</td></tr>
<tr><td>Hornsea 4</td><td>43.1</td><td>Mean</td></tr>
<tr><td>Norfolk Vanguard</td><td>21</td><td>Mean</td></tr>
<tr><td>Norfolk Boreas</td><td>14</td><td>Mean</td></tr>
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The Applicants note that the majority of projects presently in the examination phase, while not consented (Outer Dowsing Offshore Wind (ODOW), North Falls and Five Estuaries) have expressed support of calculating compensation requirement using the mean. An exception to this is Rampion 2 which has presented impact figures calculated using 95% UCI, though the total kittiwake impact for this</td></tr>
</table>

I.D.	Written Question	Applicants' Response
		project is 1.69 birds. Note that the ratios and calculation methods (Hornsea 3, Hornsea 4 etc.) applied by all projects named above were variable and were dependent on numerous factors taken into consideration by the developers. To date, only two consented projects have required derogation for auks (guillemots in both instances); Hornsea Project Four and SEP and DEP. Consent for Hornsea Project Four was granted based on compensation calculations which applied the mean impact value of 452 guillemot. However, SEP and DEP was granted consent based on compensation calculations which applied the 95% UCI of 16 guillemot. As noted above for kittiwake, projects with smaller impacts, such as SEP and DEP typically concede the 95% UCI as the additional layer of precaution has minimal overall effect on the compensation requirement.
OR.1.15	**Kittiwake and auk compensation quantum** 1. Can the Applicants provide compensation quanta at ratios of 1:1, 1:2 and 1:3 for kittiwake, guillemot and razorbill according to both the Hornsea 3 part 2 and Hornsea 4 approaches, as advised by NE [AS-160] and in its Risk and Issue Log [AS-161, point H6]? This is required so that the SoS has the complete information in order to make a decision on the compensation quanta required if they were to decide AEoI. 2. Which compensation ratio do NE and the RSPB believe should be applied for each of these species?	1) The Applicants consider the Hornsea Three method to be unsuitable for a number of reasons (stated in AS-087) namely, that it is unnecessarily complicated, and includes double-counting of the effects of mortality and thus an overestimation of compensation quantum and the full method is not publicly available such that it can be readily replicated or quality assured. Natural England have acknowledged this in Appendix H2 - Natural England's Advice on Offshore Ornithology Compensation Deadline 2 [AS-160], stating that '*identifying a robust and proportionate approach to quantifying the compensation requirements for offshore windfarms impacting seabird SPAs has proved challenging. Multiple methods have been used but there is no clear consensus on the most appropriate method to use*'. As a result, Natural England has commissioned the BTO to carry out a review of existing approaches to compensation calculations regarding the most appropriate method to use for black legged kittiwake and potentially other relevant to other seabird species. Notwithstanding this, the Applicants have already provided compensation quanta at ratios of 1:1 and 2:1 for kittiwake, according to both the Hornsea 3 part 2 and Hornsea 4 approaches, in Table 5.1 of **Appendix 1 - Project Level Kittiwake Compensation Plan (Revision 4)** [REP2-010]. The 3:1 ratio is simply 1:1 multiplied by three. For ease these numbers for both methodologies and all three ratios, are provided in the **Precaution in the Ornithology Assessment and Implications for Compensation Quantum** [document reference: 13.6] report and accompanying spreadsheet submitted at Deadline 3. Regarding guillemot and razorbill (auks), as stated in **Cover letter and Annex 1** [AS-158] at Deadline 2 the Applicants consider the Hornsea Three method to be unsuitable for guillemot and razorbill (auks) as the method was developed for kittiwake, and the demographic information required for his methodology is not available for auks. Natural England note this lack of demographic information in [REP1-065]. As such it is not possible to apply this methodology to auks and present the numbers. Furthermore, in a recent submission to the Five Estuaries Examination (REP8-051[55]), Natural England have stated that following testing for guillemot and razorbill, it has become apparent that lower levels of natal dispersal, compounded by older recruitment ages and lower productivity can produce unrealistic and clearly disproportionate requirements for scaling compensatory measures. In addition, they say that it is not clear that some of the demographic information is well evidenced, which can introduce significant uncertainty into any calculations reliant on those data. In such cases and pending further refinement and updates to best practice advice, Natural England consider that given the current absence of a robust alternative option for these species, it is appropriate for the Hornsea 4 method to be used in addition with other steps they have outlined. Table 4-4 and 4-5 of the **Guillemot [and Razorbill] Compensation Plan** [AS-089], presents the **c**ompensation requirement (breeding pairs) based on a 1:1 ratio and 2:1 respectively based on the Hornsea Project Four methodology. The 3:1 ratio is simply 1:1 times by three. For ease the numbers for all three ratios, are provided in the **Precaution in the Ornithology Assessment and Implications for Compensation Quantum** [document reference: 13.6] report and accompanying spreadsheet **s**ubmitted at Deadline 3. 2) No response is required. Question directed to Natural England and RSPB.
OR.1.16	**Hornsea 3 Stage 2 methodology spreadsheet**	No response is required. Question directed to Natural England.

[55] EN010115-001655-Natural England - Appendix D8 – Natural England's Advice on the Applicant's Proposed Seabird Compensation Measures.pdf

I.D.	Written Question	Applicants' Response
	Does NE have access to the Hornsea 3 Stage 2 methodology spreadsheet? If so, could this be shared with the Applicants so the exact methodology can be replicated? If the spreadsheet cannot be shared, can NE provide an alternative way for the Applicants to ensure the methodology they have used correctly follows the Hornsea 3 Stage 2 methodology?	
OR.1.17	**British Trust for Ornithology review of existing approaches to compensation calculations** NE states it will endeavour to keep current Examinations and prospective applicants updated on timescales for the recommendations from the review it has commissioned from the British Trust for Ornithology, of existing approaches to compensation calculations [AS-160] that is due March 2025. Would the Applicants amend relevant parts of the Proposed Development in light of this advice or not? If not, please explain why not. If so, what implications would this have for the Examination timescales?	A definite publication date is not provided by Natural England, however assuming the BTO guidance/ compensation calculation methodology is published in a timely manner, prior to the end of the Examination, the Applicants will review the methodology and apply it to their data, amending the relevant documents as required. Prior to reviewing the guidance / methodology from the BTO, it is not possible to understand the timing implications (i.e. how long it will take to apply the guidance) however it is not expected that this will be particularly time consuming, hence it is assumed that it should take no longer than a few weeks following publication to provide an updated response, assuming that there are no clarifications required and, of course, that the Applicants agree with the BTO's assumptions/rationale. As such, ideally, the Applicants would require the BTO guidance by the second week of March in order to have this information available for discussion in the Issue Specific Hearing (ISH) 2 (week commencing 7th April). Should the BTO guidance not be available until the end of March, then the revised documents including this methodology will be submitted at Deadline 4 (25th April 2025). In regard to whether the Applicants would then make changes to the Proposed Development based on the outcome of applying new guidance, the Applicants believe they have already set out robust mitigation and compensation measures based on an overly precautionary approach to calculations therefore they do not anticipate further changes in light of the BTO methodology would be required.
OR.1.18	**Kittiwake compensation quantum** 1. Can you provide comment on the Applicants' apportioned impact as presented in the RIAA [AS-085] and Project-level Kittiwake Compensation Plan [REP2-010]? 2. Could NE elaborate on the evidence for the case of using the upper 95% upper confidence limit vs the mean, and 100% vs 53% adult apportionment?	No response is required. Question directed to Natural England / RSPB.
OR.1.19	**Applicants' compensation proposals** Can you respond to the detailed criteria for assessing compensation proposals, documented in section 5 of the RSPB's WR [REP1-087]? For each criteria the RSPB has set out, can you explain in full: 1. If it is required by law or is a recommendation? 2. Whether and how your proposed compensation would meet each criterion?	1 – All of the sources quoted (EC, 2019, Defra, 2021 and the Natural England checklist) are badged as guidance. It is worth noting that under 'Targeted' RSPB highlight that measures '*Must consist of ecological measures: payments to individuals/funds are not appropriate*' an attribute that is clearly now questionable given that the UK Government is progressing with the Marine Recovery Fund. 2 - Table 1 of [REP1-087] is effectively reproduced in the criteria from Natural England's checklist (which is based on EC and Defra guidance) which the Applicants have provided in the summary section for each of the compensation plans (i.e. for guillemot Table 7-1 of **Guillemot [and Razorbill] Compensation Plan** [AS-089], for kittiwake Table 9-1 of **Project-Level Kittiwake Compensation Plan** [REP2-010] and for Sandbanks Table 8-1 of **Project Level Dogger Bank Compensation Plan** [REP2-012]). The Applicants provide these tables in order to demonstrate compliance of the measures proposed with the requirements for compensation as per the advice of Natural England and the latest advice from Defra, noting that, contrary to the approach of Natural England, RSPB have not taken the "Best practice guidance for developing compensation measures in relation to Marine Protected Areas" (Defra, 2021)[56] into account due to "*it still being a draft produced for consultation and yet to be finalised.*"

[56] Defra (2021) https://consult.defra.gov.uk/marine-planning-licensing-team/mpa-compensation-guidance-consultation/supporting_documents/mpacompensatorymeasuresbestpracticeguidance.pdf

<table>
<tr><th>I.D.</th><th>Written Question</th><th>Applicants' Response</th></tr>
<tr><td></td><td></td><td>For reference, the Applicants have provided a comparison of the Natural England checklist alongside the original EC guidance criteria[57] as listed in Table 1 of [REP1-087].
<table>
<tr><th>Criteria from NE Checklist</th><th>EC Criteria</th></tr>
<tr><td>a) What, where, when: clear and detailed statements regarding the location and design of the proposal</td><td rowspan="2">Targeted
Location
Technical feasibility
Extent
Timing</td></tr>
<tr><td>b) Why and how: ecological evidence to demonstrate compensation for the impacted site feature is deliverable in the proposed locations.</td></tr>
<tr><td>c) For measures on land, demonstrate that on ground construction deliverability is secured and not just the requirement to deliver in the DCO e.g., landowner agreement is in place. For measures at sea, demonstrate that measures have been secured e.g. agreements with other sea or seabed users.</td><td rowspan="3">Long-term implementation</td></tr>
<tr><td>d) Policy/legislative mechanism for delivering the compensation</td></tr>
<tr><td>e) Agreed DCO/DML conditions</td></tr>
<tr><td>f) Clear aims & objectives & links to the conservation objectives of the site or feature.</td><td>Targeted</td></tr>
<tr><td>g) Mechanism for further commitments if the original compensation objectives are not met – i.e., adaptive management.</td><td rowspan="2">Long-term implementation</td></tr>
<tr><td>h) Clear governance proposal for the post-consent phase (e.g. ToR agreed)</td></tr>
<tr><td>i) Ensure development of compensatory measures is open and transparent</td><td>All criteria</td></tr>
<tr><td>j) Timescales for implementation & how quickly the measures will contribute to the network</td><td>Timing</td></tr>
<tr><td>k) Commitments to ongoing monitoring of measure performance against specified success criteria.</td><td rowspan="3">Long-term implementation</td></tr>
<tr><td>l) Proposals for ongoing sign off' procedure for implementing compensation measures throughout the lifetime of the project, including implementing feedback loops from monitoring.</td></tr>
<tr><td>m) Commitment to continued annual management of the compensation area throughout the lifetime of the project</td></tr>
</table></td></tr>
<tr><td>OR.1.20</td><td>Applicants' kittiwake compensation proposals

Do you agree with the Applicants' statement in their Deadline 2 cover letter on page 5 [AS-158]:'For Kittiwakes at the FFC SPA the principal compensation proposed by the Applicants in the Project-Level Kittiwake Compensation Plan [REP2-010], is the delivery of Artificial Nesting Structure(s) (ANS). This aligns with the primary measure identified by the Kittiwake Strategic Compensation Plan [APP-053] and with Department for Energy Security and Net Zero (DESNZ) guidance (DESNZ, 2025) which confirmed the inclusion of offshore ANS within the Library of Strategic</td><td>No response is required. Question directed to Natural England.</td></tr>
</table>

[57] European Commission (2019) Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC https://environment.ec.europa.eu/topics/nature-and-biodiversity/natura-2000/managing-and-protecting-natura-2000-sites_en

I.D.	Written Question	Applicants' Response
	Compensation Measures and the eligibility of Round 4 offshore wind projects to deliver this measure. Guidance also states that projects wishing to rely on this measure ahead of the Marine Recovery Fund (MRF) being operational need to deliver offshore ANS on a project led or collaborative basis, and that where possible developers should construct fewer and larger offshore ANS placed in optimal sites. As such the Applicants' believe that the compensation measure proposed is accepted by Natural England as a member of the kittiwake steering group. The delivery mechanism is confirmed by Department of Environment, Food and Rural Affairs (Defra) and DESNZ, hence this does not need further debate'. If not, explain why not.	
OR.1.21	**Applicants' kittiwake compensation proposals** The ExA notes your response to the RSPB's questions from its RR [RR-049] in The Applicants' Responses to Relevant Representations (Revision 1) [PDA-013]. You referred to updates due to be submitted at Deadline 1 for many of these. Can you now respond in full to the questions from the RSPB, documented in section 6 of the RSPB's WR submitted at Deadline 1 [REP1-087]? These are: 1. Based on the Applicants' expert knowledge, its initial assessment of the Areas of Search and ongoing evaluation work, what does it consider are the likely engineering and manufacturing requirements of such a structure? 2. What would these requirements mean in terms of the supply chain and logistics pathways eg access to specialist installation vessels, and how might this be affected by each of the sequential and concurrent wind farm construction scenarios? 3. How might this translate into lead-in times for the installation of bespoke offshore Artificial Nesting Structure (ANS), and how does this relate to the Applicants' sequential and concurrent development scenarios? 4. What is the Applicants' understanding of when the organisation responsible for commissioning and construction of an offshore ANS under the Kittiwake Strategic Implementation and Monitoring Plan (KSIMP) process would be identified and how might this affect the lead-in times? 5. What is the Applicants' understanding of how these lead times would be affected by the different implementation routes it has identified e.g. via The Crown Estate KSIMP, the MRF or by the project alone?	1. The Applicants undertook significant consultation with the Projects' engineers throughout the ANS site selection process. The anticipated base-case considering the site-conditions is a steel monopile structure with a light topside (incorporating the nesting structure and access requirements). The requirements for such a structure were taken into consideration during site selection by shortlisting candidate sites in suitable water depths, in locations predicted to be characterised by satisfactory geological and metocean conditions. 2. The structure will be small compared with the likely turbine structures, hence will open up a larger and broadly different supply chain (including both fabricators and vessels) compared with that of the turbine foundations and sub-structures. 3. This broader supply chain opportunity is anticipated to improve the position on lead-times. 4. The Applicant is not aware of when the organisation responsible for commissioning and construction of an offshore ANS under the strategic plan for Round 4 projects will be identified. The responsible operator – most likely the Marine Recovery Fund Operator (MRFO) has not yet been confirmed. While the Applicants are members of the Kittiwake Strategic Compensation Plan (KSCP) Steering Group, the Steering Group has not convened following the publication of the **Round 4 Kittiwake Strategic Compensation Plan** [APP-053] in 2024 so progression for plans outlined in this Plan have not been shared with the wider members. The Applicants have maintained engagement with The Crown Estate, as well as the Collaboration on Offshore Wind Strategic Compensation (COWSC) organisation throughout the planning process for the Projects, though there has been no new information shared regarding timescales for delivery of a strategic offshore artificial nesting structure (ANS). The Department of Energy Security and Net Zero (DESNZ) guidance on strategic compensation measures for offshore wind with a focus on the Marine Recovery Fund (MRF) (DESNZ, 2025) states that OWF developers "*need to be able to deliver the measure themselves, or in collaboration with other projects*" ahead of the MRF being operational. It is the Applicants' interpretation that this most likely means that programmes for developer led measures are likely to be ahead of strategic timescales for delivery at present. 5 – It is the Applicants understanding that there would be a single ANS to be delivered strategically, and this would be delivered by the MRFO – the identity of which is yet to be confirmed. COWSC is working alongside Natural England, The Crown Estate, Joint Nature Conservation Committee (JNCC), Offshore Wind Industry Council (OWIC), DESNZ and Defra as well as other organisations to develop plans for delivery of a strategic offshore ANS. However, details regarding this are not public at present. Due to the lack of public information, it is challenging to compare delivery timelines for various mechanisms but as outlined above, DESNZ guidance encourages the delivery of project led ANS which may suggest that this is the most imminent delivery route. Despite the evolving landscape surrounding strategic ANS delivery, the Projects' default delivery mechanism is via a project-delivered offshore ANS with contingency provided by nesting spaces on ODOW's offshore ANS.
OR.1.22	**Applicants' kittiwake compensation proposals** NE states in Appendix H2 [AS-160] that you have committed to delivering a single project-led ANS, (with a second ANS to be delivered by Outer Dowsing OWF if	A Memorandum of Understanding (MoU) between the Applicants and ODOW has been agreed and signed by both parties. The Project-Level Kittiwake Compensation Plan will be updated at Deadline 4 to reflect this. However, should the ODOW ANS installation be delayed, or not proceed, the Applicants maintain that their project led structure will provide sufficient nesting spaces to

I.D.	Written Question	Applicants' Response
	development consent is given) and that discussions are underway to secure a Memorandum of Understanding to allow resilience to be shared between the Proposed Development and the ANS that would be delivered by Outer Dowsing OWF if it gained development consent. NE is concerned [AS-160] that the single ANS would not provide sufficient quantum of compensation for kittiwake for the predicted impacts and that it cannot be assumed that a 'compensation envelope' of 5,500 nesting spaces would be sufficient given the higher impacts now predicted from the Proposed Development as NE states in point H7 of its Risk and Issue Log 2.1 [AS-161]. If the Outer Dowsing OWF was not to gain consent, can the Applicants confirm whether the single proposed ANS for the Proposed Development would be able to provide adequate kittiwake compensation for the full range of predicted impacts from the Proposed Development? Can you support your answer with evidence?	accommodate the Projects compensation requirement. As set out in **Round 4 Kittiwake Strategic Compensation Plan** [APP-053], the delivery of a second ANS for the Round 4 projects provides additional security from the perspective of compensation provision on a strategic basis, though is not required for the delivery of sufficient nesting spaces. The Applicants would also like to highlight the presence of the Projects onshore ANS at Gateshead which provides additional resilience through early compensation delivery. Under the 'worst-case' impact scenario calculated by the Applicants (the Hornsea 3 calculation method, UCI 95% and 100% apportionment to adult population) the Projects compensation requirement is 2,085 birds, this is reduced to 1,007 when the Hornsea 4 calculation is applied. This figure is presented within the **Precaution in the Ornithology Assessment and Implications for Compensation Quantum** [document reference: 13.6] report and accompanying spreadsheet submitted at Deadline 3 and represents a ratio of 1:1. At a ratio of 2:1, the project alone requirement for compensation would increase to 4,170 (2,014 using Hornsea 4 calculation) which remains within the 'compensation envelope' outlined in **Round 4 Kittiwake Strategic Compensation Plan** [APP-053]. The Applicant would consider the Hornsea 3 value to be excessively precautionary and does not regard the use of a ratio exceeding 1:1 when applied in combination with this method alongside a 95% UCI, 100% adult apportionment to be appropriate. However, to provide further comfort, the ANS design being progressed by the Applicants by their appointed contractor is modular until the point of fabrication, which ensures flexibility for the structure capacity for nesting spaces, regardless of the final quantum figure that is agreed by the Secretary of State. This eliminates any risk of the project-led ANS not providing sufficient quantum.
OR.1.23	**Applicants' kittiwake compensation proposals** Can you respond in full to the questions from the RSPB, documented in section 6 of the RSPB's WR [REP1-087]? These are: 1. What steps has The Crown Estate taken to secure a marine licence for an offshore ANS in the alternative Areas of Search? 2. Assuming no steps have been taken as no decision has yet been taken on the preferred location for any offshore ANS under the KSIMP, what is the Applicants' and The Crown Estate's view on the implications of this for the implementation timeline for any such offshore ANS?	1. The Applicants have confirmed through discussions with The Crown Estate that The Crown Estate have no plans to secure a Marine Licence from the MMO for the development of offshore ANS in any of the Areas of Search (AoS) provided in the **Round 4 Kittiwake Strategic Compensation Plan** [APP-053] (KSCP). 2. It is understood that developers should continue to consult with Defra and COWSC regarding the delivery of any future offshore ANS which may be delivered through the Marine Recovery Fund, however the organisation responsible for commissioning a strategically led structure remains unconfirmed. The delivery timeline for any strategic measure for kittiwake is currently unknown and was not elaborated on in the DESNZ's 'Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance' publication. To protect the Projects against risk of strategic ANS not being progressed within the necessary timeframe, a project-led ANS is being advanced by the Applicants. As per **Appendix 1 - Project Level Kittiwake Compensation Plan (Revision 4)** [REP2-010], this Project led measure is the primary delivery mechanism for the Applicants required kittiwake compensation and is not reliant on the delivery of a strategic ANS. It is anticipated that the project led ANS proposed by DBS (and ODOW) will be delivered ahead of any strategic offshore ANS for kittiwake.
OR.1.24	**Applicants' kittiwake compensation proposals** The RSPB has highlighted [REP1-087 paragraph 6.14] Hornsea Four's change in approach to delivery of its kittiwake compensation, switching from offshore ANS to onshore ANS stated in their final Kittiwake Compensation Implementation and Monitoring Plan, paragraph 2.1.1.5. Can you evaluate the key, foreseeable risks to meeting the fabrication and installation programme for the offshore ANS and specify the measures the Applicants' plan to put in place to mitigate these risks, particularly in light of the recent Strategic compensation measures for offshore wind activities: Marine Recovery Fund interim guidance published by DESNZ on 29 January 2025?	An assessment of risks and contingencies is ongoing across the Projects. Specifically, for the ANS early supplier engagement and development of a robust concept design has been prioritised, with both tasks being commenced in 2024. The offshore ANS will be small compared with the likely turbine structures, hence will open up a larger and broadly different supply chain (including both fabricators and vessels) compared with that of the turbine foundations and sub-structures.
OR.1.25	**Kittiwake compensation proposals - offshore ANS**	No response is required. Question directed to Natural England, The Wildlife Trusts and the RSPB.

I.D.	Written Question	Applicants' Response
	Section 6.3 of the Applicants' Project-Level Kittiwake Compensation Plan [REP2-010] states that three candidate offshore ANS sites have been selected for progress to site investigation surveys to confirm suitability and that the Applicants are seeking to undertake geophysical surveys for the three candidate sites in April and May 2025, and geotechnical surveys later in 2025. The Applicants state that the outputs of these surveys would enable the selection of a project led offshore ANS site by the close of the Examination period. The Applicants go on to state that they anticipate that in Q2 2025, a Marine Licence application would be submitted to the Marine Management Organisation (MMO) and a Seabed Lease application to The Crown Estate would be submitted with ongoing consultation with fisheries organisations and other key stakeholders in the interim and that stakeholder engagement would continue throughout the site selection process. Do NE, The Wildlife Trusts or the RSPB have any concerns with this suggested approach?	
OR.1.26	**Case for reduction in kittiwake breeding seasons for ANS installation** Do you have any comments on the Applicants' proposal to reduce the number of breeding seasons ahead of operation of the proposed offshore ANS from three to two seasons, as proposed in the Case for Reduction in Kittiwake Breeding Seasons for ANS Installation [REP2-060] and the Project-Level Kittiwake Compensation Plan [REP2-010]? Please signpost or add further evidence to support your position.	No response is required. Question directed to Natural England, The Wildlife Trusts and the RSPB.
OR.1.27	**Case for reduction in kittiwake breeding seasons for ANS installation** You state in the Project-Level Kittiwake Compensation Plan [REP2-010] that you expect to deliver kittiwake compensation requirements in collaboration with Outer Dowsing OWF and that Outer Dowsing OWF submitted a change request into its Examination in February 2025 to amend its draft DCO wording to reduce the number of breeding seasons ahead of operation from three to two. If this proposed change from the Outer Dowsing Applicant is not accepted by the SoS, can you explain how that would impact on your proposals for the Proposed Development, given that the offshore ANS are planned to be delivered collaboratively with Outer Dowsing OWF?	Should ODOW's change request (accepted into ODOW's examination by the Examining Authority in February 2025) not be accepted by the SoS, then so far as the Applicants understand, ODOW may pursue one of several options (though the Applicants cannot comment with any certainty on what these may be). However, the Applicants can hypothesise that ODOW may be obliged to deliver their project-led ANS three years in advance of operation, as per their original proposal, or their operation date may be delayed. Should ODOW be required to delay earliest operation due to an inability to delivery their ANS three years ahead of operation, the compensation delivery by this project would be delayed by the equivalent time period. This, however, would not impact the Applicants ability to deliver the entirety of their own compensation requirement via installation of their own project-led ANS. The project-led ANS design brief specifies that topside design should accommodate for in excess of predicted combined impacts for the Projects and ODOW combined, and as such, has sufficient capacity to deliver compensation for the Projects alone should the installation of the ODOW ANS be delayed.
OR.1.28	**Dealing with any accrued compensation deficit** Section 6.3.6, paragraph 205 of the Project-Level Kittiwake Compensation Plan [REP2-010] refers to the concept of *'compensation deficit accrued'* should there be a delay to the delivery of the offshore ANS for kittiwakes. The Applicants suggest that this would be so small that it would be paid off over the lifespan of the Proposed Development, or that the scale of compensation could be increased, or alternative measures could be relied on to offset any deficit accumulated during the early years of operation.	Quantitative evidence to support the Applicants position regarding the worst-case delay in achieving full compensation is provided in **Case for Reduction in Kittiwake Breeding Seasons for ANS installation [REP2-060].**

I.D.	Written Question	Applicants' Response
	1. Can the Applicants provide an update to refine their position on this and provide quantitative evidence to support their confidence for a worst-case delay between the commencement of operation of the Proposed Development and the availability of compensation measures? 2. Does the confidence equally apply to the scenario for the development of two offshore array sites simultaneously rather just one or the other, for one or two offshore ANSs, and if only two or three breeding seasons were stipulated in any Requirement to provide compensation ahead of operation, rather than four? If so, demonstrate why. 3. Do NE and the RSPB wish to provide anything further in relation to the timing of the implementation of compensation or the compensation deficit accrued?	1. The Applicants have applied the Hornsea 4 colony growth rate calculation method to their impact numbers to determine whether offshore ANS would still deliver sufficient compensation over its life expectancy if delayed by two years. Full details on the calculation method are provided in Orsted (2024) as referenced in **Case for Reduction in Kittiwake Breeding Seasons for ANS installation [REP2-060]**. The outputs of the calculations, even under pessimistic scenarios demonstrate that if the Projects compensation is delayed, the primary outcome is a deferment in the success of the compensation by the same amount of time. The colony growth calculations establish there is little biological relevance to the four-year figure and as such the Applicants are confident that a reduction in breeding seasons from four to two ahead of operation does not materially affect the delivery of the compensation requirement. 2. This principal remains applicable across multiple offshore ANS, and under various temporal scenarios, whether ANS are installed two or three breeding seasons ahead of wind farm operation. The evidence base for this is presented in **Case for Reduction in Kittiwake Breeding Seasons for ANS installation [REP2-060]**. 3. No response is required. Question directed to Natural England, The Wildlife Trusts and the RSPB.
OR.1.29	**Suitability of predator eradication or reduction on the Isles of Scilly as strategic compensation for auks** Can you comment on the Applicants' auk compensation proposals in general and particularly the suitability of predator eradication or reduction on the Isles of Scilly as a strategic compensation scheme as proposed by the Applicants in their Guillemot [and Razorbill] Compensation Plan [AS-089] and the latest update provided in the Applicants' Cover Letter at Deadline 2 [AS-158], taking into consideration The Wildlife Trusts' comments in its submission [REP1-088, section 2.4].	No response is required. Question directed to Natural England, The Wildlife Trusts and the RSPB.
OR.1.30	**Securing auk compensation** Noting the SoS's clear indication in decision letters for other recent offshore wind farm DCO applications that potential derogation and compensation matters should reach a conclusion during the Examination, can you: 1. Provide an update on the Auk Compensation Expert Topic Group discussion on predator eradication? 2. Provide further details and a schedule for the Collaboration in Offshore Wind Strategic Compensation study investigating effectiveness of predator eradication for guillemot and razorbill? 3. Detail how the compensation would be secured through any DCO under any scenario (site identified and secured; site identified but not secured; site not identified or secured)? 4. Confirm the locations of the two 'project-led' locations referred to in your Deadline 2 cover letter [AS-158] where survey work is being undertaken? 5. Provide an update on the survey work to determine suitability for a predator reduction scheme, including	1. The most recent meeting of the Auk Compensation Expert Topic Group (ETG) was held on the 30th September 2024, where the results of the site shortlist refinement surveys were presented as were the proposals for further surveys at Sheep Island and Isles of Scilly. No further meetings of the ETG have occurred to date, although meetings with individual member groups of the ETG, i.e., Natural England and The Wildlife Trusts have occurred. The Applicants have attempted, on multiple occasions, to arrange a meeting but have faced challenges with Natural England's availability. 2. The OWIC Strategic Compensation Studies team are working in partnership with key stakeholders, including The Wildlife Trusts and interested developers (including the Applicants), to support a strategic approach to delivering a predator eradication project in the Isles of Scilly for the purpose of seabird compensation. The following statement, which has been jointly agreed by Defra, DESNZ, Natural England, The Wildlife Trust, RSPB, The Crown Estate and OWIC was provided by Defra on 13th March 2025 for the examination: *"The Isles of Scilly Seabird Recovery Partnership is developing a predator eradication project to recover seabird populations on the Isles of Scilly (IoS) as a strategic compensation measure in relation to offshore wind development. This partnership is led by Isles of Scilly Wildlife Trust, and closely involves the Duchy of Cornwall, RSPB, The Wildlife Trusts and a range of other local and national partners.*

I.D.	Written Question	Applicants' Response
	a) determining predator (rat) presence; b) determining the amount of additional suitable available predator-free potential auk habitat that would be created, noting NE's statement [AS-160] that, if any of these locations are already rat-free, the available habitat cannot be assumed to contribute to the compensation measure. 6. State whether the proposed auk compensation sites under consideration would have sufficient compensation capacity if the upper confidence interval values were to be considered, as per NE's concern [AS-160]? 7. Provide estimated timescales for completion of this work and whether decisions on choice of either of these sites could be made by the close of the Examination??	*The partnership, with support from The Wildlife Trusts, is developing a predator eradication programme on the Isles of Scilly to cover a 30 year period. This programme will include an operational plan to remove predators from the islands, a long-term maintenance/biosecurity plan to ensure the islands remain predator free, a community engagement plan and a monitoring and evidence plan. It is expected the outputs of this work will be delivered Spring 2027, with the potential delivery of the eradication programme to follow. It is envisaged that this will be one of the first fully developed and costed programmes to be established as a strategic compensation measure for offshore wind farm impacts on protected seabirds.* *Currently, Defra is establishing the Marine Recovery Fund (MRF), to develop strategic compensation measures, which is anticipated to be fully operational by late 2025. A number of organisations have recently met, including Defra, DESNZ, Natural England, The Wildlife Trusts, OWIC, The Crown Estate, and RSPB, to establish a Task and Finish Group to establish the mechanisms required to allow predator eradication to be delivered as a strategic compensation measure, noting the option for this to delivered by the Marine Recovery Fund.* *All parties agree that predator eradication on the Isles of Scilly has great potential to provide compensation for the impacts of offshore wind projects and would support its inclusion in project specific compensation plans. Offshore wind projects currently seeking consent might wish to submit this statement to the examining authority to demonstrate progress with this scheme, if they seek to use it as strategic compensation for unavoidable impacts to protected species likely to be impacted by their projects"* 3. Regardless of the scenario, Schedule 18 Part 3 of the Draft DCO conditions the Applicants, where predator eradication is taken forward, to production of the Guillemot and Razorbill CIMP detailing where and how the compensation will be implemented, specify the minimum time prior to installation of any wind turbine tower which implementation is required, in addition to details of how land rights have or will be obtained. The Guillemot and Razorbill CIMP must be approved by the SoS and measures implemented in accordance with the approved CIMP. Therefore, according to the conditions of the DCO the Applicants are required to have implemented the compensation in accordance with the SoS approved CIMP before installation of any wind turbine tower can occur. With regards to strategic compensation, in their response on the 14th March 2025 to OWIC's questions on the MRF interim guidance and written ministerial statement, Defra stated that DESNZ and NE looking at whether a generic condition could be developed to allow projects such as the IoS to be relied upon as compensation in examinations. The condition would allow for transfer of the project to the MRF once operational. 4. The two project-led locations referred to in the Deadline 2 cover letter [AS-158] are Worms Head and Middle Mouse, as detailed in the **Guillemot and Razorbill Compensation Plan (Revision 3)** [AS-089]. 5. Surveys were conducted at both Worms Head and Middle Mouse in January and February 2025 respectively. a. The surveys at Worms Head confirmed the presence of rats at the site, which was corroborated by the National Trust during subsequent consultation on 21st February 2025. However, the surveys at Middle Mouse were inconclusive and further surveys will be required to confirm the presence of rats at this location. b. Surveys at Worms Head have enabled an estimation of the suitable available habitat, which is presented in a redacted form in the **Guillemot [and Razorbill] Compensation Site Shortlist Refinement Report (revision 2)** [document reference 10.20] to be submitted at Deadline 3, with a non-redacted version provided to Natural England. The availability of habitat at this site remains unchanged from that presented in the **Guillemot [and Razorbill] Compensation Site Shortlist Refinement Report (revision 1)** [PDB-008].

I.D.	Written Question	Applicants' Response
		6. As discussed elsewhere **Precaution in the Ornithology Assessment and Implications for Compensation Quantum** [document reference: 13.6] report and accompanying spreadsheet submitted at Deadline 3 the Applicants consider that the compensation quantum should be determined by use of the mean, not the upper confidence interval and should be based upon preferred displacement and mortality rates of 50% and 1% respectively. Based on the higher estimate of available habitat, using a density of 46 pairs/m² (Harris and Wanless, 1987[58]), Middle Mouse has sufficient compensation capacity to provide 100% of the project-level compensation requirement for the Applicants' displacement and mortality rates (50% and 1%) and using the upper confidence interval as presented in the **Precaution in the Ornithology Assessment and Implications for Compensation Quantum** [document reference: 13.6] report and accompanying spreadsheet submitted at Deadline 3. Using the more conservative estimate of available habitat, based on a density of 20 pairs/m² (Harris and Birkhead, 1985[59]), Middle Mouse does not provide 100% of the project-level compensation requirement for the upper confidence interval at the Applicants' displacement and mortality rates (50% and 1%). The Worms Head site would have sufficient compensation capacity, based on the more conservative estimate of available habitat (20 pairs/m²), for the upper confidence interval at the Applicants' preferred displacement and mortality rates of 50% and 1%. At the higher estimate of available habitat (46 pairs/m²), Worms Head has sufficient compensation capacity for 100% of the project-level compensation requirement at the upper confidence interval at displacement and mortality rates of 70% and 2%. All of the combinations of impact inputs and displacement and mortality rates are presented in the **Precaution in the Ornithology Assessment and Implications for Compensation Quantum** [document reference: 13.6] report and accompanying spreadsheet submitted at Deadline 3. The habitat availability for each site is detailed in the non-redacted version of **Guillemot [and Razorbill] Compensation Site Shortlist Refinement Report (Revision 2)** [document reference 10.20] which will be provided to Natural England and the Examining Authority. 7. Further surveys are proposed to be undertaken during the auk breeding season at Worms Head May/June 2025, with the intention that the results are used to determine an appropriate site prior to the end of examination. Further surveys at Middle Mouse would need to be undertaken at the end of the seabird breeding season to avoid disturbance of the colony, and therefore after the close of the examination.
OR.1.31	**Connectivity between the proposed sites and the FFC SPA and the National Site Network** Whilst welcoming the Applicants' assessment of connectivity with the National Site Network that was included in the Guillemot and Razorbill Compensation Plan [AS-089], NE states [AS-160] that, whilst there is a pathway from the potential sites of Worms Head and Middle Mouse for birds to recruit and contribute to the National Site Network, it is likely to be limited, and this uncertainty should be reflected in the level of compensation provision. 1. Can the Applicants, RSPB and the Wildlife Trusts suggest a suitable factor to be applied to the compensation quanta to account for this level of uncertainty? 2. Can NE advise a factor to be applied to the compensation quanta to account for this level of uncertainty?	1) As acknowledged by Natural England, the case for connectivity was established in AS-089 for each of the colonies identified since they are all located within reported recruitment distances. While the probability of recruitment from a natal (hatched) colony to any particular breeding colony is likely to decline with increasing distance, any additional birds hatched within the regional population will ultimately be contributing to the overall coherence of the National Site Network, including individuals that recruit to non-SPA colonies. This is because growth at those colonies will also contribute to growth in the regional populations (i.e. the inter-connected nature of seabird breeding populations means that they are all linked to a greater or lesser extent, whether designated as SPAs or not). Thus the Applicants propose that compensation ratios should be applied to address uncertainty that the proposed measure (e.g. rat eradication) will deliver its projected outcomes (increased population and productivity) and not on the basis of where those additional hatched birds recruit as breeding adults. Since the auk displacement assessment already contains several independent, additive, sources of precaution (over-estimates of displacement rate (70%), mortality rate (>=2%), assumption that all birds in breeding season are breeders at FFC SPA, assumption that 70% of post-breeding birds are from FFC SPA, density independent PVA projections), the Applicants consider that no further compensation ratio should be applied as the 1:1 estimate is already highly precautionary.

[58] Harris, M.P. and Wanless, S. 1987. The breeding biology of Guillemots *Uria aalge* on the Isle of May over a six year period. Ibis 130: 172-192.
[59] Harris, M.P. and Birkhead, T.R. 1985. Breeding ecology of the Atlantic Alcidae. In D.N. Nettleship and T.R. Birkhead (eds.), The Atlantic Alcidae (London: Academic Press).

I.D.	Written Question	Applicants' Response
		2) No response is required. Question directed to Natural England.
OR.1.32	**Adaptive management measures** If adaptive management measures beyond predator eradication became required to compensate for impacts on auks, section 5.4 of the Guillemot (and Razorbill) Compensation Plan [AS-089] considers artificial nesting sites, and bycatch reduction, which would rely on the Applicants successfully achieving the process set out in paragraph 204 [AS-089] to engage sufficient skippers to implement adequate compensation. What would be an adequate number of skippers? Is there any evidence that either approach would be achievable in practice?	With the modular design of the proposed kittiwake tower, it would be possible to include additional nesting spaces for auks if necessary. Evidence presented by (Orsted, 2022[60] and Equinor, 2023[61]) reported that through the implementation of bycatch reduction technology (looming eye buoys) can result in a 25% reduction in bycatch one vessel could account for 8 auk mortalities each year. Accounting for the proportion of the population thought to comprise adult birds (60% for guillemot and 52% for razorbill), 28 vessels would be required to compensate for 162.8 adult guillemot predicted to be impacted at the Applicants' preferred 50% and 1% displacement and mortality rates, or 38 vessels if razorbill also require compensation. At displacement and mortality rates of 70% and 2% respectively, 80 vessels would be required to compensate for guillemot alone or 106 vessels if compensation for razorbill is also required. Over 500 vessels have permits for netting in the south-west (Fishtek Marine, 2023[62]), therefore sufficient capacity exists in the fishing fleet for compensation to be achieved.
OR.1.33	**NPS EN-3 in relation to offshore ornithology** The ExA notes that section 12.4 of ES Chapter 12 [AS-057] gives incorrect paragraph numbers for many of the quoted paragraphs in NPS EN-3. For example, the following quoted text has been referenced in ES Chapter 12 as EN-3 Paragraph 2.8.91 when it is actually EN-3 Paragraph 2.8.101. *'Applicants must undertake a detailed assessment of the offshore ecological, biodiversity and physical impacts of their proposed development, for all phases of the lifespan of that development, in accordance with the appropriate policy for offshore wind farm EIAs, HRAs and MCZ assessments (See sections 4.3 and 5.4 of EN-1)'.* Can you review and correct all references to the NPS as necessary?	The Applicants have reviewed all references to the NPS and note that incorrect NPS-EN3 paragraph numbers were stated in Table 12-5 in the previous revision of **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057]. An updated version of Table 12-5 is provided in **Appendix H** of this document.
OR.1.34	**NPS EN-3 in relation to offshore ornithology** The ExA notes that ES Chapter 12 [AS-057] section 12.4 does not reference the following paragraphs of NPS EN-3. Can you explain why the following paragraphs of NPS EN-3 have been omitted? If they were omitted in error, can you explain how the application fulfils these policy requirements in NPS EN-3? a) *'In developing proposals applicants must refer to the most recent best practice advice originally provided by Natural England under the Offshore Wind Enabling Action Programme, and/or their relevant Statutory Nature Conservation Bodies (SNCBs)'.* NPS EN-3 paragraph 2.8.105. b) *'Applicants are expected to have regard to guidance issued in respect of Marine Licence requirements and consult at an early stage of pre-application with the Marine Management Organisation'.* NPS EN-3 paragraph 2.8.108. c) *'Applicants should have regard to duties in relation to Good Environmental Status of marine waters under the UK Marine Strategy and MPA target*	The Applicants note that items a) – c), j), l), m) and n) were all included within Table 1-2 of **Policy Compliance Assessment Tables** [APP-227] and were not included within **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057] itself due to these points not being specific to the topic of offshore ornithology. These items have, however, been added to the updated version of Table 12-5 as provided in **Appendix H** of this document. Items d) – i) are found in section 2.11 of NPS-EN3 which relates specifically to Tidal Stream developments and not offshore wind. The Applicants note paragraph 2.11.35 of NPS-EN3 which states *'In addition, applicants should have regard to the specific ecological and biodiversity considerations that pertain to proposed offshore wind infrastructure developments.'*, which appears to be an error when considering the section's focus on Tidal Stream developments. Please see the below list for the equivalent paragraphs in section 2.8 of NPS-EN3 regarding offshore wind developments, and where in Table 1-2 of **Policy Compliance Assessment Tables** [APP-227] these points are addressed: • d) - Captured under item 2.43 regarding paragraph2.8.107 of NPS-EN3; • e) - Captured under item 2.40 regarding paragraph 2.8.103 of NPS-EN3; • f) – Captured under item 2.44 regarding paragraph 2.8.108 of NPS-EN3; • g) – Captured under item 2.45 regarding paragraph 2.8.109 of NPS-EN3;

[60] Orsted 2022. Hornsea Project Four G5.13 Bycatch Reduction Technology Selection Phase Summary (Revision 1). PINS document reference REP5-068.
[61] Equinor 2023. Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects. Appendix 4 Guillemot Compensation Document (Revision E).
[62] Fishtek Marine, 2023. Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects Annex 4 Auk Bycatch Reduction Feasibility Statement.

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	(including any interim target) in England, set under the Environment Act 2021'. NPS EN-3 paragraph 2.8.109. d) *'Applicants should explain why their decisions on siting, design, and impact mitigation are proportionate and well-targeted considering real-world evidence gathered from previous deployments'.* NPS EN-3 paragraph 2.11.38. e) *'Applicants should assess the potential of their proposed development to have net positive effects on marine ecology and biodiversity as well as negative effects'.* NPS EN-3 Paragraph 2.11.40. f) *'Applicants are expected to have regard to guidance issued in respect of Marine Licence requirements'.* NPS EN-3 paragraph 2.11.41. g) *'Applicants should also have regard to Good Environmental Status under the UK Marine Strategy'.* NPS EN-3 Paragraph 2.11.42. h) *'Careful design and siting of the development is likely to be the primary form of impact mitigation, along with the choice of construction and installation techniques'.* NPS EN-3 paragraph 2.11.45. i) *'Applicants must always employ the mitigation hierarchy, in particular to avoid as far as is possible the need to find compensatory measures for coastal, inshore and offshore developments affecting designated sites'.* NPS EN-3 paragraph 2.11.46. j) *'Aviation and navigation lighting should be minimised and/or on demand (as encouraged in EN-1 Section 5.5) to avoid attracting birds, taking into account impacts on safety. Subject to other constraints, wind turbines should be laid out within a site, in a way that minimises collision risk'.* NPS EN-3 paragraph 2.8.240. k) *'Turbine parameters should also be developed to reduce collision risk where the assessment shows there is a significant risk of collision (e.g., altering rotor height).* *'Construction vessels and post-construction maintenance vessel traffic associated with offshore wind farms and offshore transmission should, where practicable and compatible with operational requirements and navigational safety, avoid rafting seabirds during sensitive periods and follow agreed navigation routes to and from the site and minimise the number of vessel movements overall'.* NPS EN-3 paragraph 2.8.242. *l) 'If, during the pre-application stage, SNCBs indicate that the proposed development is likely adversely to impact a protected site, the applicant should include with their application such information as may reasonably be required to assess potential derogations under the*	• h) – No like-for-like version of this paragraph is stated in NPS-EN3. Paragraph 2.8.233 of NPS-EN3 covers a similar thematic area however, with the Applicants regard to this point presented under item 2.94 in Table 1-2 of the **Policy Compliance Assessment Tables** [APP-227]. • i) - No like-for-like version of this paragraph is stated in NPS-EN3. Paragraph 2.8.66 of NPS-EN3 covers a similar thematic area however, with the Applicants regard to this point presented under item 2.29 in Table 1-2 of the **Policy Compliance Assessment Tables** [APP-227]. The Applicants acknowledge however that items k) and o) were omitted by mistake previously, however these items have been included in **Appendix H** of this document.

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	Habitats Regulations or the Marine and Coastal Access Act 2009'. NPS EN-3 paragraph 2.8.267. m) *'Applicants should work closely at an early stage in the preapplication process with SNCBs, and Defra, in conjunction with the relevant regulators, Local Planning Authorities, National Park Authorities, landowners and other relevant stakeholders to develop a compensation plan for all protected sites adversely affected by the development'.* NPS EN-3 paragraph 2.8.273. n) *'Before submitting an application, applicants should seek the views of the Statutory Nature Conservation Bodies (SNCBs) and Defra, as to the suitability, securability and effectiveness of the compensation plan to ensure that the overall coherence of the National Site Network for the impacted SAC/SPA/MCZ feature is protected. Consultation should also take place throughout the pre-application phase with key stakeholders (e.g. via the evidence plan process and use of expert topic groups)'.* NPS EN-3 paragraph 2.8.27. o) *'Not every impact for every project will initially fall within the strategic compensation proposals, so applicants should continue to discuss with SNCBs and Defra the need for site specific or strategic compensation at the earliest opportunity'* NPS EN-3 paragraph 2.8.282.	
OR.1.35	**NPS EN-3 in relation to offshore ornithology** The ExA notes that section 12.4 of ES Chapter 12 [AS-057] does not reference paragraph 2.8.110 of NPS EN-3, which states, *'The British Energy Security Strategy contains a commitment to reviewing the Habitats Regulation Assessment process for offshore wind farm developments, and powers are included in the Energy Act 2023 to implement this through secondary legislation. Further guidance will be published as a separate document setting out what information assessments must contain. Once final guidance is published, applicants will be expected to comply'.* Can you explain whether the final guidance referred to has been published and therefore whether this paragraph is currently relevant to the application?	Following the publication of the British Energy Security Strategy on the 7th April 2022, no further information regarding the proposed new guidance regarding the Habitats Regulations Assessment process has been published. As such, paragraph 2.8.110 of NPS-EN3 does not have any relevance to the assessment undertaken in support of the Projects' application at this time.
OR.1.36	**NPS EN-3 in relation to offshore ornithology** The ExA notes that section 12.4 of ES Chapter 12 [AS-057] omits reference to the last two bullet points of paragraph 2.8.136 of NPS EN-3 which state that, *'Offshore wind farms have the potential to impact on birds through: …. impacts upon prey species and prey habitat; and impacts on protected sites'.* Can you explain why these last two bullet points referring to prey species, prey habitat and impacts on protected sites were omitted and if they have any implications for your assessment and the Examination?	The last two bullet points of paragraph 2.8.136 of NPS EN-3 were omitted in error in the previous **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057] but were addressed under item 2.59 in Table 1-2 of **Policy Compliance Assessment Tables** [APP-227]. An updated version of Table 12-5 is provided in **Appendix H** of this document, including reference to this point regarding prey species and prey habitat.

I.D.	Written Question	Applicants' Response
OR.1.37	**NPS EN-3 in relation to offshore ornithology** Looking at the evidence in front of the Examination at this time, what is your position in respect of the following tests in NPS EN-3 (which the ExA must consider in its recommendation to the SoS)? a) *'The Secretary of State may consider that monitoring of any impact is appropriate owing to the complex nature of offshore wind development, and the difficulty in establishing the evidence base for marine environmental recovery'.* NPS EN-3 paragraph 2.8.296. b) *'The Secretary of State must be satisfied that displacement assessments have been conducted to a satisfactory standard having had regard to the advice from the relevant statutory advisor'.* NPS EN-3 paragraph 2.8.315. c) *'The conservation status of seabirds is of relevance and the Secretary of State should take into account the views of the relevant statutory advisors and be satisfied that cumulative and in-combination impacts on seabird species have been considered'.* NPS EN-3 paragraph 2.8.316.	a) The Applicants agree that monitoring of offshore wind farms is essential to improve the knowledge base for future developments and also to improve understanding of the potential impacts of existing wind farms on seabirds. The Applicants will fully engage with the regulator and stakeholders to develop appropriate monitoring for the Projects that aims to address both wider knowledge gaps and also reflects site specific sensitivities. b) The Applicants consider that the displacement assessments have been undertaken and presented in line with the statutory advice on this matter, including the incorporation of a considerable degree of precaution. c) Cumulative and in-combination impacts for species considered to be of risk have been provided as per industry standard practices. The impact assessment has given due consideration to the conservation status of these species, in particular those that are features of designated sites (i.e. SPAs). In summary, the Applicants consider that a robust and appropriate ornithological impact assessment has been presented for the Projects which passes all the tests in NPS EN-3.
OR.1.38	**Relevance of NPS EN-5** ES Chapter 12 (section 12.4.1.1) [AS-057] includes NPS EN-5 as a policy consideration, but then makes no further reference to it. Can its relevance be clarified in the context of offshore ornithology?	Table 1-3 of **Policy Compliance Assessment Tables** [APP-227] details how the Applicants' assessment has been undertaken in accordance with the relevant policies detailed in NPS-EN5. With regards to offshore ornithology, paragraph 2.9.6 regarding Biodiversity and Geological Conservation is of relevance to offshore ornithology, with this topic addressed under item 3.9 in Table 1-3 of the **Policy Compliance Assessment Tables** [APP-227].
OR.1.39	**Revised ES Chapter 12 Offshore Ornithology – connectivity** Revised ES Chapter 12 [AS-057] indicates that one of the key embedded mitigation measures for offshore ornithology was site selection, with arrays being located at least 100km from the nearest nesting colonies at Flamborough Head and the Filey Coast and, as such, connectivity for most species would be relatively low. 1. Do you agree that connectivity for most species would be relatively low? If not, explain why not. 2. Do you agree the site selection is an effective embedded mitigation measure for potential EIA offshore ornithological impacts?	No response is required. Question directed to Natural England.
OR.1.40	**Consideration of Highly Pathogenic Avian Influenza (HPAI) in the assessment of effects on marine bird species** The Applicants have added a section to consider how HPAI has been considered in the assessment of effects on marine bird species into Chapter 12 of the ES [AS-057, section 12.5.2]. Has this adequately addressed your concerns on this issue? If not, what is outstanding and what could the Applicants do to address your remaining concerns?	No response is required. Question directed to Natural England and the RSPB.

I.D.	Written Question	Applicants' Response
OR.1.41	**Seabirds of conservation concern** 1. Does the latest status assessment of breeding seabird species in the UK (the 2021 Birds of Conservation Concern 5 review and the update to the second International Union for Nature Red List review of extinction risk, published in British Birds, 2 September 2024, Stanbury *et al*) affect the marine ornithology assessment and results? 2. Are there implications for the HRA? If so, does the paper need to be made available to the ExA? 3. Do you have any comments on the paper's examination of HPAI to date that might be relevant to the Proposed Development?	1. The Birds of Conservation Concern (BoCC) reviews provide a high level overview of the status of all British bird species. As such, they do not specifically consider the potential effects of offshore wind farm development. These reviews are not specifically intended to be used to inform project level impact assessments, but rather to highlight general trends and changes to species' status. In contrast, the ornithology assessments for offshore wind farms present highly detailed, site specific analysis which takes into account seabird population conservation status at a range of scales from regional to breeding colony specific. Consequently, reviews such as BoCC, while useful as a guide to each species' wider conservation status, do not specifically inform the impact assessment, and this applies to the most recent one. The Applicants do not consider these changes merit a revision of the EIA Ornithology Assessment, however if this is revised to incorporate other changes these BoCC classifications will be amended. 2. The review (Stanbury *et al.* 2024) can be provided if the ExA would wish to review it, however, as noted above, the Applicants do not consider the information therein will be of specific relevance to the HRA or EIA. 3. Stanbury et al. (2024) provide consideration of the potential for HPAI to have affected seabird populations. The only one which is considered by the Applicants to be of relevance to the Projects is gannet. This species suffered declines at some colonies due to HPAI, although notably the BoCC status for this species did not change as a consequence (remaining Amber). There are also encouraging signs that the populations are showing relatively rapid recovery. For example Bass Rock, the species largest colony, reported heavy losses in 2022, with estimates of dead birds at the colony ranging from 3,761 to 5,053 (Tyndall *et al.* 2024). However, in 2023 the same methods reported only 23 to 43 dead birds, and an apparent recovery in the live population of 166% (Tyndall et al. 2024). Overall, Stanbury et al. (2024), as outlined in point 1 above, provides a relatively high level overview of bird population status which is informative as background context, but does not provide the detailed population estimates on which impact assessments are built.
OR.1.42	**Great black-backed gull and lesser black-backed gull cumulative totals** Can you check the cumulative collision impacts for great black-backed gull and lesser black-backed gull as per NE's advice [AS-161]?	The Applicants will review the cumulative collision totals for these species and provide an update at Deadline 4 if appropriate. However, in advance of this review the Applicants note that cumulative and in-combination tables often vary between applications due to differences in presentation of factors such as avoidance rates, and these are often explained in the accompanying text. Furthermore, the Applicants are of the opinion that revising these tables will have no material effects on the assessment conclusions and note Natural England has made no suggestion to the contrary. So these aspects should not be the cause of any delay in Natural England finalising their position on the applications' impacts on ornithological interests.
OR.1.43	**Inconsistency between the cumulative and in-combination totals between the ES and the RIAA** 1. Can you provide an explanation for why the cumulative impact totals presented in ES Chapter 12 section 7.12 [AS-057] and the unapportioned in-combination totals presented in the RIAA [AS-086] do not always match? 2. Can you check the cumulative and in-combination totals for all species as per NE's advice [AS-161] and provide an explanation for the difference or update as necessary?	The Applicants have responded to Natural England on this matter (Applicants responses to NE comment R&I ref: G54 in **The Applicants' Responses to Deadline 2 Documents** [document reference: 13.3]). The response is reproduced here for convenience. *The collision estimates in these tables reflect different collision avoidance rates that have been applied in the past. For example, for kittiwake the title for table 12-99 of 7.12 ES Chapter 12 [AS-058] states that the collisions are presented using the older avoidance rate of 98.9% unless otherwise indicated (see the table footnotes) and in the text that follows the table (paragraphs 809 and 810), it is explained how the total value changes with the application of the more recently advised higher avoidance rate. In Table 9-23 of* ***6.1 RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)*** *[AS-086] the collisions have been adjusted using the updated avoidance rate of 99.2%. It is acknowledged that this aspect (presentation of collision for older wind farms which used different avoidance rates) is one which can result in confusion such as here, however the figures indicated by Natural England are all correct and the associated text explains this.*
OR.1.44	**Ornithological mitigation** NE stated in its RR [RR-039] that further ornithological mitigation should be considered for the Proposed Development. Specific mention was made of the potential for:	a) Density mapping data based on the site-specific aerial survey data was collated and examined (pre-application) to indicate areas within The Crown Estate lease options that showed higher and lower densities of birds, with one area related to birds used in the boundary refinement (this was presented as part of the minutes from the ornithology ETG meeting held on 6th February 2024 (see **Consultation Report, Appendix F - Non-statutory consultation and engagement** [APP-043]). Generally, the Applicants consider that hotspot modelling is an unreliable basis on which to conduct any boundary changes since seabird distributions are notoriously variable through time, and the snapshots collected for the impact assessment, while considered a reliable guide in terms of population

I.D.	Written Question	Applicants' Response
	a) Hotspot modelling of seabird densities and distributions in the study to identify areas where impacts are particularly high, which might be suitable for changes to array size or layout to mitigate impacts. b) Consideration of further mitigation such as: i. array reductions, ii. changes to the design or layout of arrays, and iii. increasing the hub height of turbines. The ExA notes your response to this representation in Response to NE's Relevant Representations (Appendix G & H) (Revision 01) [PDB-006]. It appears from NE's representation and reasserted position on this in their Risk and Issue log [AS-161] and Appendix H [AS-160] that further mitigation could be feasible and should be considered beyond those measures referenced in your response [PDB-006], particularly in light of NE's statement that, to date, the Proposed Development would be the highest impacting project in English waters on FFC SPA kittiwake. Can you expand on what further mitigation you have considered in light of NE's representation on this matter and whether the mitigation hierarchy has been fully adhered to for ornithological impacts? Can you justify your response?	estimates generally, are not considered to represent static and consistent locations. It would therefore not be appropriate to use these as a means to further modify the site boundaries. b) The Applicants reiterate that mitigation relating to air gaps has been applied in accordance with the Round 4 plan level Habitats Regulation Assessment (The Crown Estate 2022) whereby, to reduce potential collisions with birds in flight (particularly kittiwakes), the clearance of the blades above the water was set at a minimum 34m above MSL. This mitigation measure was committed to by the Applicants early in the strategic compensation process and has been adhered to within the design envelopes of the Projects. The Applicants continued and are continuing to review the consenting, technical and commercial feasibility of increasing the minimum air gap throughout the pre-application and examination phases. The Applicants note that whilst increasing the lower blade tip clearance to minimise ornithological impact naturally leads to an increase to the upper tip height, this also has a consequential increase in the risk of impact. The Applicants have submitted an **Ornithological Mitigation Option Report** [AS-118] which considered the feasibility of increasing the air gap/hub height. The conclusion of this work is that increasing the air gap beyond 34m is not currently feasible due to the increased consenting, engineering, and financial risks to such an extent as to potentially make the Projects commercially unviable. Further justification is presented in the **Ornithological Mitigation Option Report** [AS-118]. As part of the progression of project design from the Preliminary Environmental Information Report to the application stage the array area boundaries were reduced and refined. A number of factors, including bird distribution data, were considered as part of the boundary refinement exercise. Density mapping based on the site-specific aerial survey data was collated and examined to indicate areas within The Crown Estate lease options that showed higher and lower densities of birds, and this was used alongside other environmental and technical information to enact the boundary change. An outline of the factors considered in the boundary refinement exercise was presented as part of the minutes from the ornithology ETG meeting held on 6th February 2024 (see **Consultation Report, Appendix F - Non-statutory consultation and engagement** [APP-043]). The refinements to the Array Area boundaries was, therefore, undertaken to help reduce impacts on important bird populations. Any reductions or changes to the array design or layout must be considered against other environmental, technical, and engineering constraints, as well as benefits to ornithology. For example, the layout and site design must include requirements by MCA and Trinity House for navigational safety, including the provision of Search and Rescue lanes. Furthermore, The Crown Estate Lease requirement to meet a minimum specific power density would make further amendments to site design challenging at this stage. The Applicants must seek to achieve as close to the minimum power density of 5MW/km² in order to be competitive in the highly competitive bidding process for a Contract For Difference, without which the Projects may be delayed or not be constructed at all. The Applicants consider that a robust assessment has been provided and, with the exception of those SPA features for which an in-combination adverse effect on integrity has been conceded, this has demonstrated that the Projects will not have any significant or adverse effects on integrity of ornithological interests. Through the refinement of the Array Areas at PEIR, the reduction in numbers of turbines for the Projects to a maximum of 200 turbines from the maximum of 300 turbines proposed in the Projects Scoping Report[63] and the commitment to a minimum air gap of 34m, the Applicants have demonstrated clear adherence to the mitigation hierarchy to avoid, reduce and mitigate as far as practicable the impacts to offshore ornithology. On this basis the Applicants do not consider any additional mitigation is required.
OR.1.45	**Decommissioning displacement impacts** Your RR [RR-039] advised that an assessment of seabird displacement impacts during decommissioning would be necessary. The Applicants have said [PDB-006] that the decommissioning assessment was assumed to be equivalent to construction, in line with best practice. Your latest Risk and Issue Log [AS-161]	No response is required. Question directed to Natural England.

[63] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010125/EN010125-000181-DBS%20-%20Environmental%20Impact%20Assessment%20Scoping%20Report.pdf

I.D.	Written Question	Applicants' Response
	advises it would be beneficial for decommissioning impacts to be explicitly quantified in the assessment as for construction impacts. Can you give examples of other OWF DCO applications for which this has been requested and for which the Applicants have provided this information?	
OR.1.46	**Conservation value in the derivation of significance** ES Chapter 12 [AS-057, paragraph 32] explains that the assessment of significance takes account of conservation value and that, *'the narrative behind the assessment is important here; the conservation value of an ornithological receptor can be used where relevant as a modifier for the sensitivity (to the effect) already assigned to the receptor.'* 1. Can you signpost where this narrative is provided for each of the ornithological receptors considered for which the modified has been used? 2. Table 12-14 lists the bird species and their Birds of Conservation Concern colour listing. How were these accounted for in each species-impact assessment?	The species' conservation value and status have not been used in the assessment in a prescriptive manner, but rather to provide background context for the assessment. For example, the assessment of an impact on the growth rate or mortality of a species which has a relatively large population and is undergoing positive growth would be considered of lower concern than for a species with a smaller population or one that is in decline. These factors have been taken into account in the assessment where appropriate.
OR.1.47	**Comparative sea level benchmarks** There appeared to be some confusion during pre-application consultation over the use of MSL when describing blade clearance height (rather than highest astronomical tide (HAT)). You have explained in the application documents and your post Preliminary Meeting adjournment submissions [PDB-006] why MSL is used. However, for full transparency, can you: 1. Amend Table 5-2 in ES Chapter 5 – Project Description [REP1-009] to include values presented in MSL, HAT and MHWS? 2. Provide confirmation whether the use of MSL aligns with the requirements of The Crown Estate Record of the Round 4 Habitats Regulations Assessment 2, which specifies 'sea level' rather than 'mean sea level'?	1 - The minimum lower blade tip clearance to: • MSL is 34m; • HAT is 32.4m; • MHWS is 32.8m Table 5-2 of **Chapter 5 Project Description** [REP1-059] will be amended to include these values in the next revision of this chapter. 2 - It is unclear to which part of the Crown Estate assessment this request refers. However, the Applicants consider the important aspect to be that whichever sea level datum is used this is clearly stated, as is the case in the ornithology assessment. Therefore, there is no means to determine which sea level was being referred to in the Crown Estate HRA. It is also very relevant that the seabird flight height dataset, used by all offshore wind farm developers in their collision risk modelling, is measured from MSL and hence it is considered appropriate to discuss turbine heights for collision risk modelling with respect to the same reference point. Furthermore, since the Crown Estate HRA was a form of strategic assessment it also follows that, as is standard, any specific assessment conclusions (such as collision risks) which were based on assumptions about seabird densities and turbine specifications made prior to data collection and design decisions, will now be superseded by the individual Projects' assessments. Hence the question of which sea level datum was used in the Crown Estate HRA is no longer considered relevant.
OR.1.48	**Scope of Population Viability Analyses studies** 1. Can you clarify the intended scope of information in Appendix 12-13, Population Viability Analyses [APP-116]? Paragraph 1 says that this provides details of the Population Viability Analyses for the kittiwake breeding population at the FFC SPA, yet there are tables and figures referring to gannet, razorbill and guillemot.	1) The PVA in APP-116 have now been replaced by PVA in Annex A of the **RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)** [AS-085], which provides PVA for gannet, kittiwake, guillemot, razorbill and puffin. 2) The dashed lines provide the upper and lower confidence intervals, with the colours corresponding to the median outputs plotted as solid lines.

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	2. In Appendix 12-13, Population Viability Analyses [APP-116], can you clarify the legends of the graphs in terms of the outputs of the various Population Viability Analyses, and what the hatched lines show?	
OR.1.49	**Collision risk modelling and associated parameters in the draft DCO** 1. Can calculations be provided to support the statement in the ES Chapter 12, section 12.8.3 paragraph 720 [AS-057] that: *'For all species, the worst-case design was the more numerous small wind turbine scenario.'* Is this true for both DBS East and West individually and combined? Support your answer with further calculations. 2. The ES Project Description Table 5-2 [REP1-009] specifies a maximum number of wind turbines of 57-100 for DBS East and West individually and 113-200 combined. Can you explain how 100 smaller diameter wind turbines of 259m diameter would keep within the specified maximum rotor swept area (for small turbines) specified in Table 5-2 of 5.263 km^2? Support your answer with calculations presented in both km^2 and m^2. 3. The ES Project Description Table 5-2 [REP1-009] specifies a maximum number of wind turbines of 57-100 for DBS East and West individually and 113-200 combined. Can you explain how 57 larger diameter wind turbines of 344.08m diameter would keep within the specified maximum rotor swept area (for large turbines) specified in Table 5-2 of 5.299 km^2? Support your answer with calculations presented in both km^2 and m^2. 4. The control on the number of turbines of a particular diameter is often done by specifying the maximum rotor swept area in a DCO, (for example, see Sheringham and Dudgeon and Awel y Môr). Can you explain why the maximum rotor swept area is not currently included in the DBS draft DCO [REP1-004] and how the current drafting of the draft DCO would control the number and diameter of turbines permitted to be constructed?	1. The complete collision risks for both turbine models under consideration were provided in **Appendix 12-9 - Collision Risk Modelling Outputs** [APP-112]. This demonstrates that Turbine model 1 (100 smaller turbines in both East and West) is the worst case for impacts for all species. 2.The **approximate** small turbine rotor diameter, as noted in Table 5-2 of **Chapter 5 Project Description (Revision 3)** [REP1-009] is 259m. This figure was rounded up from the more specific (but still indicative) figure of 258.87m, which was used to calculate the total rotor swept area. The total rotor swept area for 100 turbines with an indicative diameter of 258.87m is calculated as: 100 x $(258.87/2)^2$ x pi = 5.263km^2 (or 5,263,241.88m^2). 3. The **approximate** large turbine rotor diameter, as noted in Table 5-2 of **Chapter 5 Project Description (Revision 3)** [REP1-009] is 344.08m. This figure was rounded up from the more specific (but still indicative) figure of 344.076m, which was used to calculate the total rotor swept area. The total rotor swept area for 57 turbines with a diameter of 344.076m is calculated as: 57 x $(344.076/2)^2$ x pi = 5.300km^2 (or 5,299,971.06m^2). The Applicants acknowledge the maximum rotor swept area for large turbines in km^2 should be stated as 5.300km^2 and will make the necessary updates to **Chapter 5 Project Description (Revision 3)** [REP1-009] when it is updated at Deadline 8. The Applicants note that this previous rounded figure of 5.299km^2 was not used in the parameters underpinning **Appendix 12-9 - Collision Risk Modelling Outputs** [APP-112] or for any other calculations presented in the DCO Application. 4. Requirement 2 of the **Draft DCO (Revision 6)** [document reference 3.1] includes restrictions on both the number and diameter of turbines permitted to be constructed. It states that the number of wind turbine generators in respect of the DBS East Project offshore works must not exceed 100 and in respect of the DBS West Project offshore works must not exceed 100. It also limits the rotor diameter of each turbine to 344.08m, as well as containing restrictions on the height and spacing of the turbines and the minimum air gap. It is therefore not considered to be necessary to also secure the rotor swept area.
OR.1.50	**Collision risk modelling and associated parameters in the draft DCO** Following on from written question OR.1.50, do you believe the rotor wind swept area should be included as a parameter in the draft DCO as per other made orders for other offshore windfarms such as Sheringham and Dudgeon and Awel y Môr?	No response is required. Question directed to Natural England / RSPB and The Wildlife Trusts.
OR.1.51	**Digital aerial survey methodology** In its RR [RR-049] and again in its WR [REP1-087], the RSPB raised a number of concerns about a perceived lack of methodological detail in relation to the digital aerial survey, and further signposting was provided by the Applicants in response [PDA-013]. Are there any matters outstanding in relation to this? If so, please state what they are and how they could be resolved by the close of the Examination.	The Applicants do not consider there to be any remaining outstanding matters in relation to this query, and note the submission of the **Response to RSPB comments on Digital Aerial Surveys** [document reference: 13.4] submitted at Deadline 3 provides further clarifications regarding the RSPB's queries on Digital Aerial Surveys. The Applicants consider that this matter has now been resolved.

I.D.	Written Question	Applicants' Response
OR.1.52	**New research findings** At least two scientific research papers that may be relevant to the offshore ornithology assessment have been published since the submission of the application - do either of these or any other recent research have any implications for the assessments reported by the Applicant for the EIA and HRA? (1: Davies, JG *et al*, Influence of wind on kittiwake *Rissa tridactyla* flight and offshore wind turbine collision risk. Marine Biology **171**, 191 (2024). 2: Pollock, CJ *et al*, Avoidance and attraction responses of kittiwakes to three offshore wind farms in the North Sea. Marine Biology **171**, 217 (2024).)	These studies, and other new research, provide useful information on seabird interactions with wind farms, however in terms of how the assessments are conducted it is typically necessary for Natural England to review these findings and determine if an update to their guidance is required. The Applicants therefore consider this question is best addressed by Natural England.
OR.1.53	**Greater Wash SPA – qualifying features** Along with red-throated diver, paragraph 5.2 and Table 5.1 of your RR [RR-039] identifies common scoter, little gull and little tern from the Greater Wash SPA as features for which outstanding concerns remain. Can you confirm your concerns in relation to these?	No response is required. Question directed to Natural England
OR.1.54	**Greater Wash SPA - red-throated diver** Regarding potential impacts on red-throated diver in the Greater Wash SPA, NE noted that the avoidance of works during the over-wintering period (1st November to 31st March inclusive) has not been included as a mitigation measure [RR-039]. You are of the view that this measure is not required, but have proposed other measures including use of existing shipping lanes [AS-085]. NE has responded [AS-159], reiterating advice that you should commit to avoiding or restricting cable installation works within the Greater Wash SPA plus a 2km buffer during the over-wintering period (1st November to 31st March inclusive) to avoid adverse impacts on red-throated divers from the Greater Wash SPA. How do you intend to resolve this disagreement with NE by the close of the Examination?	The Applicants have provided additional detail regarding the potential effects on red-throated diver as a result of the Projects in **The Applicants' Responses to Deadline 2 Documents** [document reference 13.3], which is repeated below. The Applicants maintain the position that avoidance of works during the over-wintering period for red-throated diver is not required for the Projects, and await Natural England's response to the submission detailed below. *The total area of overlap of the Offshore Export Cable Corridor with the Greater Wash SPA is 12.1km². This represents approximately 0.3% of the total area of the Greater Wash SPA, which measures 3,536km² in extent. As noted in section 9.5.2 of* ***RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)*** *[AS-085], accounting for the use of two cable installation vessels and the 2km buffer around each vessel, the worst case area from which birds could be displaced during Offshore Export Cable installation activities is 25.2km², approximately 0.7% of the total area of the Greater Wash SPA.* *The Offshore Export Cable Corridor intersects the Greater Wash SPA at the very northern extent of the SPA's boundary. The region of the SPA which the Offshore Export Cable Corridor crosses has low densities of red-throated diver recorded, and the nearshore sections were not identified as within the species' distribution within the documentation that detailed the scientific case for the classification of the Greater Wash as a potential Special Protection Area (Natural England and JNCC 2016[64]). The peak density of red-throated diver within the overlap of the Offshore Export Cable Corridor and the SPA is between 0.68 and 0.87 birds/km², indicating up to 17 to 22 divers could be displaced at any given time during installation of the Offshore Export Cable Corridor. Installation of the trenchless crossing (e.g. Horizontal Directional Drill) exit pits and Offshore Export Cables for the projects within the Greater Wash SPA would occur as single isolated events. As such, any disturbance of red-throated diver individuals would occur in discrete events, and would not represent a continuous and sustained period of disturbance.* *As noted in section 9.5.2 of* ***RIAA HRA Part 4 of 4 – Marine Ornithological Features (Revision 3)*** *[AS-085], the review of available evidence for red-throated diver displacement previously submitted for the Norfolk Vanguard assessment (MacArthur Green 2019a) concluded that there would be little or no effect of displacement on diver survival. In line with this conclusion, a maximum, and hence precautionary, displacement caused mortality rate of 1% was identified as appropriate for the assessment conducted for the Projects. At this level of additional mortality, only a maximum of 0.2 individuals would be expected to die across the entire winter period (September to*

[64] V9 FINAL Greater Wash Departmental Brief 17 October 2016 ready for consultation.pdf

I.D.	Written Question	Applicants' Response
		April) as a result of any potential displacement effects from the offshore cable installation activities, which would be restricted to a maximum of one nonbreeding season. *The estimated non-breeding population of red-throated divers for the Greater Wash SPA, from the SPA citation at classification, was 1,407 individuals. This is a mean of peak counts from aerial surveys carried out between 2002/03 to 2005/06 (Lawson et al., 2016; Natural England and JNCC, 2016).* *The Greater Wash SPA population estimate may be considered dated as it is more than 10 years old. For the Outer Thames Estuary SPA, immediately to the south of the Greater Wash, more recent surveys in 2018 and 2013 resulted in an 180% increase to the SPA population estimate, from 6,446 individuals at the time of designation in 2010, to 18,079 (Natural England, 2019). This increase is attributed to a more accurate census method, with earlier surveys based on observers recording from planes likely to be an underestimate compared with more recent surveys using digital aerial photography. Thus, the population estimate on the Greater Wash SPA citation may underestimate the numbers present within the SPA and the actual density of red-throated diver present within the overlap of the Offshore Export Cable Corridor and the SPA.* *Given the minimal overlap of the Offshore Export Cable Corridor in relation to the Greater Wash SPA as a whole, the low peak density of red-throated diver individuals located within the overlapping area, and the low number of individuals expected to be displaced across the entire installation period, the Applicants consider a restriction on installation works within Greater Wash SPA plus a 2km buffer during the over-wintering period (1st November to 31st March inclusive) to be over-precautionary to the potential level of disturbance.* *The Applicants also note that no such restriction was placed on the Dogger Bank A and B (formerly Creyke Beck) offshore wind farm projects. The offshore export cable corridor for these projects also overlaps the Greater Wash SPA at the northern boundary of the site to a minimal extent (0.2% of the overall Greater Wash SPA area).*
OR.1.55	**Cumulative assessment for impacts on red-throated diver** Can you revisit the figures presented in your cumulative assessment and clarify how they have been arrived at, according to NE's advice that that these figures should be presented with an appropriate range of mortality rates between 1% and 10% for array displacement, [AS-159]?	The Applicants will review these figures and provide an update at Deadline 4 if appropriate. However, in advance of undertaking this review, the Applicants note that Natural England has already stated their position on this matter (*long-standing position that significant adverse effects at the EIA scale could not be ruled out for this species due to cumulative impacts*) and therefore any revision to this assessment will have no material effect on their conclusions. So this aspect should not be the cause of any delay in Natural England finalising their position on the applications' impacts on ornithological interests. The Applicants also note that Natural England appears to have mistakenly made reference to the array in their recommendations (*appropriate range of mortality rates between 1 and 10% for array displacement*). The Applicants note that the DBS Array Areas are far beyond the coastal waters favoured by this species, and only one individual was recorded during the 24 baseline surveys (in May, in flight through the 4km buffer of DBS West). Therefore the Applicants consider this reference to the Array Areas has been made in error, and that Natural England's focus is on the potential impacts to this species which may occur in coastal waters (i.e. the cable route and vessel routes).
OR.1.56	**Transboundary 32 response – Denmark** 1. Have the Applicants adequately addressed your concerns [OD-010] in the Applicants' responses to Regulation 32 Transboundary Consultation Responses [AS-117]? 2. Do you have any outstanding concerns? If so, please provide further detail and suggest how these could be resolved.	No response is required. Question directed to The Denmark Environmental Protection Agency.
OR.1.57	**Transboundary 32 response – Germany**	No response is required. Question directed to The Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz (Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection).

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	Have the Applicants adequately addressed your concerns [OD-011] in the Applicants' Responses to Regulation 32 Transboundary Consultation Responses [AS-117]? If not, explain why not and suggest how these could be resolved.	
OR.1.58	**Transboundary 32 response – The Netherlands** 1. Have the Applicants adequately addressed your concerns [OD-012] in the Applicants' Responses to Regulation 32 Transboundary Consultation Responses [AS-117] in relation to ornithology? If not, explain why not and suggest how these could be resolved. 2. In your Regulation 32 transboundary consultation response [OD-012], you stated that you *'expect considerable habitat loss for various bird species by this new development'*. Can you provide any more detail on this point, such as where the habitat loss would occur?	No response is required. Question directed to The Netherlands Ministry of Infrastructure and Water Management.

1.24 Planning and Policy Context

Table 1-24 - Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Planning and Policy Context

I.D.	Written Question	Applicants' Response
PPC.1.1	**Consultation responses regarding site selection and assessment of alternatives** Can you provide an overview of comments received during the pre-application stage regarding site selection and assessment of alternatives and the Project Response, as has been provided for most other ES chapters (for example [APP-073], [APP-082], [APP-087])?	An overview of comments received during the pre-application stage regarding site selection and assessment of alternatives and the Project Response, is provided in **Appendix I**.
PPC.1.2	**Mitigation hierarchy and application of Critical National Priority (CNP)** The Planning Statement [APP-226, paragraph 497] suggests that there is a presumption in favour of granting consent for the Proposed Development, which, in part, arises from the fact it would deliver CNP infrastructure. Section 4.2 of NPS EN-1 explains that the application of CNP applies following the consideration of the need case, the impacts of the project and the application of the mitigation hierarchy which is to avoid, mitigate and compensate. The exceptions to the presumption for residual impacts are also set out. The flow diagram on page 56 sets out that it is for the SoS to apply CNP if the applicant demonstrates that the mitigation hierarchy, requirements in EN-1 and the relevant technology specific NPS have been applied, as well as any other legal and regulatory requirements. In this context, can you provide a clear statement of your consideration of section 4.2 of NPS EN-1, including the potential exceptions that the SoS should have regard to when applying CNP to decision-making?	Paragraph 4.1.3 of National Policy Statement (NPS) EN-1 directs that "*the Secretary of State will start with a presumption in favour of granting consent to applications for energy NSIPs*". Paragraph 4.1.7 goes further, stating "*For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases*". The Applicants are confident that, at 3GW and with the potential to supply the annual needs of around 3 million UK homes[65], the Dogger Bank South projects would provide low carbon energy at significant scale and qualify as critical national priority infrastructure. The Projects have followed the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 in assessing the impacts of the Projects within the Environmental Statement (ES) as outlined within the ES Chapters on Introduction and Policy and Legislative Contexts. Each ES Chapter provides an overview of significant residual effects as well as the proposed mitigation measures to reduce the impacts. Application of the mitigation hierarchy can be observed in the design of the project, which sought to avoid impacts (commonly referred to as embedded mitigation), and mitigation measures subsequently applied. Such measures are additionally described in the **Commitments Register (Revision 2)** [REP2-025]. Compliance with EN-1, EN-3 and EN-5 are set out in full in the **Policy Compliance Assessment Tables** [APP-227] While the presumption in favour of CNP infrastructure directs that the needs case will outweigh most residual impacts, Paragraph 2.4.15 of NPS EN-1 excludes from these residual impacts "*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 … offshore navigation, or to onshore flood and coastal erosion risk*". The Projects' Environmental Impact Assessment does not find any residual impacts in these areas, save for a temporary effect on air quality caused by construction near to the Bentley Moor Wood Local Wildlife Site. This effect to the ancient woodland habitat has been assessed significant, but this does not constitute an unacceptable risk to irreplaceable habitat. The Applicants do not think that there is any reason why the SoS should not apply the CNP standard to the Dogger Bank South projects, and there are no EIA exceptions to the resultant presumption in favour.
PPC.1.3	**NPS EN-1** Can you expand on how you have taken a co-ordinated approach to onshore transmission, offshore transmission, and offshore generation and interconnector developments with other existing and potential energy providers in accordance with NPS EN-1 paragraph 3.3.80?	Paragraph 3.3.80 of NPS EN-1 seeks consideration of coordination between developments to reduce "avoidable disruption, inefficiency, and visual impacts". The Dogger Bank South projects are two separate proposed wind farms which would share a cable corridor and use adjoining onshore converter stations. The two projects, consented

[65] Calculation based on 2021 generation, and assuming average (mean) annual household consumption of 3,509 kWh, based on latest statistics from Department of Energy Security and Net Zero (Subnational Electricity and Gas Consumption Statistics Regional and Local Authority, Great Britain, 2021, Mean domestic electricity consumption (kWh per meter) by country/region, Great Britain, 2021).

I.D.	Written Question	Applicants' Response
		through the same DCO, have been designed to reduce the disruption and inefficiency cautioned by the NPS, and as such answer the challenge posed by the policy. The Applicants have cooperated with the National Energy System Operator, and the Dogger Bank South Projects were scoped into the Holistic Network Design (2022) (referenced in NPS EN-1 Paragraph 3.3.74). However, further work by the System Operator effectively de-scoped the projects from the South Cluster, recommending that the projects use a radial connection. This work is reported in **Appendix 4-1 - Ofgem and National Grid Electricity System Operator Holistic Network Design Statements** [APP-069]. Though the coordinated design of the projects, and by working with the System Operator, the Applicants have complied with the requirements of the policy.
PPC.1.4	**NPS EN-1** NPS EN-1 paragraph 2.3.7 states that regard should be had to the aims, goals and targets of the Government's Environmental Improvement Plan and other existing and future measures and targets in England. How has the Proposed Development had regard to this? On 30 July 2024, the Government announced a rapid review of the Environmental Improvement Plan to deliver its legally binding targets to save nature. Does this have any implications for the Proposed Development? If so, what are they and would this alter any of the conclusions in the ES or Planning Statement?	The apex goal of the Environmental Improvement Plan 2023 is "thriving plants and wildlife". The Dogger Bank South projects are the largest renewable energy projects currently being developed in the UK and make up almost 40% of the capacity of the Round 4 leasing projects. The low carbon electricity they would generate would significantly decarbonise the UK's energy supply, helping to mitigate the risk that climate change presents to plants and wildlife. Further, the projects are committed to ensuring no net loss of biodiversity through the delivery of the Projects (see **Appendix 18-10 - Biodiversity Net Gain Strategy** [APP-157]) and to enhance habitats where practicable. On 30 January 2025, the Government published an interim statement on the Environmental Improvement Plan rapid review, announcing that a revised Plan will be published in 2025. While the Applicants have no prior knowledge of the contents of such a revised Plan, if it is similar to the original Plan then it should not have implications for the Proposed Development, nor would it alter the conclusions of the ES or Planning Statement. The Projects, which seek to mitigate climate change are fundamentally in conformity with the goals of the Environmental Improvement Plan.
PPC.1.5	**Needs case** ES Chapter 2 [APP-065] presents various potential benefits associated with delivery of the Proposed Development. Given that an application should be presented on a precautionary (worst case) basis, only the benefits of delivering one array area should be presented in Section 2.4 of [APP-065]. For example, paragraph 39 presents employment benefits of the concurrent delivery of both array areas. Can you review this document and present the needs case and potential benefits of the Proposed Development on a worst case scenario basis?	**Chapter 2 Need for the Project** [APP-065] accurately presents the contribution that the Dogger Bank South offshore wind farms could make to decarbonisation and employment if both projects are built. As consent is sought for both projects, the Applicants consider that this is a reasonable description of the Projects' ability to meet the needs established by government policy. **Chapter 6 EIA Methodology** [APP-076] paragraph 2 describes the three development scenarios assessed, with construction of a single wind farm 'in isolation' as least likely. The implications for all three scenarios are described in full in **Chapter 28 Socio-economics** [APP-217] and **Chapter 30 Climate Change** [APP-222].
PPC.1.6	**Contribution of the Proposed Development** Can you signpost in the application documents where you quantify the Proposed Development's contribution to combating climate change, a reduction in greenhouse gas emissions and to energy security? What percentage of the UK's energy consumption could the Proposed Development provide? What percentage of the UK's energy targets could the Proposed Development achieve? What would be the installed capacity and the likely generating capacity of the Proposed Development (confirm what load factor you use in determining this information)? Can you also signpost to where this information is provided for all scenarios (in isolation array area delivery, sequential array area delivery and concurrent array area delivery). If this information has not yet been provided, then can you do so?	With a combined capacity of 3GW, the Dogger Bank South (DBS) Offshore Wind Farm Projects are critical, flagship national projects necessary for driving forward the UK's renewable energy agenda. As described in Chapter 2 Need for the Project [APP-065] (section 2.4) the Projects would make a significant contribution to the achievement of both the national renewable energy targets and to the UK's contribution to global efforts to reduce the effects of climate change. The Projects would also help to reduce the UK's reliance on imported energy and to improve energy security, generating enough clean renewable energy to power around 3 million typical UK households per year[65]. The Projects are currently the largest offshore wind projects currently being developed in the UK, making up almost 40% of the capacity of the UK's offshore wind Round 4 leasing projects. If approved, construction could commence in 2026/27, with first power generation expected to contribute to the UK Government's clean energy targets in 2030.

I.D.	Written Question	Applicants' Response
		Chapter 30 Climate Change [APP-222] outlines the contribution of the Projects to combating climate change. The installed capacity for the In Isolation Scenario is 1,500 MW as provided in paragraph 131 of APP-222. This would be doubled to 3,000 MW in the Sequential and Concurrent Scenarios. As stated in paragraph 131 of **Chapter 30 Climate Change** [APP-222], the assumed capacity factor for the Projects is 63.1%, which was derived from the Department for Business, Energy and Industrial Strategy for new build offshore wind projects. There are currently no established electricity or consumption targets in the UK beyond the target established by UK Government of 50 GW offshore wind capacity by 2030. The Projects would provide 3% and 6% of the contribution towards the 50 GW capacity target for the In Isolation Scenario, and Sequential and Concurrent Scenarios respectively. Beyond 2030, the balanced pathway of the 7th Carbon Budget assumes that capacity from offshore wind would increase from 15 GW in 2023, to 88 GW by 2040. The Projects would therefore provide 1.7% and 3.4% of the contribution 88 GW capacity ambition for the In Isolation Scenario, and Sequential and Concurrent Scenarios respectively. **Chapter 30 Climate Change** [APP-222] also describes how the avoided emissions were estimated to be approximately 91.8 million and 183.4 million tonnes for the In Isolation and Sequential Scenarios respectively (over the Projects' operational lifetimes) resulting in a beneficial effect, which is considered to be significant in EIA terms. In summary, the Projects would make a substantial contribution to the UK's electricity generation while helping the UK to reduce its carbon emissions in line with Government's legally binding targets to achieve net zero by 2050. Should the Projects be approved, they will play a major part in advancing offshore wind capacity in the UK.

1.25 Shipping and Navigation

Table 1-25 - Applicant's comments on the Examining Authority's Written Questions (ExQ1) - Shipping and Navigation

I.D.	Written Representation	Applicant's Comment
SN.1.1	**DFDS consultation response** ES Chapter 14 [APP-121, paragraph 309] explains DFDS Seaways confirmed during consultation that there is a no lose approach to the DBS array areas in normal or adverse weather conditions for the Immingham-Gothenburg route and thus there would be no direct impact. Can you provide or signpost to where this consultation response can be found?	The Applicants wish to clarify that this DFDS Seaways comment should read as "*no close approach to the DBS Array Area*". This response from DFDS Seaways was received via email correspondence on 4th December 2023 and clearly indicates that they have no concerns relating to the Projects given that they do not transit in proximity to the Dogger Bank South (DBS) Array Areas. This email has been included in **Appendix J – WQ SN.1.1 Shipping and Navigation DFDS Email** of this response.
SN1.2	**Effect on commercial vessels** Table B-1, when cross referenced with Table 3-1 and Table 3-2, of the Navigational Risk Assessment [APP-124] identifies a reasonably probable serious cumulative effect of the proposed DBS East and West arrays for commercial vessels. Can you comment on this and confirm you are satisfied that the commercial impact of the proposed development on ports and commercial shipping has been appropriately assessed and mitigated. Please provide justification in your response.	No response required. Question directed to UK Chamber of Shipping and UK Major Ports Group.
SN.1.3	**Significance of effect** ES Chapter 14 [APP-121, Table 14-32] identifies vessel displacement, increased vessel to vessel collision risk, collision risk between third-party vessels and a project vessel, and reduction of emergency response capability including search and rescue as 'tolerable with mitigation' for all phases of the project, after considering the embedded mitigation measures. As no additional mitigation measures are proposed, please clarify whether the significance of effect for these hazards is correct.	The significance of effect associated with these hazards is 'tolerable with mitigation'. In the context of this terminology, mitigation refers to the embedded mitigation measures, i.e., a tolerable level of significance is concluded with the embedded mitigation measures in place. Across the relevant impacts embedded mitigation measures include (but are not limited to) compliance with MGN 654, promulgation of information, charting of infrastructure, lighting and marking and marine coordination for project vessels. Following the International Maritime Organisation Formal Safety Assessment methodology required under MGN 654, this significance of effect is considered 'as low as reasonably practicable' and not significant in Environmental Impact Assessment terms.
SN.1.4	**Effect on recreational vessels** To demonstrate a worse-case scenario has been assessed, can you provide, or signpost where it can be found in the application documents, the vessel displacement assessment for recreational vessels that pass around the arrays? [APP-121], paragraph 116]	The significance of effect summarised in Table 14-12 and Table 14-13 of **Chapter 14 Shipping and Navigation** [APP-121] in relation to vessel displacement and third-party collision risk account for all vessel types including recreational vessels.
SN.1.5	**Future case annual frequencies** The Navigational Risk Assessment [APP-124, Table C.6] identifies fishing vessel to structure allision annual frequencies including future case uplifts of 10% and 20%. Can you signpost where the future case annual frequencies have been stated in ES Chapter 14 [APP-121] and how they are reflected in the assessment of likely significant effects? For example, paragraph 168 of ES Chapter 14 [APP-121] state, '*it has been assumed that the baseline fishing activity in terms of proximity to wind turbines would not change*'.	The future case annual frequencies for fishing vessel to structure allision risk, based on potential growth in fishing vessel movements of 10% and 20%, are provided in section 16.2.2.5 of **Appendix 14-2 Navigational Risk Assessment (NRA)** [APP-124] which is the technical appendix to **Chapter 14 Shipping and Navigation** [APP-121]. The future case scenario is considered throughout the assessment of significance, noting that the quote provided refers to the nature of baseline fishing activity, i.e., the conservative assumption that the level of fishing vessel activity within the DBS Array Areas will not be negatively influenced by the presence of the Projects. There are no factors expected to heavily influence future case traffic growth such as port developments.
SN.1.6	**Temporal displacement** Commercial vessel displacement impacts associated with the Proposed Development in isolation and cumulatively appear to be assessed only based on a percentage increase to the distance of existing shipping routes. Explain if temporal duration should be included in the assessment to reflect distance and the potential for slower vessel speeds navigating multiple obstructions. If so,	The duration of transits is only an important factor where there is a regular timetabled service for which relies upon its ability to maintain said timetable. There are no such services operating in proximity to the DBS Array Areas as illustrated in the review of Roll-on/Roll-off vessels in section 10.1.3 of **Appendix 14-2 NRA** [APP-124]. Distance is the factor which impacts on fuel consumption and is therefore deemed the pertinent factor for operators in this area. Additionally, accurate quantification of duration increases would be challenging given that vessel speed may vary

I.D.	Written Representation	Applicant's Comment
	how would this affect the conclusions reached in the ES? If temporal duration should not be included, provide justification in your response.	significantly along a route. No concerns have been raised to date by vessel operators, the Maritime and Coastguard Agency (MCA) or UK Chamber of Shipping regarding the methodology for quantifying vessel displacement.
SN.1.7	**Compass deviation studies** How would the need for pre- and post-construction compass deviation studies be identified, as referred to by the MCA [RR-031] and the subsequent Applicants' response [PDA-013]? Could the Applicants explain how this is secured in the draft DCO?	The commitment to undertake pre- and post-construction compass deviation studies if required by the MCA will be included in the next revision of the **Cable Statement (Revision 3)** [REP2-039] to be submitted at Deadline 4. Approval of the final Cable Statement is secured in the **Draft DCO (Revision 6)** [document reference 3.1] under Condition 15/13/11 of Deemed Marine Licences 1 - 5.
SN.1.8	**Monitoring for potential shipping and navigation effects** The Offshore In-Principle Monitoring Plan [REP2-043, table 1.6] outlines the monitoring proposals for potential shipping and navigation effects. Can you identify the methods for securing each monitoring proposal? In addition, can you define 'periodic monitoring' and clarify that the proposals would be for a minimum of three years, as stated in ES Chapter 14 [APP-121, paragraph 244]? If construction or post-construction monitoring were to reveal that the impacts on vessel routeing and safety were greater than those predicted in the Navigational Risk Assessment [APP-124], what mechanisms would there be for adaptive management to address these greater than predicted effects?	The shipping and navigation monitoring proposals outlined in the **In Principle Monitoring Plan (Revision 2)** [REP2-043] are secured in the **Draft DCO (Revision 6)** [document reference: 3.1] under Conditions 21(6) and 22(3)(d) of Deemed Marine Licences (DML)s 1 and 2, and conditions 19(5) and 20(3)(d) of DMLs 3 and 4. Regarding the definition of 'periodic monitoring', these timescales would be defined in the Construction Method Statement and agreed with the appropriate stakeholders in the post-consent stage of the Projects. As agreement of the Construction Method Statement with stakeholders is secured under Condition 15/13/11 of DMLs 1 – 5, the final 'periodic monitoring' periods are secured in the **Draft DCO (Revision 6)** [document reference: 3.1]. Section 3.3 of the **Outline Vessel Traffic Monitoring Plan** [APP-254] outlines the approach to addressing any changes noted from those anticipated in **Appendix 14-2 NRA** [APP-124]; in particular, that MCA and Trinity House would be consulted on whether any additional mitigation measures are required. The MCA and Trinity House have not raised any concerns to date with the content of the Outline Vessel Traffic Monitoring Plan.
Internal array allision		
SN.1.9	**Spacing between offshore infrastructure** Can you clarify the minimum spacing between the Proposed Development surface infrastructure (such as platforms, substations and bridge links), and in particular how separation distances (widths and heights) would be measured if an accommodation platform were connected to another offshore structure, and where this would be secured?	Bridge linked platforms could be located directly adjacent to each other. The final layout, which will define the minimum spacing between surface infrastructure – both in terms of width and height - will be determined post consent in consultation with MCA and Trinity House. This is secured in Conditions 15/13/11 of DMLs 1-5.
SN.1.10	**Bridge link locations** Can you clarify which sensitive bridge link locations have been modelled [APP-124], paragraph 71], which have a qualitative assessment and provide justification for the assessment approach selected?	Worst case indicative locations for the bridge links are defined in Figure 6-2 of **Appendix 14-2 NRA** [APP-124] and are labelled as 'conjoined platforms' in the legend. These locations were selected to maximise allision risk associated with deviated main commercial routes which pass the Projects' Array Areas at these locations, noting that bridge linked platforms represent a greater surface footprint for allision risk.
SN.1.11	**Collision and allision risks for bridge links** Can you justify why it is appropriate to use a single structure to represent the connected platforms [APP-124, paragraph 71] to model collision and allision risk associated with bridge links, and clarify how that would assess the risk of vessels passing beneath bridge links?	Use of a single structure ensures a worst case approach to the quantification of allision risk, i.e., a vessel would by default allide with a structure rather than safely navigate under a bridge link. The risk of vessels navigating under a bridge link is assessed qualitatively in Paragraph 521 of **Appendix 14-2 NRA** [APP-124]. It is noted that key shipping and navigation stakeholders (MCA, Trinity House, UK Chamber of Shipping) have raised no concerns to date with the approach to risk assessing bridge links.
Search and Rescue		
SN.1.12	**Search and rescue capability**	Paragraph 609 of **Appendix 14-2 NRA** [APP-124] determines that the likelihood of an incident occurring that requires an emergency response will be increased in the cumulative scenario compared to the Projects In Isolation

I.D.	Written Representation	Applicant's Comment
	Can you provide, or signpost where it can be found in the application documents, justification for concluding the severity of consequence for reduction of emergency response capability including search and rescue as 'moderate' for the DBS projects in isolation but 'serious' when cumulatively assessed [APP-121, Table 14-9]?	Scenario. Accordingly, the likelihood of multiple incidents requiring emergency response occurring simultaneously is greater. Although this relates most directly to the frequency of occurrence (which is increased from 'extremely unlikely' for the Projects in isolation to 'remote' for the cumulative scenario) it is deemed that the extent of the delay to an emergency response request could be exacerbated, introducing the potential for a higher level of consequence which is deemed 'serious' under the Formal Safety Assessment methodology.
SN.1.13	**Search and rescue operations** Can you confirm, or signpost where it can be found in the application documents, how the effect on search and rescue operations has been quantified, including justification that the frequency of occurrence 'extremely unlikely' in Table 14-25 [APP-121] is consistent with the definition in Table 3-1 [APP-124]?	The Applicants assume the Examining Authority are referring to the definition in Table 3-2 **Appendix 14-2 NRA** [APP-124] which relates to frequency, and not Table 3-1. The effect on Search and Rescue (SAR) operations is qualified in **Appendix 14-2 NRA** [APP-124] in line with the requirements of the Methodology for Assessing Marine Navigational Safety & Emergency Response Risks of OREIs (Annex 1 to MGN 654). The 'extremely unlikely' frequency of occurrence relates to a 'moderate' severity of consequence in which there is an inability to undertake an effective search. This reflects the low rate of historical incidents in the region (particularly within the locations of the Projects' Array Areas) and the relevant embedded mitigation measures which include compliance with MGN 654, marine coordination for project vessels and project vessel compliance with international marine regulations. In particular, compliance with MGN 654 will incorporate agreement of the final layout in consultation with MCA and Trinity House such as to minimise the potential for an ineffective search. This is secured in Condition 15(1)(a) of Schedules 10 and 11 of the DMLs. It is noted that the MCA have not raised any concerns to date with the approach or assessment of effects on SAR operations.
SN.1.14	**Search and rescue response times** Can you confirm if there would be a likely effect on search and rescue response times due to the proposed arrays obstructing the most effective path to an incident and would this be acceptable? Has it been evidenced how this has been minimised?	SAR operations for an incident outwith the Projects Array Areas would not be impacted noting that the Applicants will liaise with the MCA as required on SAR related matters post consent and during the lifetime of the Projects, including through compliance with MGN 654 and completion of a SAR Checklist, which is included as an embedded mitigation measure.

1.26 Socio-economic Effects and Tourism

Table 1-26 - Applicant's comments on the Examining Authority's Written Questions (ExQ1) - Socio-economic Effects and Tourism

I.D.	Written Representation	Applicant's Comment
SET.1.1	**Supply chain strategy** Reference is made throughout ES Chapter 28 [APP-217] to the proposed development of a supply chain strategy. Can you clarify when the document would be prepared and how this would be secured as part of the draft DCO? Would you consult any parties on the final strategy? If so, who would be consulted?	The Applicants have a strong track record of delivering supply chain engagement that both strengthens and increases the utilisation of local supply chains, and enables associated job creation. As referenced in **Chapter 28 Socio-Economics** [APP-217] as part of the embedded mitigation for the Projects, a Supply Chain Plan (or their replacement) would be required to be produced by the Applicants as part of the application for future Contracts for Difference Allocation (CfD) Rounds. In addition, **Chapter 28 Socio-Economics** [APP-217] details how, as part of the embedded mitigation for the Projects, a detailed Skills and Employment Strategy, based on the **Outline Skills and Employment Strategy** [APP-230] will be developed post-consent to ensure that the Projects facilitate positive and meaningful skills and employment opportunities (and therefore the economic benefits) to the local economy, as secured by **Draft DCO (Revision 6)** [document reference 3.1] Requirement 26. Since the Applicants submitted the DCO Application, the CfD requirement to submit a Supply Chain Plan has been replaced by the Clean Industry Bonus (CIB) scheme. Whilst the new CIB requirement varies slightly from the Supply Chain Plan in approach, the overall aims are aligned in terms of requiring investment into supply chain capability, investment in infrastructure, and requirement for sustainability benefits. This document is not secured under the DCO, instead it is a requirement of the CfD regime. Consequently the Applicants are confident the effects assessed in the application will still be delivered. The Applicants intend to prepare this in advance of CfD application (anticipated Q1/Q2 of 2026). The Applicants are not required to consult on the CIB, but will follow government guidance and any requirements set by the Government in relation to the development and delivery of the Projects' CIB.
SET.1.2	**NPS EN-1 policy compliance** Table 28-2 of ES Chapter 28 [APP-217] states that, *'the contribution to the development of low-carbon industries is considered in Section 28.1'* and that, *'the key port locations have not been determined at this stage and socio-economic impacts are assessed at the level of the Local Economic Area, which covers multiple local authorities in the North West of England and Wales. Tourism and recreation impacts are assessed at a more local level.'* Can you signpost or clarify how the Proposed Development would contribute to the development of low carbon industries at the local and regional level as well as nationally? On that basis, do you consider the Proposed Development complies with NPS EN-1, paragraph 5.13.4?	The Projects are located approximately 100km from the east coast of England and, therefore, in determining what is 'local' to the development it is necessary to consider where the onshore epicentres of impact are. One of the key epicentres of impact will be the onshore cable route and substation, which are located in the defined Humber region. As shown in table 28-19 of **Chapter 28 Socio-economics** [APP-217], the onshore works are expected to create an economic opportunity for the Humber Region. This will include the opportunities for explicitly low carbon industries, such as electrical engineering, and enable companies in this industry, in this local area to be well placed to benefit from any future electrical engineering works in the area that will support the energy transition. However, most of the employment opportunities will be within companies that do not consider themselves to be low-carbon industries. This will include the wider construction sector, which will play a strategic role in the energy transition. The wider construction sector in the Humber Region will also benefit from the experience of working on the Projects, which it can then apply to future energy transition developments in the region. The other key type of epicentre of impact, which will define what area is local to the development, is the port locations. The selection of these locations is discussed in more detail in the response to SET.1.3, however for the purposes of the assessment it has been assumed that these ports will be based within the Humber Region. Regardless of where these ports are based, their location will become an area considered local to the Projects because they will be 'local' to the activities generated by the Projects. These activities will be economic in nature and will be in support of the development, construction and operation of offshore wind farms. This will directly support the low carbon industries in these areas and therefore complies with National Policy Statement (NPS) EN-1 Paragraph 5.13.4

I.D.	Written Representation	Applicant's Comment
		Note that there is an error in Table 28-2. It should read "*the key port locations have not been determined at this stage and socio-economic impacts are assessed at the level of the Local Economic Area, which covers multiple local authorities in the Humber Region*" Now that this point has been clarified in this response, the Applicants do not propose to update **Chapter 28 Socio-economics** [APP-217] on this matter.
SET.1.3	**Primary port location** ES Chapter 28 [APP-217, paragraph 247] states that, '*the Humber Region study area has also been defined based on the assumption that the primary operations and maintenance port would be within the region'.* Clarify if a decision on the primary port has already been made? If yes, how is a potential commitment to a specific port within the region secured? If not, how likely is it that the port would be located within the region and when would a decision be made? What are potential implications for the Humber region and the assessment (and in particular ES Chapter 28) if the primary port was not located within the Humber region?	The primary port for the Operations and Maintenance (O&M) phase has not yet been selected, and a decision is not likely to be made until around the time of the Final Investment Decision (early 2027). The Applicants can confirm that the O&M port will be in England, with a number of options both within and outside of the Humber Region under consideration. **Chapter 28 Socio-economics** [APP-217] (paragraphs 16 and 17) states: "*The exact port locations for both construction and operations are currently unknown, however given the proximity of the Humber Region to the Projects and onshore export cable corridor, this is considered the most appropriate local study area. This is also the case with regard to any knock-on effects on infrastructure and demographics.* *In addition, given the scale of the Projects, the assessment of impacts would be carried out at UK level (this study area is referred to as 'UK' throughout). This would provide additional evidence on the role the Projects could have towards the transition to net zero as a stimulus to economic activity."* The Applicants consider the Environmental Statement (ES) has been carried out based upon reasonable and appropriate assumptions and has assessed impacts over an appropriate study area given the information available at the time. It is normal practice for a Project of this nature and scale to maintain flexibility on the primary O&M port at the time of DCO submission, due to the need to maintain flexibility throughout the procurement process. In the event that the O&M port selected is outside of the Humber Region, some of the impacts identified within the Humber Region would occur in other regions of England instead and the effect in the Humber Region would be Negligible.
SET.1.4	**Cumulative effects assessment** ES Chapter 28 [APP-217] does not identify any cumulative effects in relation to demographics, employment or operation and maintenance from the Proposed Development with Hornsea 4 OWF. Why do you consider that there would be no cumulative effects from the Proposed Development and Hornsea 4 OWF in relation to demographics and employment, considering there is '*potential for some overlapping in construction, and during operations and maintenance*', as stated in ES Chapter 28 [APP-217, table 28-83]?	Hornsea 4 Offshore Wind Farm does have the potential to contribute to cumulative effects for both demographics and employment. These have been considered in the cumulative assessment, however the text in **Chapter 28 Socio-economics** [APP-217] paragraph 346 and 348 should have been aligned with that in paragraph 344. The Applicants do not however proposed to update **Chapter 28 Socio-economics** [APP-217] as Hornsea 4 has been considered in the CEA and this omission does not alter the assessment of effects. The cumulative effect on employment would also be minor beneficial in the Humber Region as multiple projects are likely to stimulate a greater level of investment of skills development and more people attracted to the region would have a greater positive impact on projected declining working age populations.
SET.1.5	**Local skills and employment** The SoCG between the Applicants and ERYC [REP1-028] has highlighted concerns regarding the proposed wording of Requirement 26, Local Skills and Employment. Can you confirm whether this has been resolved and clarify the agreed wording? Is ERYC satisfied with the information provided as part of the proposed Outline Skills and Employment Strategy [APP-230]?	The Applicants have asked the East Riding of Yorkshire Council (ERYC) to clarify if they have any comments on the wording of Requirement 26 and will clarify in the next revision of the **East Riding of Yorkshire Council Statement of Common Ground (SoCG)** [REP1-028] at Deadline 4.

I.D.	Written Representation	Applicant's Comment
SET.1.6	**Butt Farm Caravan and Camping Site** ES Chapter 29 [APP-219, table 29-19] lists the significant effects identified at tourism receptors during construction. On what basis did you consider that there would be no adverse effects on the tourism business at Butt Farm Caravan and Camping from traffic and transport, air quality and noise and vibration matters? *You may wish to link the answer to this question with the answer to NV.1.7*	The assessment of impacts on the tourism business were determined by the relevant experts and the assessments of these environmental impacts: • The assessment of Noise (**Chapter 25 Noise (Revision 2)** [REP1-019]) impacts considered Butt Farm (noted as R39 in the assessment). This found no significant effects from Noise at Butt Farm. • The assessment of Air Quality (**Chapter 26 Air Quality** [APP-208]) considered Butt Farm as one of the residential receptors within 250m of the Onshore Development Area and found no significant effects. • The assessment of Traffic and Transport effects (**Chapter 24 Traffic and Transport** [APP-195]) have not identified any significant effects on the roads leading to Butt Farm. • The assessment of Land Use effects (**Chapter 21 Land Use (Revision 3)** [REP2-022] did not identify any significant effects on the land used for Butt Farm Caravan and Camping Site. No other environmental topics were considered relevant. As detailed in response to NV1.7 facilities that allow for occasional overnight stays (such as the camping and caravan site at Butt Farm) were not identified as noise sensitive receptors in **Chapter 25 Noise (Revision 2)** [REP1-019]. This was based on the assumption that people using this type of facility would only be exposed to noise for a relatively short period of time (e.g. whilst staying) and this is highly unlikely to result in significant adverse impacts on their health and wellbeing, which requires significantly longer durations of noise exposure.
SET.1.7	**Butt Farm Caravan and Camping Site** ES Chapter 29 [APP-219, paragraph 168] states that, '*the reinstatement of the landscape via a landscape scheme would help reduce the magnitude of impact from medium to low as reinstated landscape features mature over time'.* This would appear to be contrary to the assessment in ES Chapter 29 [APP-219, Section 29.6.2.2], which concludes a medium magnitude of impact at Year 10. Can you clarify your assessment of the magnitude of impact to the tourism business at Butt Farm at Year 10? In addition, can you explain why it is considered appropriate that the magnitude of impact for Butt Farm Caravan and Camping during construction (Impact 2) and operation (Impact 6) as set out in ES Chapter 29 [APP-219] have both been assessed as medium, noting that any landscaping scheme would not be established during the construction phase (or shortly after)?	The following response sets out how the magnitude of impact for Butt Farm Caravan and Camping during construction (Impact 2) and operation (Impact 6) in **Chapter 29 Tourism and Recreation** [APP-219] have been assessed as a 'medium' magnitude of impact. Where paragraph 168 of **Chapter 29 Tourism and Recreation** [APP-219] states that '*The reinstatement of the landscape (e.g., temporary construction compounds etc.) via a landscape scheme would help reduce the magnitude of impact from medium to low as reinstated landscape features mature over time'* this is in relation to the assessment of construction activities on Viewpoint 1 (VP1): Butt Farm, as detailed in section 23.6.1.2.3.1.4 of **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] explains why the residual construction impact on VP1 has been reduced from medium to low in paragraph 232 '*The reinstatement of the landscape (e.g., TCCs etc.) via a landscape scheme would help reduce the magnitude of impact from medium to low as reinstated landscape features mature over time.*' However, paragraph 233 also clarifies that '*On completion of all construction works, construction effects on the landscape would be superseded by the operational effects, which are assessed in section 23.6.2*'. As stated in **Chapter 29 Tourism and Recreation** [APP-219], paragraph 168, '*the assessment of the magnitude of impact is determined by the residual effects identified in the other chapters*', which was low for VP1, as described above. However, for Butt Farm Caravan and Camping as a tourism receptor, as set out in paragraph 169, '*During the construction phase, the planting will not provide any additional cover and not reduce the magnitude of effect for visitors to Butt Farm*.' Therefore, when considering the effects identified in the Landscape and Visual Impact Assessment (LVIA) for the assessment on Butt Farm as a tourism receptor a 'medium', rather than 'low' magnitude of impact and 'moderate' significance of effect were identified for Butt Farm as detailed in Table 29-21 of **Chapter 29 Tourism and Recreation** [APP-219]. It should be noted that as identified on Figure 23-7d from VP1 in **Chapter 23 Landscape and Visual Impact Assessment Figure 23-1 to Figure 23-17 (Revision 3)** [REP2-024], there would be an existing hedgerow providing screening between Butt Farm Caravan and Camping and the Substation Zone during construction. This is clarified in paragraph 223 of **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] and the hedgerow contributes to the 'medium' magnitude of impact identified in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192].

I.D.	Written Representation	Applicant's Comment
		The Applicants would like to confirm that the wording in paragraph 168, clarified above is not contradictory to section 29.6.2.2 of **Chapter 29 Tourism and Recreation** [APP-219], which concludes a medium magnitude of impact at Year 10. This is because Section 29.6.2.2 is describing the operational impact and paragraph 168 is describing the construction impact. The operational residual magnitude of impact in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]) is assessed as high without the landscape features, set out in the **Outline Landscape Management Plan (OLMP) (Revision 3)** [REP2-031] and medium at Year 10 with the features i.e. when landscape planting has matured. This correlates with the impact on Butt Farm as a tourism receptor which is also medium, because the woodland planting would largely screen the lower elements of the Onshore Converter Stations. The upper parts of the Onshore Converter Stations such as the roofs of the buildings would still be visible on the skyline. The amount of screening provided by the planting would continue to increase beyond year 10, as the trees mature and grow, as stated in paragraph 224. It should be noted that Figure 23-7d from VP1 in **Chapter 23 Landscape and Visual Impact Assessment Figure 23-1 to Figure 23-17 (Revision 3)** [REP2-024] has now been updated with **Project Change Request 2 - Onshore Substation Zone** [AS-152] and this now shows more of the Onshore Converter Station buildings screened from Viewpoint 1.
SET.1.8	**Butt Farm Caravan and Camping Site** ES Chapter 29 [APP-219, paragraph 177] in relation to potential effects during construction on Butt Farm Caravan and Camping, states that, '*the landscape environment is a factor which attracts visitors to the site. However, the facility is not dependent on the landscape environment to attract or accommodate visitors'.* Why do you consider that the tourism business at Butt Farm would not be dependent on the landscape environment with particular regard to the concerns raised in the Ullyotts (Rural) Limited on behalf of J L White & Son and Butt Farm Caravan, Camping & Glamping Site RR [RR-054] highlighting a potential negative impact on the business from the Proposed Development?	Butt Farm Caravan and Camping markets itself as a base to explore Beverley and the wider region, and it is access to these wider attractions that were determined to be the driver of visitors to the site. The landscape environment is a factor, but not the primary factor that attracts visitors to the site and it is not dependent on it. The major adverse visual effects on the landscape would likely be temporary while the landscaping matures (within 8-10 years), and Butt Farm is a considered to not be dependent on a single environmental condition to attract visitors. Therefore, it was considered to have a Moderate significance of effect (significant in Environmental Impact Assessment (EIA) terms) on Butt Farm Caravan and Camping as a tourism receptor, in line with the process outlined in section 29.4.3.2. The visual impact of the Projects have been assessed and are presented in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. Viewpoint 1 (VP1) shown on Figure 23-7d in **Chapter 23 Landscape and Visual Impact Assessment Figure 23-1 to Figure 23-17 (Revision 3)** [REP2-024] is most representative of the Butt farm Caravan and Camping site. As detailed in section 23.6.1.2.3.1 of **Chapter 23 Landscape and Visual impact Assessment** [APP-192] there would be a temporary significant visual effect (moderate adverse) during the construction phase at VP1 from Butt Farm for a period of four to six years within the Onshore Substation Zone. On completion of all construction works, construction effects of the Onshore Converter Stations would be superseded by the operational effects, which are assessed in section 23.6.2.3.1 of **Chapter 23 Landscape and Visual impact Assessment** [APP-192] at VP1 as major adverse (significant) in year one following completion. By year 10, the mitigation planting of the Onshore Converter Stations is expected to be effective in partly screening and filtering views of the Onshore Converter Stations, with residual effects assessed as moderate adverse at year 10. Vegetation is expected to be around 8-10m in height as shown on the photomontage in Figure 23-7d from VP1 in **Chapter 23 Landscape and Visual Impact Assessment Figure 23-1 to Figure 23-17 (Revision 3)** [REP2-024]. The vegetation would largely screen the lower elements of the Onshore Converter Stations, however, the upper parts of the Onshore Converter Stations such as the roofs of the buildings would still be visible on the skyline. The amount of screening provided by the planting would continue to increase as the trees mature with age, as detailed in the **OLMP (Revision 3)** [REP2-031] which has now been updated with the revised design set out in **Projects Change Request 2 - Onshore Substation Zone** [AS-152]. It should also be noted that section 1.5.3 states '*Where practical, landscape mitigation planting will be established as early as possible in the construction phase.*' This will ensure that planting delivers effective mitigation for receptors as early as possible. The **OLMP (Revision 3)** [REP2-031] was developed in consultation with the local planning authority, ERYC, a final Landscape Management Plan (LMP) will be submitted to the ERYC for

I.D.	Written Representation	Applicant's Comment
		approval prior to construction and is secured by Requirements 10 and 11 of the **Draft DCO (Revision 6)** [document reference 3.1]. The **Design and Access Statement (Revision 2)** [REP2-027] sets out the design principles for the Onshore Converter Station(s) and includes a requirement for a 'Design Champion' and 'Design Panel' with representatives to be agreed with the Planning Authority, who will work with the engineers at the detailed design stage to consider the external appearance of the buildings and ensure the final LMP maximises the screening opportunities set out in the **OLMP (Revision 3)** [REP2-031]. This will also include consultation with the ERYC council and the relevant Ward Councillors. The significant adverse effect identified in **Chapter 29 Tourism and Recreation** [APP-219] on Butt Farm campsite, as detailed in section 29.6.2.2 relates to the significant effects identified in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] outlined above and with the mitigation outlined above, the residue effect is moderate adverse following the maturation of planting after eight to ten years. Noise and air quality effects during construction, including those from construction traffic are not considered to be significant with the implementation of the measures set out in **Outline Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025] and the **Outline Construction Traffic Management Plan (Revision 2)** [AS-020]. Further information on potential noise and air quality impacts and proposed mitigation can be found in **Chapter 25 Noise (Revision 2)** [REP1-019], **Chapter 26 Air Quality** [APP-208] and **Chapter 24 Traffic and Transport** [APP-195]. The final Code of Construction Practice and Construction Traffic Management Plan will be subject to approval from the relevant planning authority. There are no significant effects identified during operation of the Onshore Converter Stations. The Applicants acknowledge that the permanent footprint of the Onshore Substation Zone would occupy part of the area utilised for the caravan and campsite site for essential screening purposes. The Applicants continue to seek voluntary occupier's agreements with the occupiers of Butt Farm on reasonable commercial terms that are consistent with compensation packages agreed recently with ERYC for the Jocks Lodge Improvement Scheme. The Applicant's Land Agent has been having productive discussions with the agent for the occupiers of Butt Farm, and the Applicants are hopeful that an agreement of compensation for an occupier's consent will be reached. Any reasonable loss of business is a matter of compensation which is being considered by the Applicants based on the evidence provided.
SET.1.9	**Butt Farm Caravan and Camping Site** ES Chapter 29 [APP-219] identifies a moderate adverse significance of effect on the tourism asset at the Butt Farm Caravan and Camping Site during both the construction and operational phases. However, ES Chapter 29 [APP-219, paragraph 181] states that no additional mitigation measures have been identified for the construction phase. Can you explain why this is? Would measures such as fencing or other screening reduce any potentially significant effects during construction?	As detailed in the Applicants response to SET.1.8, the significant adverse effects identified in **Chapter 29 Tourism and Recreation** [APP-219] on Butt Farm campsite, as detailed in Section 29.6.2.2 relate to the significant effects identified in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. The residual LVIA effect is moderate adverse during construction and during operation following the maturation of planting after eight to ten years at Butt Farm (VP1). As described in the identified in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] the significance of effect on VP1 (Butt Farm) has been mitigated as much as reasonably practicable. The screening and fencing proposed around the Onshore Converter Station Zone, as outlined in the **OCoCP (Revision 3)** [REP1-025] is designed to reduce unauthorised entry, however it would provide some limited screening of the construction works, as shown in **Figure 23-9e** from VP3 in **Chapter 23 Landscape and Visual Impact Assessment Figure 23-1 to Figure 23-17 (Revision 3)** [REP2-024]. Permanent fencing would not be able to provide screening for the converter station buildings which reach a maximum height of 24m. Screening using the existing and newly planted vegetation is set out in the **OLMP (Revision 3)** [REP2-031].

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		As detailed in SET.1.9 the Applicants continue to seek voluntary occupier's agreements with the occupiers of Butt Farm on reasonable commercial terms that are consistent with compensation packages agreed recently with ERYC for the Jocks Lodge Improvement Scheme. The Applicant's Land Agent has been having productive discussions with the agent for the occupiers of Butt Farm, and the Applicants are hopeful that an agreement of compensation for an occupier's consent will be reached. Any reasonable loss of business from the Butt Farm Caravan and Camping Site is a matter of compensation which is being considered by the Applicants based on the evidence provided.
SET.1.10	**Strawberry Fields Holiday Park** Strawberry Fields Holiday Park is situated opposite the proposed landfall location, but no effects on the tourism element have been identified for this receptor during construction (Table 29-19 of ES Chapter 29 [APP-219]). Can you explain why you consider that the tourism receptor would not have any potential effects relating to landscape and visual impact, transport and traffic or noise and vibration from the Proposed Development during the construction phase?	The assessment of impacts on the tourism business were determined by the relevant experts and the assessments of these environmental impact : • The assessment of Noise (**Chapter 25 Noise (Revision 2)** [REP1-019]) impacts considered Strawberry Fields Holiday Park (noted as R4 in the assessment). This found no significant effects from noise on Strawberry Fields Holiday Park during the construction phase. The impacts are assessed as being minor adverse at this location, and therefore no significant effects are anticipated on the receptor as a tourism asset. • The assessment of Air Quality (**Chapter 26 Air Quality** [APP-208]) considered residential receptors within 205m of the landfall and found no significant effects. • The assessment of Traffic and Transport effects (**Chapter 24 Traffic and Transport** [APP-195]) have considered Cliff Road, the road on which Strawberry Fields Holiday Park is located, as part of the assessment. No significant effects have been identified on this road because there are explicit mitigation measure to avoid using this road, through utilisation of a Haul road. • The assessment of Land Use effects (**Chapter 21 Land Use (Revision 3)** [REP2-022] did not identify any significant effects on the land used for Strawberry Fields Holiday Park. As detailed in the **Project Change Request 1 - Offshore & Intertidal Works** [AS-141] the intertidal exit pits that were proposed to be included on the beach, within the Landfall Zone for a short trenchless crossing option but have now been removed from the application. Therefore, there would be no works on the beach. The beach is not visible directly from Strawberry Fields Holiday Park but may be used by its visitors. No significant residual effects at the Landfall Zone were identified in **Chapter 23 Landscape and Visual impact Assessment** [APP-192]. Although moderate adverse effects were identified during construction prior to reinstatement. The Strawberry Fields holiday park and all the pitches are surrounded by mature vegetation blocking views outside of the park to the Landfall Zone. There would also be no restrictions to Public Right of Way including the King Charles III England Coast Path. As the main construction works at the landfall would be over an 18-month period, the duration is of short-term the effects on tourism receptors were not considered significant. On completion of the landfall, the area would be fully restored to pre-existing conditions in accordance with **OCoCP (Revision 3)** [REP1-025]. No other environmental topics were considered relevant.
SET.1.11	**Assessment of tourism effects** Your LIR does not make reference to the appropriateness of the Applicants' assessment of effects on tourism with particular regard to the close vicinity of the Proposed Development to the Yorkshire Wolds and various coastal towns as well as a number of caravan and camping businesses situated along the onshore export cable corridor, near the landfall and onshore converter station. Do you have any further comments in relation to the potential effects of the Proposed Development on tourism, as detailed in ES Chapter 29 [APP-219]?	No response is required. Question directed to ERYC.

1.27 Traffic and Transportation including Public Rights of Way

Table 1-27 – Applicants' Response to the Examining Authority's Written Questions (ExQ1) - Traffic and Transportation including Public Rights of Way

I.D.	Written Question	Applicants' Response
TT.1.1	**Construction traffic assignment – sections** Table 24-2-7 of Appendix 24.2 [AS-019] explains the proposed approach to the assignment of peak construction traffic demand for individual sections. Whilst the sections are described in the table and reference is made to the individual construction access points identified in figure 24-2-2 of [REP1-018], the extent and location of each section is unclear. Can you provide a plan showing each section as identified in table 24-2-7 of Appendix 24.2 [AS-019]?	The Applicants would direct the ExA to **Figure 24-2-2** in the **Appendix 24-2 Transport Assessment (Revision 2)** [AS-019] which provides a Figure showing the approximate extent of the sections referred to in Table 24-2-7 of **Appendix 24-2 Transport Assessment (Revision 2)** [AS-019].
TT.1.2	**Security access and gate at the onshore converter station** Your response [PDA-013] to the RR submitted by Ullyotts (Rural) Limited on behalf of J L White & Son and Butt Farm Caravan, Camping and Glamping Site [RR-054] references a security gate at the access point off the A1079. Can you expand on the proposed security access and gate from the A1079 for both the construction and operational phase? Can you also confirm whether there would be any other emergency or other accesses for either vehicles or pedestrians to and from the onshore converter station site and, if so, where would they be located? Can you clarify whether there would be any access from the onshore converter station site to Butt Farm?	The Applicants would clarify that it is proposed that a gate will be provided at the junction of the access to the Onshore Substation Zone and the A1079 (notated AC-SB4) detailed on **Figure 24-2-2** of the **Chapter 24 Traffic and Transport Figures (Revision 2)** [REP1-018]. The approximate location of this gate is shown on drawing number: PC2340-RHD-ZZ-ZZ-DR-R-0133 (Access AC-SB4 General Arrangement) in Annex 2 of the **Outline Construction Traffic Management Plan (OCTMP) (Revision 2)** [AS-020] (page 80). The gate has been set back from the edge of the layby such that the driver of a large vehicle can pull up to the closed gate and then open it without the vehicle blocking back into the layby. This access gate is proposed for both the construction and operational phase to prevent unauthorised access for vehicles and pedestrians and would be locked when not in use. For the construction phase, the gate would be opened at the start of the working day and left in the open position until the end of the working day before being closed. Typically, this would be completed by onsite security personnel. During the operational phase, the gate would be locked and operational staff would be issued with a key, opening the gate to pass through before closing and locking it once they have passed through. An Operations and Maintenance procedure would be developed for providing emergency services access in case of emergency. No further means of access is proposed to the Onshore Substation Zone, and the Applicants can confirm that no access is proposed from Butt Farm.
TT.1.3	**Assessment methodology – driver delay (capacity)** Following discussions at ISH2, can you indicate whether you are satisfied with the approach towards the identification and modelling of sensitive junctions in relation to driver delay effects? If not, can you explain any outstanding concerns and the work required by the Applicants to address them?	No response is required. Question directed to National Highways (NH) and Hull City Council (HCC).
TT.1.4	**Future year traffic flow** Do you consider the choice of 2026 as the reference year for background traffic (Section 24.5.5.1 of ES Chapter 24 [APP-195]) to be appropriate? The submission confirms that, at the earliest, construction works would commence in 2026 and could last up to seven years (in a concurrent scenario). However, construction could also commence seven years after consent has been granted which could be in 2032 or 2033, lasting up to seven years (up to 2039 or 2040). Could the Applicants explain if any potential traffic growth between 2026 and 2033 has been considered in the baseline	The Applicants refer the ExA to paragraph 18 of the Transport Assessment that confirms that: *"In order to consider a worst case scenario, a reference year for background traffic of 2026 has been derived. The rationale for this is, later years could result in potentially higher background traffic flows and therefore a lesser magnitude of change for environmental impacts".* This approach is derived from the Environmental Assessment of Traffic and Movement (EATM) guidelines published by the Institute of Environmental Management and Assessment (2023) for the assessment of the environmental impacts of road traffic associated with new developments which notes that the greatest environmental change will generally be when the project traffic is at the largest proportion of the total flow.

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	assessment? Are any other schemes of relevance to the Proposed Development expected to come forward during this time?	This approach is appropriate for the impacts of severance, amenity and road safety whereby the assessment is predicated on changes in traffic flows. However, when considering driver delay (capacity) it is accepted that capacity can theoretically be affected by material changes in total traffic, rather than magnitude of change. To initially test junctions 14 to 17 (for driver delay) a base year of 2026 was adopted which includes (as a worst case) cumulative projects that could emerge during the construction period. This aligned the assessment with all other traffic and transport impact assessments and quantified the Projects' contribution to delay (prior to ambiguity created by future forecasts of traffic growth). The junction modelling for junctions 14 to 17 concluded potentially significant effects (requiring mitigation) and as such further assessment of future years was considered to be academic. Provisions are made within the **OCTMP** [AS-020] to secure this mitigation and any future transport modelling if required which is secured by Requirement 14 of the **Draft DCO (Revision 6)** [document reference 3.1]. Should the future assessment indicate potentially significant effects, mitigation measures will be applied on a hierarchical basis with demand management measures (e.g. use of minibuses, staggering shift times, peak hour restrictions etc.) being preferred. The measures would be agreed with the relevant highway authorities through the development of the final Construction Traffic Management Plan (which is secured by Requirement 14 of the **Draft DCO (Revision 6)** [document reference 3.1]) to ensure that residual effects (including any cumulative effects) are not significant in EIA terms.
TT.1.5	**Construction traffic impact screening** Can you clarify why links 64 and 68 for DBS East and DBS West concurrently (ES Chapter 24 [APP-195, table 24-19]) are listed for further assessment even though they are identified to be below the threshold for further assessment, as illustrated in ES Chapter 24 [APP-195, table 24-18]?	The Applicants would clarify that this is a minor drafting error in Table 24-19 (only) and these links are below screening thresholds (as identified by the ExA) and should not have been included as links requiring further assessment. However, it can be noted that these links have not been carried forward to the detailed assessment presented later in **Chapter 24 Traffic and Transport** [APP-195] (Tables 24-22 & 24-23 for Severance and Table 24-25 & 24-26 for Amenity). As such no changes are proposed to **Chapter 24 Traffic and Transport** [APP-195].
TT.1.6	**Assessment of significance – amenity** Section 24.6.1.3 of ES Chapter 24 [APP-195] concludes that link 73 should be given a high magnitude of impact (for DBS East and DBS West concurrently) (table 24-24 of ES Chapter 24 [APP-195]) and low sensitivity (table 24-15 of ES Chapter 24 [APP-195]), resulting in a moderate adverse significance of effect. Notwithstanding the assessment, link 73 has not been included in Table 24-26 of ES Chapter 24 [APP-195], which summarises the effects. Can you explain why? Do you consider additional mitigation would need to be secured in relation to link 73 as part of Annex 1 of the outline Construction Traffic Management Plan (oCTMP) [AS-020]?	The Applicants acknowledge that for Dogger Bank South (DBS) East and DBS West concurrently the addition of a peak of 53 HGV movements should have resulted in the assignment of a moderate adverse significance of effect (requiring mitigation). It is noted however that the construction of DBS East and DBS West In Isolation would require a peak of 38 HGV movements per day and therefore is assessed to result in a minor adverse effect which is not significant in EIA terms. Therefore, it is proposed to cap HGV movements along Link 73 to not exceed those assessed for DBS East and DBS West In Isolation (i.e. no more than 38 HGV movements per day). This approach would mirror that adopted for Link 58 where flows along the link are capped to the DBS East and DBS West In Isolation Scenario. This existing commitment for Link 58 is captured within the **OCTMP (Revision 2)** [AS-020]. The Applicants will update the OCTMP to cap HGV movements along Link 73 such that they do not exceed 38 HGV movements per day, at Deadline 4.
TT.1.7	**Assessment of significance - road safety** ES Chapter 24 [APP-195, table 24-16] identifies links 23, 33, 54, 63, 64 and 73 for further assessment. However, the identified links have not been assessed further as part of section 24.6.1.4 (Impact 3: Road Safety) and are not included in table 24-27 of ES Chapter 24 [APP-195]. Can you explain how links were chosen for further assessment and why links 23, 33, 54, 63, 64 and 73 were not considered as part of the significance of effects assessment?	The Applicant would clarify that the links listed are links where the collision rate is below the national average for the link, but there is a cluster (Cluster 11) of collisions along the link. The clusters are however common to other links. For example, Cluster 11 on Link 23 is located at the intersection of Links 20, 21 and 23. For the purposes of a proportional assessment and to avoid repetition, the analysis of the Projects construction traffic upon this cluster is therefore considered at Link 20 (rather than Link 23). When considering the magnitude of impact, the highest percentage change from all three links has however been selected. For example, Cluster 11 is located at the intersection of links 20, 21 and 23 which have a corresponding change in total traffic of 5.6%, 1.6% and 1.9% respectively. The magnitude

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		of impact assessment in Table 24-27 of **Chapter 24 Traffic and Transport** [APP-195] is therefore based upon the greatest percentage change- (5.6%). The approach described for Link 23 above is common for the other links listed by the ExA (excluding Link 73), i.e. Link 33 is covered under Link 32, Link 54 is covered under Link 12 and Link 63 under Link 61. The exception is however, Link 73 whereby the Applicants would note that Table 24-16 of **Chapter 24 Traffic and Transport** [APP-195] incorrectly identifies the link as having a collision rate above the national average instead of below (therefore noting the link requires further assessment). It can be noted from Table 24-2-3 of **Appendix 24-2 Transport Assessment (Revision 2)** [AS-019] that there have been no collisions along this link and the link therefore has a collision rate below the national average.
TT.1.8	**Assessment of significance – driver delay (capacity) - Junction 15** ES Chapter 24 [APP-195, table 24-30] provides a summary of the junction sensitivity and magnitude of effects for sensitive junctions 14 to 17. With regard to junction 15, can you provide clarification on the referenced junction improvements? 1. What are the proposed timescales for completion? 2. Would there be any implications for either the assessment of the junction already undertaken or on the construction period of the Proposed Development from the works?	1. The Applicants note the scheme of improvements referred to was reported to have been completed by ERYC in April 2024 (2024[66]). 2. The Applicants would clarify that at the time of drafting **Chapter 24 Traffic and Transport** [APP-195], East Riding of Yorkshire Council noted that the roundabout was due to be improved and provided the Applicants with copies of their approved junction model for the improvement scenario. This model represents the current and future baseline with the improvements implemented. Noting that the assessment has been undertaken using this model and that the roundabout improvement scheme is completed the Applicants consider that the conclusions of **Chapter 24 Traffic and Transport** [APP-195] are valid.
TT.1.9	**Assessment of significance – driver delay (capacity) - Junctions 1 to 13** **Applicants:** Following discussions at ISH2 in relation to the delayed junction modelling for sensitive junctions 1 to 13, what is your view on whether the oCTMP [AS-020] should be updated to provide an explanation of how junction modelling for junctions 1 to 13 would be approached in the potential scenario of the A63/ Castle Street Junction Improvement works not being completed prior to commencement of construction of the Proposed Development? In addition, can you explain whether junctions 1 to 13 have been considered as part of the CEA in ES Chapter 24 [APP-195, Section 24.8, table 24-37]? How was a conclusion on the assessment of cumulative effects reached without having assessed the effects of sensitive junctions 1 to 13? How has this impacted the assessment of cumulative effects with other schemes as set out in ES Chapter 24 [APP-195, table 24-38]? **NH and HCC:** Can you provide updates on timescales and progress of the A63 Castle Street junctions improvement works and confirm when they are likely to be completed?	***Delayed Junction Modelling*** The Applicants note that publicly, National Highways state: *"Despite working at pace, unfortunately we won't be able to hit our previously published Spring 2025 open to traffic date… We're now aiming to complete the scheme by Spring 2026"* (2025[67]). The Applicants note that as there is approximately one year left until completion of the A63 Castle Street, there should be a higher degree of certainty in regard to National Highways programme for completion. The Applicants would also note that the A63 Castle Street improvements should be almost complete before any decision by the Secretary of State upon consent for the Projects (expected by the end of Q4 2025 latest). It is therefore considered that there is limited potential that the A63 Castle Street works will not be completed prior to the commencement of construction of the Projects. However, in the unlikely event of a further delay, the Applicants would note that Paragraph 96 of the **OCTMP (Revision 2)** [AS-020] states that: *"If the relevant highway authorities consider that more detailed assessment is required, the methodology for modelling would first be agreed with the relevant highway authorities. This would include:* • *The approach to gathering baseline data (turning counts, queue length surveys, etc.);* • *Approach to factoring survey data to a future year, e.g. appropriate TEMPRo (Trip End Model Presentation Program) factors…"* This method to agreeing the approach to baseline data and future years with the highway authorities through the development of the final Construction Traffic Management Plan (which is secured by Requirement 14 of the **Draft DCO (Revision 6)** [document reference 3.1]) would therefore extend to including any residual effects associated with the completion of the A63 Castle Street Improvements. The Applicants consider it is not necessary to provide further

[66] Papa's Roundabout (May 2024). Available at: https://www.hulldailymail.co.uk/news/hull-east-yorkshire-news/gallery/19m-improvement-scheme-papas-roundabout-9259208 [Accessed March 2025]).
[67] A63 Castle Street Latest Updates (2025). Available at: https://nationalhighways.co.uk/our-roads/yorkshire-and-north-east/a63-castle-street/#latest-updates [Accessed: March 2025].

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		detail beyond this assurance and consider that the matter can be suitably addressed post determination (through agreement with the highway authorities). ***Cumulative Effects*** Table 24-37 of **Chapter 24 Traffic and Transport** [APP-195] presents an assessment of the potential for cumulative effects upon driver delay (capacity) at junctions 14 to 17. No assessment of the potential for cumulative effects upon junctions 1 to 13 is presented however, noting that the direction of the highway authorities to defer the primary assessment as outlined in Section 24.4.3.3.3 of **Chapter 24 Traffic and Transport** [APP-195] and explained at ISH2. The approach to securing the future assessment of capacity at these junctions is captured within Section 4.6 of the Outline Construction Traffic Management Plan [AS-020]. Paragraph 96 of the **OCTMP (Revision 2)** [AS-020] notes that: *"If the relevant highway authorities consider that more detailed assessment is required, the methodology for modelling would first be agreed with the relevant highway authorities. This would include:* • *The approach to gathering baseline data (turning counts, queue length surveys, etc.);* • *Approach to factoring survey data to a future year, e.g. appropriate TEMPRo (Trip End Model Presentation Program) factors…"* The traffic surveys (referred to in the first bullet) would be undertaken closer to the start of construction (than surveys in the DCO application) and would therefore reduce the need for factoring to a future baseline or to include cumulative projects (as many would be captured within the baseline surveys). Any requirement to factor beyond this to include for cumulative schemes not captured as part of the baseline surveys would also be discussed as noted in the second bullet. Should the future assessment indicate potentially significant effects, mitigation measures will be applied on a hierarchical basis with demand management measures (e.g. use of minibuses, staggering shift times, peak hour restrictions etc.) being preferred. The measures would be agreed with the relevant highway authorities through the development of the final Construction Traffic Management Plan (which is secured by Requirement 14 of the **Draft DCO (Revision 6)** [document reference 3.1]) to ensure that residual effects (including any cumulative effects) are not significant. This approach to mitigation would follow the similar approach which is presented within **Chapter 24 Traffic and Transport** [APP-195] for junctions within the administration area of ERYC (junctions 14 to 17) whereby prior to the application of demand management measures, significant effects were identified.
TT.1.10	**Assessment of significance – driver delay (highway geometry)** In relation to link 58, ES Chapter 24 [APP-195, table 24-34] explains that it is proposed to widen Ings Road (Link 58) as part of a proposal for a new Household Waste Centre to allow for its use as a construction access (shown as access AC12 on the Access to Works Plan [APP-016]). 1. Can you confirm the status of any planning application or appeal for the proposed Household Waste Centre? 2. What is the likelihood of a new planning application being determined during Examination? What are the proposed indicative construction timescales, and do you consider the road widening proposals would be implemented before construction of the Proposed Development would commence?	The Applicants note that the planning application is listed as 'Application Refused' on the ERYC planning portal (Planning reference: 22/03331/CM) (with a date of the 15 January 2024). The Applicants have no more details with regard to whether the plans are going to appeal or the likelihood of a new planning application coming forward during the examination. The Applicants would however note that the new Household Waste Centre was being promoted by ERYC, and they may be able to provide further updates to the ExA that are not available to the Applicants. Noting that the Household Waste Centre has been refused, the Applicants consider that the proposed mitigation measures for Ings Road would need to be implemented prior to the commencement of the Projects. This approach is described in Table 24-34 of **Chapter 24 Traffic and Transport** [APP-195], which notes that: *"In the event that the improvements to Ings Road [as part of the Household Waste recycling Centre] are not implemented in time for the commencement of construction of the Projects the following measures are proposed. To accommodate the*

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		forecast HGV traffic, the road would be widened, or an escort vehicle would be used to guide HGVs along the link and hold back conflicting HGV traffic". This commitment to agreeing with ERYC the final form of access management measures to be implemented is contained within Section 4.4 of the **OCTMP (Revision 2)** [AS-020].
TT.1.11	**Potential effects during operation - proposed operational access strategy** ES Chapter 24 [APP-195, paragraph 275] states that details of the proposed operational access strategy are provided in Appendix 24.2 [AS-019]. Can you signpost or provide details of this?	The Applicants would initially direct the ExA to Section 24.2.6 of **Appendix 24-2 Transport Assessment (Revision 2)** [AS-019] which describes the access strategy for the Projects. In summary, access to the Onshore Converter Station(s) would be provided from a new access via a layby on the A1079 (notated AC-SB4) shown on **Figure 24-2-2** of **Appendix 24-2 Transport Assessment (Revision 2)** [AS-019]. An outline design for this access is provided within **Appendix 24-2 Transport Assessment (Revision 2)** [AS-019] as drawing number: PC2340-RHD-ZZ-ZZ-DR-R-0133 (page 1393). This access would be utilised for both the Projects' construction and operational phases to provide the means of access to the Onshore Converter Station(s).
TT.1.12	**Abnormal Indivisible Load assessment** The Abnormal Indivisible Load Access Report [APP-199, paragraph 9.5] states that, '*no formal clarification has been obtained from East Riding of Yorkshire Council in terms of structures on the preferred route. It will be necessary to obtain confirmation from East Riding of Yorkshire Council as to the suitability of their structures for the proposed loads and attempts to do this will continue and be reported on separately when obtained.'* Can you provide an update on the discussions? 1. Do you consider the measures included in the oCTMP [AS-020] and in the Abnormal Indivisible Local Access Report [APP-199] in relation to abnormal load management to be sufficient and appropriately detailed at this stage? If not, can you outline the additional information that should be included? 2. Could you update the SoCG between the Applicants and the ERYC [REP1-028] and NH [REP1-037] to include the discussions and agreements on the movements of any abnormal indivisible loads?	The Applicants would clarify that a notification for the movement of the load was submitted by Wynns (consulting engineers specialising in the movement of abnormal loads) through the existing approval process ESDAL (Electronic Service Delivery for Abnormal Loads). This application was processed by the Abnormal Indivisible Loads Team at National Highways who are responsible for approving movements on behalf of the Secretary of State for Transport for all road networks. In carrying out this responsible for engaging with relevant local highway authorities, where their routes are impacted. National Highways confirmed that as the route had recently been cleared for Dogger Bank A and B for transformers of 256 tonnes and as the proposed load was comparable (230 tonne transformers) they advised that further consultation work (with East Riding of Yorkshire Council) was not required as the route had recently been proven. A copy of this email is provided as **Appendix K** of this response. The Applicants assert that as the route has recently been approved and traversed by Dogger Bank A and B that the route is negotiable. However, Wynns advice is that this route will need to be reconfirmed in the future with ERYC to ensure there has been no deterioration of highway structures. The future consent for the movement of any abnormal loads will require agreement with the relevant highway authorities and police through ESDAL. This requirement is captured within Section 2.5 of the **OCTMP (Revision 2)** [AS-020], which is secured by Requirement 14 of the **Draft DCO (Revision 6)** [document reference 3.1].
TT.1.13	**Outline travel plan measures** **Applicants:** The information in table 3-1 of the oCTMP [AS-020] regarding outline travel plan measures is noted. However, it is unclear whether it is proposed to provide a detailed travel plan, either during the Examination or at a later stage. Can you clarify? Has consideration been given to a Travel Plan Co-ordinator? If not, why not? When would a decision be made, and would this be discussed further with the relevant Highways Authorities? How would the travel plan and any proposed monitoring, review and targets be secured? Do you consider the Proposed Development currently complies with paragraph 5.14.7 of NPS EN-1? **NH, HCC and ERYC:** Do you consider the information in relation to the outline travel plan measures, including demand management and monitoring, to be sufficient as currently submitted? If not, can you identify the additional information required.	The **OCTMP (Revision 2)** [AS-020] includes both the elements of a travel plan for managing employee travel as well as measures to manage HGV traffic. A single document is typical practice for managing construction traffic. The rationale for not having two separate documents, is that there would be a high degree of commonality and repetition between many of the measures, monitoring and control measures and it is therefore considered simpler for highways stakeholders and contractors to have a single reference document. The Applicants would note that no concerns have been raised by any of the highways stakeholders on this matter. ***Travel Plan Co-Ordinator*** Section 1.4 of the **OCTMP (Revision 2)** [AS-020] outlines that a Traffic Management Co-ordinator (TMCo) would be appointed prior to construction and their roles and responsibilities. The TMCo would undertake the functions required to manage, monitor and control employee travel. The Applicants therefore confirm that the role of a Travel Plan co-ordinator is captured in the OCTMP (albeit under a different name).

I.D.	Written Question	Applicants' Response
		Compliance with EN-1 Paragraph 5.14.7 of EN1 states that: *"The applicant should prepare a travel plan including demand management and monitoring measures to mitigate transport impacts."* Section 3.2.1 of the **OCTMP (Revision 2)** [AS-020] includes details of a range of travel plan measures to be adopted by the contractor to reduce single occupancy vehicle trips and section 5.2.4 of the OCTMP includes details of the proposed approach to monitoring employee travel. Paragraph 5.14.7 of EN1 goes on to states that: *"The applicant should also provide details of proposed measures to improve access by active, public and shared transport to:* • *reduce the need for parking associated with the proposal* • *contribute to decarbonisation of the transport network* • *improve user travel options by offering genuine modal choice"* The adoption and refinement of travel plan measures outlined in Section 3.2.1 of the **OCTMP (Revision 2)** [AS-020] in a finalised Construction Traffic Management Plan (secured by Requirement 14 of the Draft DCO (Revision 6) [document reference 3.1]) would reduce single occupancy vehicle trips and intrinsically lead to a reduction in the need for parking, reduce carbon emissions (compared to single occupancy vehicle trips) and improve user choice. In summary, the Applicants clarify that the elements of a Travel Plan are captured within the **OCTMP (Revision 2)** [AS-020] and as such that the OCTMP complies with the aims of paragraph 5.14.7 of NPS EN-1.
TT.1.14	**Construction access AC8 – opposite Heron Lakes Caravan Park** Can you explain the need for the proposed construction access AC8 as shown on page 21 of the Access to Works Plan [APP-016]? Why do you consider this to be the most appropriate location for an access? Can you clarify when you chose this location, as it would not appear to have been considered in the Access Development Strategy [APP-070]?	The Applicants would clarify that it was originally planned that access would be provided from the A1035 at Access Ac9 (south) and traffic would have travelled east along the temporary haul road crossing over Meaux Lane and heading east toward Monk Dike. This access strategy was proposed as it allowed access from a main A road (the A1035) and avoided the need for traffic to travel via Meaux Lane which is of restricted width. However, following Section 42 consultation feedback from the Preliminary Environmental Information Report (PEIR), a biosecurity issue was raised by a landowner on the export cable corridor, which would restrict the continuity of the temporary haul road east from Access AC9. This issue meant that the poultry farm could not continue to operate during construction if the haul road was continuous east from AC9. The continuity of the haul road south-east from AC9 can be noted from **Figure 24-2-2** in the **Appendix 24-2 Transport Assessment (Revision 2**) [AS-019] by observing the extent of Section 6B. In response to the Section 42 consultation on the PEIR, and to facilitate access to the Projects whilst maintaining the poultry farm operation, the Applicants reviewed available access options and identified a possible access from the A1035 (notated AC8). This strategy is noted in Table 1-1 of the **Appendix 4-2 Access Strategy Development** [APP-070]. Access AC8 is an existing access from a main A road that allows traffic to access west of Meaux Lane and east toward Monk Dike. The access has been used for the installation of onshore wind turbines and is used by farm traffic and there is an existing track south toward the wind turbine and temporary haul road. It is therefore considered that this is the most appropriate location for the access.

I.D.	Written Question	Applicants' Response
TT.1.15	**Emergency beach access AC1** The proposed emergency beach access was discussed at ISH2 and it was agreed that the Applicants would consult with the local authority on the detailed design (such as any ramp, matting or access road as required). Is there any update on discussions and could the Applicants clarify how the proposed commitment would be secured as part of the draft DCO?	As discussed at ISH2 the design of the emergency beach access will be developed at the detailed design stage by the Contractor. Therefore, there would not be any further discussions on the design of the access with the ERYC prior to the detailed design phase. The **Outline Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025] was updated at Deadline 2 to include further detail on the Drilling Fluid Management Plan, which will be developed by the Contractor prior to construction and will include measures to be undertaken during the active trenchless crossing installation phase at the Landfall Zone. This Drilling Fluid Management Plan will form part of the CoCP and will also include the design of the emergency beach access which would be required to support with mitigating any drilling fluid breakout, should it occur during this phase of construction. This would be agreed with the ERYC as part of the CoCP which is secured by Requirement 19 of the **Draft DCO (Revision 6)** [document reference 3.1], as detailed in Table 3-2 of the **OCoCP (Revision 3)** [REP1-025].
TT.1.16	**Cumulative effects assessment** Paragraph 290 of ES Chapter 24 [APP-195] notes that some schemes have not been considered as resulting in likely cumulative significant effects due to certain considerations, including where no traffic and transport assessment was submitted as part of an application or where there would be no temporal overlap. 1. Can you clarify how a missing transport assessment would conclude that the identified scheme would not have an effect, and consequently should not be considered as part of the CEA? On a cautionary basis, should these schemes be included in the traffic and transport CEA? 2. The ExA notes the recent submission of the Peartree Hill Solar Farm application. Can you explain why this scheme was not considered to result in cumulative effects with construction traffic as part of the assessment in the ES? Can you clarify whether the submission of the application would now have any implications in relation on the assessment of traffic and transport cumulative effects? If not, why not?	1. The Applicants would clarify that projects have not been included in the Cumulative Effects Assessment (CEA) where a Transport Assessment has not been submitted as part of the planning process. To clarify, it is not the case that the Transport Assessments are missing but rather, that it was not part of the information required in support the planning application. Planning Practice Guidance (PPG) 'Travel Plans, Transport Assessment and Statements (2014[68]) notes that: *"Transport Assessments are thorough assessments of the transport implications of development, and Transport Statements are a 'lighter-touch' evaluation to be used where this would be more proportionate to the potential impact of the development (i.e. in the case of developments with anticipated limited transport impacts)."* The Applicants note that if no Transport Assessment has been submitted, then traffic demand was forecast as likely to be very low and accordingly, no assessment of transport impacts has been required by the relevant authorities. It is therefore implicit that transport impacts are negligible and by extension the schemes contribution to cumulative effects would also be negligible. Notwithstanding, the Applicants would note that baseline traffic flows used within the traffic and transport assessment (**Chapter 24 Traffic and Transport** [APP-195]) have been factored up using TEMPro (Trip End Model Presentation Programme) growth factors which are used to forecast growth from changes in travel patterns, population and development. It can therefore be reasoned that any changes in traffic from schemes that have been scoped out would be captured as part of TEMPro traffic growth applied to background traffic flows. 2. The Applicants would note that at the time of the application there was no information on the Peartree Hill Solar Farm save for a Scoping Report. There was no information in the Scoping Report with regard to forecast vehicle numbers or traffic and transport effects and therefore it was not possible to undertake a meaningful cumulative assessment. Subsequently, (May – June 2024) a PEIR has been published which contains forecast traffic demand and a limited assessment of significant effects. It is apparent from reviewing this document that the assessment is preliminary and is not a comprehensive EIA compliant submission whereby a valid transport CEA could be undertaken as part of the DCO.

[68] Department for Levelling Up, Housing and Communities (March 2014). Travel Plans, Transport Assessment and Statements. Available at: https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements [Accessed March 2025].

I.D.	Written Question	Applicants' Response
		As of March 2025, the DCO Application for Pear Tree Farm has not been submitted. The Applicants would expect the DCO Application for the Pear Tree Farm Solar Farm to include a detailed cumulative assessment with the Projects. **Chapter 24 Traffic and Transport** [APP-195]) contains transparent and detailed transport metrics to facilitate a third party CEA.
TT.1.17	**Public Rights of Way - clarification** The PRoW Plan [APP-017, page 15] specifies the location of the '*proposed bridleway in the parishes of Catwick and Leven*'. Can you provide clarification on the status of the proposed bridleway? When is it likely to be formally designated and how would any measures as set out in the oPRoW Management Plan (Appendix C to the oCoCP [REP1-025]) be implemented for a proposed PRoW?	The Applicants have not got any further information on the proposed bridleway in the parishes of Catwick and Leven and when or, if is it likely to be formally designated. However, a Public Rights of Way (PRoW) strategy will be prepared and must be agreed with the ERYC council prior to construction as per Requirement 24 of the **Draft DCO (Revision 6)** [document reference 3.1]. This will be based on the oPRoW Management Plan, Appendix C to the **oCoCP (Revision 3)** [REP1-025] and will also consider any new PRoW identified at that time or, through consultation with the ERYC. The same measures would be applied, should a new PRoW be identified, or the bridleway be formally designated.
TT.1.18	**PRoW – Rowley Bridleway No. 13** Paragraph 25 of the oPRoW Management Plan (Appendix C to the oCoCP [REP1-025]) states that Rowley Bridleway No.13 would be permanently diverted as part of the Hornsea 4 OWF project and it is expected that those works would be either undertaken at the same time or before the Proposed Development commences. Did you consider the potential scenario of works on the Proposed Development commencing prior to Hornsea 4 OWF, or Hornsea 4 OWF not being implemented at all? Can you explain whether the bridleway would be retained as existing or diverted in line with the proposed changes? How would this be secured if it was not implemented as part of the Hornsea 4 OWF project? The same paragraph also states that, '*further details of the Hornsea 4 OWF permanent diversion are included in appendix C of the HOWF4 Outline Code of Construction Practice (F2.2)'.* Can you signpost where the additional information has been submitted or provide it as necessary?	If the permanent access road is not constructed by Hornsea 4 OWF it would be constructed by National Grid as part of the Birkhill Wood Substation development. Therefore, it is highly likely the PRoW Rowley Bridleway No.13 will have been diverted prior to the start of construction works on the Projects. However, if it were to remain in its current location it would only be impacted by the temporary construction access off the A1079, as shown in Plate 6-1. Measures to allow the crossing of the access would be put in place, as detailed for other crossings in the oPROW Management Plan (Appendix C to the **oCoCP (Revision 3)** [REP1-025]), detailed in section 4. This detail would be included in the detailed PRoW Management Plan, should this be the case. There is a missing footnote in paragraph 25 the oPROW Management Plan (Appendix C to the **oCoCP (Revision 3)** [REP1-025]) which should include a link to the Hornsea 4 OWF DCO document F2.2 Outline Code of Construction Practice (Revision: 03). The Hornsea 4 OWF Outline Public Rights of Way Management Plan is REP4-019 in the Hornsea 4 OWF DCO examination library[69]. It is not considered necessary to upload a document from another application, that can be accessed via the PINS website (see footnote below).

[69] Hornsea Project 4 Outline Code of Construction Practice (March 2022). Available at: EN010098-001419-Hornsea Project Four - Other- F2.2 Outline Code of Construction Practice.pdf [accessed March 2025].

Appendix A – WQ BGC.1.2 National Planning Policy Framework

5. The Applicants' assessed how the Projects meet the National Planning Policy Framework (NPPF) (2023) requirements and how the Projects comply with the NPPF (2023) policies within Table 1-6 of the **Policy Compliance Assessment Tables** [APP-227] submitted with the Development Consent Order Application.

6. In December 2024 an updated NPPF (2024) was published. The Applicants have reviewed the updated NPPF (2024) and provided a comparison table (**Table A-1**) of the relevant paragraphs previously presented, including any new sections or paragraphs of relevance which have been added to the updated NPPF (2024). Any changes to the relevant paragraphs from NPPF (2023) have been presented in red text within the NPPF (2024) text, blue text remains unchanged (**Table A-1**).

7. In summary, the updated NPPF (2024) has not changed the assessment that the Applicants previously presented in Table 1-6 of the **Policy Compliance Assessment Tables** [APP-227].

Table A-1 Comparison Between Previous and Current National Planning Policy Framework (NPPF, 2023; 2024) [Any changes to the text have been presented in red]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.1	Decision making Para. 2	Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. The National Planning Policy Framework must be taken into account in preparing the development plan, and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.	Decision making Para. 2	Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. The National Planning Policy Framework must be taken into account in preparing the development plan, and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.	The Applicants have considered all international, national, marine, and local planning policy and legislative context that is relevant to the impact assessment of the Projects.	**Volume 7, Chapter 3 Policy and Legislative Context** [APP-066]
6.2	Role of the NPPF in NSIP-scale applications Para. 5	The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications.	Role of the NPPF in NSIP-scale applications Para. 5	The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications.	Notwithstanding the wording of NPPF Paragraph 5, the Applicants have undertaken a review of the NPPF and the Projects' compliance with those policies contained within the NPPF, through this table (Table 1-6 of the **Policy Compliance Assessment Tables** [APP-227]), as the Applicants consider the NPPF to be both important and relevant to the SoS' decision.	**Volume 8, Planning Statement** [APP-226] **Volume 8, Policy Compliance Assessment Tables** [APP-227] **Volume 8, Design and Access Statement (Revision 2)** [REP2-027] **Volume 7, Chapters 8** to **30**
6.3	Other Material Statements Para. 6	Other statements of government policy may be material when preparing plans or deciding applications, such as relevant Written Ministerial Statements and endorsed recommendations of the National Infrastructure Commission.	Other Material Statements Para. 6	Other statements of government policy may be material when preparing plans or deciding applications, such as relevant Written Ministerial Statements and endorsed recommendations of the National Infrastructure Commission.	The Applicants are cognizant of this and have duly considered those other material statements through the Policy and Legislative Context Assessment. This includes the 2020 Energy white paper: Powering our net zero future, for example.	**Volume 7, Chapter 3 Policy and Legislative Context** [APP-066]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.4	Sustainable development Paras. 7, 8, 9 and 10	The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development, and supporting infrastructure in a sustainable manner. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. At a similarly high level, members of the United Nations – including the United Kingdom – have agreed to pursue the 17 Global Goals for Sustainable Development in the period to 2030. These address social progress, economic well-being and environmental protection. Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different 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	Sustainable development Paras. 7, 8, 9 and 10	The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development and supporting infrastructure in a sustainable manner. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. At a similarly high level, members of the United Nations – including the United Kingdom – have agreed to pursue the 17 Global Goals for Sustainable Development in the period to 2030. These address social progress, economic well-being and environmental protection. Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different 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	The Projects would make a substantial contribution, both to the achievement of UK decarbonisation targets and to global commitments to mitigating climate change. By generating low carbon, renewable and low-cost electricity in the UK, the Projects would also help to reduce the UK's reliance on imported energy and to improve energy security. From an economic perspective, the Projects, if built Concurrently, will lead to construction expenditure within the Humber Region whose residual effect is **moderate** beneficial and so significant in EIA terms. If built In Isolation or Sequentially, the residual effect on construction expenditure within the Humber Region is **minor** beneficial, not significant in EIA terms. In addition, if the Projects are built In Isolation, the Projects would support up to 1,190 jobs supported across the UK, including 760 jobs supported across the Humber Region during the development and construction. If the Projects are built Concurrently, the Projects would support up to 2,380 jobs supported across the UK, including 1,520 jobs supported across the Humber Region during the development and construction. If the Projects are built Sequentially, the Projects would support up to 1,550 jobs supported across the UK, including 930 jobs supported across the Humber Region during the development and construction. From a social perspective, the disturbance (noise, air quality, visual and traffic) to social infrastructure and population and social infrastructure impacts arising from all Development Scenarios results in residual effects that are both adverse and beneficial but are no greater than **negligible** and so not significant in EIA terms. From an environmental perspective, the Applicants have sought to protect and enhance the natural, built and historic environment as far as practical. The Applicants assessment and application of the	**Volume 8, Planning Statement** [APP-226] **Volume 8, Policy Compliance Assessment Tables** [APP-227] **Volume 7, Chapters 8** to **30**

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents

		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.
		
		These objectives should be delivered through the preparation and implementation of plans and the application of the policies in this Framework; they are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area.
		
		So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).
				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.
				
				These objectives should be delivered through the preparation and implementation of plans and the application of the policies in this Framework; they are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area.
				
				So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).
					mitigation hierarchy for the Projects have widely mitigated residual adverse effects to a level which is no greater than **minor** adverse, not significant in EIA terms. The Applicants assessment concludes the following significant effects however:
					
					For Terrestrial Ecology and Ornithology, following the assessment, residual impacts have been identified:
					
					• **Moderate** adverse effects on Breeding birds during construction; and
					• **Moderate** adverse effects identified for impacts of Nitrogen deposition on Bentley Moor Wood LWS and the ancient woodland it is designated for:
					  ○ Impact 2: Construction disturbance - Non-statutory designated sites; and
					  ○ Impact 3: Temporary habitat loss / fragmentation (impact 2) relating to nitrogen deposition at Bentley Moor Wood and ancient woodland.
					
					For Socio-economics, Construction Concurrent Expenditure within the Humber Region results in a residual **moderate** beneficial effect, which is significant in EIA terms.
					
					For Tourism and Recreation, Construction Impact 2: Tourism Assets on Butt Farm Caravan and Camping results in a residual **moderate** adverse effect which is significant in EIA terms.
					
					For Land Use, Operational Impact 2 Permanent Loss of Land for Agriculture on agricultural land results in residual **major** adverse effect, which is significant in EIA terms.
					
					For Landscape and Visual Impact, Operational Impact 1: Landscape Effects of Onshore Converter Stations on Onshore Substation Zone, Operational Impact 2: Landscape Effects of the Onshore Converter Stations on the Yorkshire Wolds Important Landscape Area (ILA) on Yorkshire Wolds ILA and Operational Impact 3: Visual Effects of Onshore Converter Stations on Viewpoint 1:	

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
					Butt Farm, Viewpoint 2: Coppleflat Lane, Bentley and Viewpoint 3: Beverley 20 near Broadgate result in residual **moderate** adverse effects, which are significant in EIA terms. For Human Health, Operational Wider Societal Infrastructure on General Population results in a residual **moderate** beneficial effect, which is significant in EIA terms. For Tourism and Recreation, Operational Impact 6: Tourism Assets on Butt Farm Caravan and Camping results in residual **moderate** adverse effect, which is significant in EIA terms. For Offshore Ornithology, Impact 9 Cumulative Assessment of Operational Displacement on Gannet, Guillemot, Razorbill, Puffin and Impact 10 Cumulative Assessment of Operational Collision Risk on Gannet, Kittiwake, Lesser black-backed gull, Herring gull and Great black-backed gull result in residual **negligible-moderate** adverse effects, which are significant in EIA terms. For Commercial Fisheries, Cumulative Impact 1: Loss or restricted access to fishing grounds – Offshore Export Cable Corridor (Construction and Decommissioning) on dredge and Cumulative Impact 2: Displacement leading to gear conflict and increased pressure on adjacent fishing grounds – Offshore Export Cable Corridor (Construction and Decommissioning) on dredge result in residual **moderate** adverse effects, which are significant in EIA terms. For Climate Change, whole life cycle operation and maintenance GHG emissions and avoided GHG emissions from the provision of renewable energy (all Development Scenarios) and whole life cycle emissions and net effect on climate change (all Development Scenarios) on the global atmosphere results in a residual **moderate** beneficial effect, which are significant in EIA terms.	

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.5	Presumption in Favour of Sustainable Development Paras. 11 and 12	Plans and decisions should apply a presumption in favour of sustainable development. For decision-taking this means: c) approving development proposals that accord with an up-to-date development plan without delay; or d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless: i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole. The presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision-making. Where a planning application conflicts with an up-to-date development plan (including any neighbourhood plans that form part of the development plan), permission should not usually be granted. Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed.	Presumption in Favour of Sustainable Development Paras. 11 and 12	Plans and decisions should apply a presumption in favour of sustainable development. For decision-taking this means: c) approving development proposals that accord with an up-to-date development plan without delay; or d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless: i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for refusing the development proposed; or ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole, having particular regard to key policies for directing development to sustainable locations, making effective use of land, securing well-designed places and providing affordable homes, individually or in combination. The presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision-making. Where a planning application conflicts with an up-to-date development plan (including any neighbourhood plans that form part of the development plan), permission should not usually be granted. Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed.	The Applicants recognise that a presumption in favour of sustainable development should be applied where Projects accord with an up-to-date development plan. This means that decision makers should seek to approve consent, without delay, for Projects which reflect sustainable development, such as the Projects. An assessment of the Projects' compliance with the local development plan has been undertaken and is captured within Table 1-7 of the **Policy Compliance Assessment Tables** [APP-227]. Upon review of the adopted and draft emerging East Riding of Yorkshire Local Plan (Strategy Document) in Table 1-8 of the **Policy Compliance Assessment Tables** [APP-227], the Applicants consider that the adopted and draft emerging Local Plan support the Projects.	**Volume 8, Policy Compliance Assessment Tables** [APP-227]
6.6	Decision-making, Pre-	Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools	Decision-making, Pre-application	Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools	As set out in the ES Chapter on Site Selection and Assessment of Alternatives, stakeholder	**Volume 7, Chapter 4 Site Selection and Assessment of**

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
	application and front-loading Para. 38	available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible. Early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties. Good quality pre-application discussion enables better coordination between public and private resources and improved outcomes for the community. Local planning authorities have a key role to play in encouraging other parties to take maximum advantage of the pre-application stage. They cannot require that a developer engages with them before submitting a planning application, but they should encourage take-up of any pre-application services they offer. They should also, where they think this would be beneficial, encourage any applicants who are not already required to do so by law to engage with the local community and, where relevant, with statutory and non-statutory consultees, before submitting their applications. The more issues that can be resolved at pre-application stage, including the need to deliver improvements in infrastructure and affordable housing, the greater the benefits. For their role in the planning system to be effective and positive, statutory planning consultees will need to take the same early, pro-active approach, and provide advice in a timely manner throughout the development process. This assists local planning authorities in issuing timely decisions, helping to ensure that applicants do not experience unnecessary delays and costs. The participation of other consenting bodies in pre-application discussions should enable early consideration of all the fundamental issues relating to whether a particular development will be acceptable	and front-loading Paras. 39 - 47	available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible. Early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties. Good quality preapplication discussion enables better coordination between public and private resources and improved outcomes for the community. Local planning authorities have a key role to play in encouraging other parties to take maximum advantage of the pre-application stage. They cannot require that a developer engages with them before submitting a planning application, but they should encourage take-up of any pre-application services they offer. They should also, where they think this would be beneficial, encourage any applicants who are not already required to do so by law to engage with the local community and, where relevant, with statutory and non-statutory consultees, before submitting their applications. The more issues that can be resolved at pre-application stage, including the need to deliver improvements in infrastructure and affordable housing, the greater the benefits. For their role in the planning system to be effective and positive, statutory planning consultees will need to take the same early, pro-active approach, and provide advice in a timely manner throughout the development process. This assists local planning authorities in issuing timely decisions, helping to ensure that applicants do not experience unnecessary delays and costs. The participation of other consenting bodies in pre-application discussions should enable early consideration of all the fundamental issues relating to whether a particular development will be acceptable	consultation and engagement has played a fundamental role in shaping the Projects. A comprehensive account of all consultation undertaken to assist in the development of the Projects is included within ES Chapter on Consultation as well as the Consultation Report. Stakeholder engagement with Statutory Consultees took place under the EPP. The EPP is a non-statutory, voluntary process and agreements are non-binding, however it provides a useful stakeholder engagement approach on key elements and outcomes of the ES process which allows continued dialogue in between the formal (statutory and non-statutory) consultation processes. On 26th July 2022, the Applicants submitted a Scoping Report to the Planning Inspectorate (Planning Inspectorate, 2022). The SoS then issued the scoping opinion for the proposed Projects on 2nd September 2022. On 06th June 2023 the Applicants published a Preliminary Environmental Information Report (PEIR) for statutory consultation, under Sections 42 and 47 of the Planning Act 2008, with the window for providing comments running until 17th July 2023. Following the closing of this consultation period, it was identified that a small number of properties within the consultation zone had been omitted from the statutory consultation, and a number of 3rd party stakeholders were not consulted. As a result, the Applicants carried out a supplementary statutory consultation which ran from 4th August 2023 until 15th September 2023. A further targeted statutory consultation period between the 13th November to the 10th December 2023 was undertaken involving all parties with an interest in the areas of land within the Onshore Development Area where adjustments had been made since the Projects' PEIR consultation.	**Alternatives (Revision 2)** [AS-017] **Volume 7, Chapter 5 Project Description** [REP1-009] **Volume 7, Chapter 7 Consultation** [APP-079] **Volume 5 Consultation Report** {APP-034] **Volume 6, Report to Inform Appropriate Assessment Habitats Regulations Assessment Parts 1-4** [APP-045 to APP-048] **Volume 6, Habitats Regulations Derogation: Provision of Evidence** [APP-051] **Volume 6, Appendix 1 – Project Level Kittiwake Compensation Plan (Revision 4)** [REP2-010] **Volume 6, Appendix 2 - Guillemot [and Razorbill] Compensation Plan (Revision 3)** [AS-089] **Volume 6, Appendix 3 - Project Level Dogger Bank Compensation Plan (Revision 2)** [REP2-012]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		in principle, even where other consents relating to how a development is built or operated are needed at a later stage. Wherever possible, parallel processing of other consents should be encouraged to help speed up the process and resolve any issues as early as possible. The right information is crucial to good decision-making, particularly where formal assessments are required (such as Environmental Impact Assessment, Habitats Regulations assessment and flood risk assessment). To avoid delay, applicants should discuss what information is needed with the local planning authority and expert bodies as early as possible. Local planning authorities should publish a list of their information requirements for applications for planning permission. These requirements should be kept to the minimum needed to make decisions, and should be reviewed at least every two years. Local planning authorities should only request supporting information that is relevant, necessary and material to the application in question. Local planning authorities should consult the appropriate bodies when considering applications for the siting of, or changes to, major hazard sites, installations or pipelines, or for development around them. Applicants and local planning authorities should consider the potential for voluntary planning performance agreements, where this might achieve a faster and more effective application process. Planning performance agreements are likely to be needed for applications that are particularly large or complex to determine.		in principle, even where other consents relating to how a development is built or operated are needed at a later stage. Wherever possible, parallel processing of other consents should be encouraged to help speed up the process and resolve any issues as early as possible. The right information is crucial to good decision-making, particularly where formal assessments are required (such as Environmental Impact Assessment, Habitats Regulations assessment and flood risk assessment). To avoid delay, applicants should discuss what information is needed with the local planning authority and expert bodies as early as possible. Local planning authorities should publish a list of their information requirements for applications for planning permission. These requirements should be kept to the minimum needed to make decisions, and should be reviewed at least every two 14 years. Local planning authorities should only request supporting information that is relevant, necessary and material to the application in question. Local planning authorities should consult the appropriate bodies when considering applications for the siting of, or changes to, major hazard sites, installations or pipelines, or for development around them. Applicants and local planning authorities should consider the potential for voluntary planning performance agreements, where this might achieve a faster and more effective application process. Planning performance agreements are likely to be needed for applications that are particularly large or complex to determine.	The consultation process described above informed several design/project changes. Where technical consultation feedback has informed the site selection or Projects' design; this is outlined in the ES Chapters on Site Selection and Assessment of Alternatives as well as on Project Description. Consultation feedback received has been carefully considered as the project design was being finalised and the documentation has been updated to form the final ES that accompanies the DCO (including DML) application. Regarding HRA the details of the process followed by the Projects is contained within the RIAA document. The RIAA has been consulted upon during the pre-application period and all HRA matters discussed with relevant stakeholders through the EPP. The Habitats Derogation Provision of Evidence document outlines the evidence to support Stage 3 (Derogation) of the HRA Process. The cumulative residual impacts have been assessed within the RIAA. Following the employment of the mitigation hierarchy, the Habitats Regulations Derogation: Provision of Evidence document, contains several appendices and annexes which include a suite of compensatory plans. These include the Kittiwake Compensation Plan, Guillemot and Razorbill Compensation Plan and Project Level Dogger Bank Compensation Plan. The Compensation Plan in relation to Razorbill is provided on a 'without prejudice' basis only. Where the Secretary of State concludes that the Projects would result in Adverse Effects on Integrity the Applicants are proposing that the compensatory measures will be secured in the dDCO. With regard to planning performance agreements (PPA), the Applicants and ERYC have agreed a PPA.	

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.7	Planning Conditions and Obligations Paras. 55 to 58	Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition. Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision-making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification. Planning obligations must only be sought where they meet all of the following tests: a) necessary to make the development acceptable in planning terms; b) directly related to the development; and c) fairly and reasonably related in scale and kind to the development. Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable. It is up to the applicant to demonstrate whether particular circumstances justify the need for a viability assessment at the application stage. The weight to be given to a viability assessment is a matter for the decision maker, having regard to all the circumstances in the case, including whether the plan and the viability evidence underpinning it is up to date, and any change in site circumstances since the plan was brought into force. All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning guidance, including standardised inputs, and should be made publicly available.	Planning Conditions and Obligations Paras. 56 to 59	Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition. Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early 16 is beneficial to all parties involved in the process and can speed up decision-making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification. Planning obligations must only be sought where they meet all of the following tests: a) necessary to make the development acceptable in planning terms; b) directly related to the development; and c) fairly and reasonably related in scale and kind to the development. Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable. It is up to the applicant to demonstrate whether particular circumstances justify the need for a viability assessment at the application stage. The weight to be given to a viability assessment is a matter for the decision maker, having regard to all the circumstances in the case, including whether the plan and the viability evidence underpinning it is up to date, and any change in site circumstances since the plan was brought into force. All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning practice guidance, including standardised inputs, and should be made publicly available.	The Applicants do not consider that there are any matters which are required to be secured through planning obligations. The submitted dDCO includes draft requirements and DML conditions to ensure that the construction, operation and decommissioning of the Projects is acceptable.	**Volume 3, Draft DCO (Revision 6)** [document reference 3.1]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.8	Building a strong, competitive economy Paras. 85 and 87	Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential. Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations.	Building a strong, competitive economy Paras. 85 and 87	Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential. Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for: a) clusters or networks of knowledge and data-driven, creative or high technology industries; and for new, expanded or upgraded facilities and infrastructure that are needed to support the growth of these industries (including data centres and grid connections); b) storage and distribution operations at a variety of scales and in suitably accessible locations that allow for the efficient and reliable handling of goods, especially where this is needed to support the supply chain, transport innovation and decarbonisation; and c) the expansion or modernisation of other industries of local, regional or national importance to support economic growth and resilience.	The Projects, if built Concurrently, will lead to construction expenditure within the Humber Region whose residual effect is **moderate** beneficial and so significant in EIA terms. If built In Isolation or Sequentially, the residual effect on construction expenditure within the Humber Region is **minor** beneficial, not significant in EIA terms. If the Projects are built In Isolation, the Projects would support up to 1,190 jobs supported across the UK, including 760 jobs supported across the Humber Region during the development and construction. If the Projects are built Concurrently, the Projects would support up to 2,380 jobs supported across the UK, including 1,520 jobs supported across the Humber Region during the development and construction. If the Projects are built Sequentially, the Projects would support up to 1,550 jobs supported across the UK, including 930 jobs supported across the Humber Region during the development and construction. In any case, the Projects would generate significant economic benefits which would support local policy EC1's objectives. Policy EC1 seeks to support the growth and diversification of the East Riding economy through employment clusters around renewable energy, for example.	**Volume 8, Planning Statement** [APP-226] **Volume 8, Policy Compliance Assessment Tables** [APP-227] **Volume 7, Chapters 8 to 30**
6.9	Supporting a prosperous rural economy Para. 88	Planning policies and decisions should enable: a) the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well-designed, beautiful new buildings; b) the development and diversification of agricultural and other land-based rural businesses;	Supporting a prosperous rural economy Para. 88	Planning policies and decisions should enable: a) the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well-designed, new buildings; b) the development and diversification of agricultural and other land-based rural businesses; c) sustainable rural tourism and leisure developments which respect the character of the countryside; and	The Applicants recognise the importance of existing and established rural businesses. The Applicants' assessment concludes: • For Tourism and Recreation, Construction Impact 2: Tourism Assets on Butt Farm Caravan and Camping results in a residual **moderate** adverse effect which is significant in EIA terms; • For Tourism and Recreation, Operational Impact 6: Tourism Assets on Butt Farm Caravan	**Volume 7, Chapter 29 Tourism and Recreation** [APP-219] **Volume 7, Chapter 23 Landscape and Visual Impact** [APP-192] **Volume 8, Policy Compliance**

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		c) sustainable rural tourism and leisure developments which respect the character of the countryside; and d) the retention and development of accessible local services and community facilities, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship.		d) the retention and development of accessible local services and community facilities, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship.	and Camping results in residual **moderate** adverse effect, which is significant in EIA terms; • For Landscape and Visual Impact, Operational Impact 1: Landscape Effects of Onshore Converter Stations on Onshore Substation Zone, Operational Impact 2: Landscape Effects of the Onshore Converter Stations on the Yorkshire Wolds ILA on Yorkshire Wolds ILA and Operational Impact 3: Visual Effects of Onshore Converter Stations on Viewpoint 1: Butt Farm, Viewpoint 2: Coppleflat Lane, Bentley and Viewpoint 3: Beverley 20 near Broadgate result in residual **moderate** adverse effects, which are significant in EIA terms; and • The significant adverse residual effects captured above are framed against the Projects' wider and substantial contribution to both the achievement of UK decarbonisation targets and to global commitments to mitigating climate change. By generating low carbon, renewable and low-cost electricity in the UK, the Projects would also help to reduce the UK's reliance on imported energy and to improve energy security. In addition, the economic benefits arising from the construction of the Projects would be significant also, as outlined in the Applicants response to Ref. 6.3 above.	**Assessment Tables** [APP-227]
6.10	Promoting healthy and safe communities Paras. 96 and 97	Planning policies and decisions should aim to achieve healthy, inclusive and safe places and beautiful buildings which: a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages; b) are safe and accessible, so that crime and disorder, and the fear of crime, do not	Promoting healthy and safe communities Paras. 96 and 97	Planning policies and decisions should aim to achieve healthy, inclusive and safe places which: a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;	The Socio-economics and Human Health assessments conclude that no residual effect is greater than **minor** adverse or beneficial for any impact, therefore not significant in EIA terms, besides for: • For Socio-economics, the Projects concurrent construction expenditure within the Humber Region would result in a residual **moderate** beneficial effect, which is significant in EIA terms; and • For Human Health, the Projects' operational impact on wider societal infrastructure to the general population results in a **moderate**	**Volume 3, Draft DCO (Revision 6)** [document reference 3.1] **Volume 8, Outline Skills and Employment Strategy** [APP-230] **Volume 7, Chapter 28 Socio-economics** [APP-217] - section 28.6

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		undermine the quality of life or community cohesion – for example through the use of beautiful, well-designed, clear and legible pedestrian and cycle routes, and high quality public space, which encourage the active and continual use of public areas; and c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling. To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should: a) plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments; b) take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community; c) guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs; d) ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and e) ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.		b) are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of well-designed, clear and legible pedestrian and cycle routes, and high quality public space, which encourage the active and continual use of public areas; and c) enable and support healthy lives, through both promoting good health and preventing ill-health, especially where this would address identified local health and well-being needs and reduce health inequalities between the most and least deprived communities – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling. To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should: a) plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments; b) take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community; c) guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs; d) ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and	beneficial effect, which is significant in EIA terms. As outlined throughout the ES, the Projects will deliver significant social and economic benefits as outlined within the ES Chapter on Socio-economics. This includes contributing to a skilled, diverse workforce and strengthen the existing manufacturing base which will be secured via the Outline Skills and Employment Strategy. The production of a detailed Skills and Employment Strategy is secured via Requirement 26 of the dDCO.	**Volume 7, Chapter 27 Human Health** [APP-214]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
				e) e) ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.		
6.11	Protecting and enhancing Public Rights of Way Paras. 103 and 104	Existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless: a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or c) the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use. Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.	Protecting and enhancing Public Rights of Way Paras. 104 and 105	Existing open space, sports and recreational buildings and land, including playing fields and formal play spaces, should not be built on unless: a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or c) the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use. Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.	The likely significant effects of the Projects on Land Use has been considered and assessed. The Land Use Assessment provides an overview of the existing environment for the Onshore Development Area landward of MHWS, followed by an assessment of likely significant effects for the construction, operation, and decommissioning stages of the Projects. The Land Use Chapter of the ES describes the impacts of any temporary or permanent land take within the Onshore Development Area that may occur to the following relevant receptors: • Environmental Stewardship schemes, designated areas (e.g. SSSIs), sites allocations, PRoW, cycle routes, coastal paths and utilities. The Tourism and Recreation assessment confirms that, through a considered site selection process, all open space and common land has been avoided except at Skipsea Beach where there would be temporary works (should the short HDD route to Landfall be selected). There will be no permanent closures of any recreational routes. However, there would be one minor permanent diversion where a PRoW crosses the permanent access for the Onshore Substation Zone, to allow for a change in level. Any disturbance would be temporary and reinstated as soon as reasonably practical.	**Volume 7, Chapter 21 Land Use (Revision 3)** [REP2-022] **Volume 8, Appendix C - Outline Public Rights of Way Management Plan** of the **Outline Code of Construction Practice (Revision 3)** [REP1-025] **Volume 7, Chapter 29 Tourism and Recreation** [APP-219]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.12	Promoting sustainable transport Paras. 108, 109, 114, 115 and 117	Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: a) the potential impacts of development on transport networks can be addressed; b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated; c) opportunities to promote walking, cycling and public transport use are identified and pursued; d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that: a) appropriate opportunities to promote sustainable transport modes can be – or have	Promoting sustainable transport Paras. 109, 110, 115, 116 and 118	Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve: a) making transport considerations an important part of early engagement with local communities; b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places; c) understanding and addressing the potential impacts of development on transport networks; d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated; e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.	The Applicants have provided a Traffic and Transport Assessment as contained within the respective Chapter. The Assessment concludes that no construction, operation or decommissioning impact will result in a residual effect which is greater than **minor** adverse, not significant in EIA terms. To achieve this, the Applicants have submitted an Outline Construction Traffic Management Plan (OCTMP) which is provided in support of the DCO application. The OCTMP includes outline travel plan measures, which would be developed further in consultation with the relevant highway authorities prior to the commencement of the Projects. The production of a final Construction Traffic Management Plan is secured by Requirement 14 under Schedule 2 Part 1 Requirements of the dDCO. The Applicants have submitted a Traffic Assessment, as an appendix to the Traffic and Transport Chapter, which has been produced in accordance with current transport guidance.	**Volume 7, Chapter 24 Traffic and Transport** [APP-195]- section 24.6 and 24.7 **Volume 8, Outline Construction Traffic Management Plan (Revision 2)** [AS-020] **Volume 3, Draft DCO (Revision 6)** [document reference 3.1] **Volume 7, Appendix 24-2 - Transport Assessment (Revision 2)** [AS-019]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		been – taken up, given the type of development and its location; b) safe and suitable access to the site can be achieved for all users; c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree. Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe. All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.		In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that: a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location; b) safe and suitable access to the site can be achieved for all users; c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach. Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios. All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored.		

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.13	Making effective use of land Para. 123	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. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or 'brownfield' land.	Making effective use of land Para. 124	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. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or 'brownfield' land.	The land required for the Onshore Converter Station will result in medium to long-term residual impacts to changes in land use and agri-environmental schemes during operation of the Projects. Whilst the loss to agriculture will be medium to long term, the land surrounding the Onshore Converter Station will be reinstated to agriculture, bounded by proposed native woodland and an area of SuDs. Details of this are provided in the Outline Landscape Management Plan submitted as part of this application. The above notwithstanding, the effective use of natural resources has been a key consideration of the Applicants to ensure impacts are minimised. The Design and Access statement outlines the Onshore Design Principles which have been used to ensure the Projects onshore elements respond to a variety of technical and environmental development criteria.	**Volume 7, Chapter 21 Land Use (Revision 3)** [REP2-022] **Volume 8, Outline Landscape Management Plan (Revision 3)** [REP2-031] **Volume 8, Design and Access Statement (Revision 2)** [REP2-027] - section 4
6.14	Meeting the challenge of climate change, flooding and coastal change Para. 157	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, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure. New development should be planned for in ways that: a) 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	Meeting the challenge of climate change, flooding and coastal change Paras. 161 – 165 and 168	The planning system should support the transition to net zero by 2050 and take full account of all climate impacts including overheating, water scarcity, storm and flood risks 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, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure	The Projects would make a substantial contribution, both to the achievement of UK decarbonisation targets and to global commitments to mitigating climate change. By generating low carbon, renewable and low-cost electricity in the UK, the Projects would also help to reduce the UK's reliance on imported energy and to improve energy security. The Applicants assessment includes a greenhouse gas assessment and a CCRA. The assessment considers: several climate change variables (such as sea level rise, precipitation, and extreme weather events); the potential climate hazards which could arise (such as drought, storm events, storm surges and tidal flooding) and the possible receptors affected such as the coast. The CCRA concludes that all receptors have a low vulnerability to climate variables and their resulting hazards.	**Volume 7, Chapter 30 Climate Change** [APP-222] - section 30.6 and Table 30-30

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.		Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating and drought from rising temperatures. Policies should support appropriate measures to ensure the future health and resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure The need to mitigate and adapt to climate change should also be considered in preparing and assessing planning applications, taking into account the full range of potential climate change impacts. New development should be planned for in ways that: a) 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 incorporating green infrastructure and sustainable drainage systems; and b) help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings in plans should reflect the Government's policy for national technical standards. To help increase the use and supply of renewable and low carbon energy and heat, plans should:		

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
				a) 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); In line with the objectives and provisions of the Climate Change Act 2008. b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for collocating potential heat customers and suppliers. When determining planning applications for all forms of renewable and low carbon energy developments and their associated infrastructure, local planning authorities should: a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future; b) recognise that small-scale and community-led projects provide a valuable contribution to cutting greenhouse gas emissions; c) c) in the case of applications for the repowering and life-extension of existing renewable sites, give significant weight to the benefits of utilising an established site.		

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.15	Planning and Flood Risk Paras. 165 to 168 and 173	Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere. Strategic policies should be informed by a strategic flood risk assessment, and should manage flood risk from all sources. They should consider cumulative impacts in, or affecting, local areas susceptible to flooding, and take account of advice from the Environment Agency and other relevant flood risk management authorities, such as lead local flood authorities and internal drainage boards. All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property. They should do this, and manage any residual risk, by: a) applying the sequential test and then, if necessary, the exception test as set out below; b) safeguarding land from development that is required, or likely to be required, for current or future flood management; c) using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding, (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management); and d) where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to relocate development, including housing, to more sustainable locations.	Planning and Flood Risk Paras. 170 to 175 and 181	Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere. Strategic policies should be informed by a strategic flood risk assessment, and should manage flood risk from all sources. They should consider cumulative impacts in, or affecting, local areas susceptible to flooding, and take account of advice from the Environment Agency and other relevant flood risk management authorities, such as lead local flood authorities and internal drainage boards. All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property. They should do this, and manage any residual risk, by: a) applying the sequential test and then, if necessary, the exception test as set out below; b) safeguarding land from development that is required, or likely to be required, for current or future flood management; c) using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding, (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management); and d) where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to relocate development, including housing, to more sustainable locations.	A FRA has been undertaken in accordance with the NPPF and the methodology and criteria provided for the application of the Sequential Test and Exception Test within the Planning Practice Guidance. The Projects Onshore elements are to be located principally in Flood Zone 1 and at low risk from surface water flooding, including the majority of the Onshore Export Cable Corridor and the Onshore Substation Zone. Furthermore, there is a low risk of flooding from all other sources of flood risk. Permanent above-ground structures, comprising the Onshore Converter Stations, are to be located within Flood Zone 1 and are therefore in accordance with the Sequential Test guidance related to placing development in the lowest flood risk areas. With regards to surface water flood risk, it is noted that the Landfall Zone and Onshore Converter Stations are principally at low risk of surface water flooding. Therefore, it is considered that flood risk concerns can be appropriately mitigated within the detailed design. On this basis, the Projects are in accordance with the Sequential Test in that areas principally at low risk have been identified over those areas at increased risk. In addition, the Flood Risk Assessment has considered the Projects susceptibility to climate change related risks and concludes that the Projects will be resilient to such risks.	**Volume 7, Chapter 20 Flood Risk and Hydrology (Revision 2)** [REP1-014] **Volume 7, Appendix 20-4 - Flood Risk Assessment** [APP-168]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding. When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment59. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that: a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location; b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment; c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate; d) any residual risk can be safely managed; and e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.		A sequential risk-based approach should also be taken to individual applications in areas known to be at risk now or in future from any form of flooding, by following the steps set out below. Within this context the aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential test should be used in areas known to be at risk now or in the future from any form of flooding, except in situations where a site-specific flood risk assessment demonstrates that no built development within the site boundary, including access or escape routes, land raising or other potentially vulnerable elements, would be located on an area that would be at risk of flooding from any source, now and in the future (having regard to potential changes in flood risk). When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that: a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location; b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;	The above notwithstanding, it is acknowledged that there are locations where infrastructure is required to pass through or to be located in Flood Zone 3 or at increased risk of surface water flooding. This relates to the Onshore Export Cable Corridor and areas adjacent to the Landfall Zone. It is also noted that the principal interaction with Flood Zone 3 is at key locations along the Onshore Export Cable Corridor (associated with the need to cross existing watercourses). Taking into account the two parts of the Exception Test, it is concluded that the first part comprising the provision of wider sustainability benefits to the community has been passed on the basis that the Projects, as NSIPs provide energy certainty utilising a sustainable and renewable source of energy at a national scale. With regard to the second part of the Exception Test, it is necessary to consider the Project in the context of its scale and that the majority of the Onshore Export Cable Corridor, as well as the Onshore Converter Stations, are not located within an area considered to be at risk of fluvial or tidal flooding. Elements that are likely to pass through areas at increased risk of flooding, i.e., Flood Zone 3 or high surface water flood risk, comprise the subterranean development which, following construction, will not be vulnerable to flood risk during its operational lifetime and will not increase flood risk elsewhere. For the subterranean development, it is only during the construction works that there is the potential for a temporary increase in flood risk and this will be mitigated through the use of appropriate management measures.	

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
				c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate; d) any residual risk can be safely managed; and e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan	Therefore, it is considered that the second part of the Exception Test has been passed, as it has been demonstrated that the infrastructure can be designed such that it would be safe for its lifetime, without increasing flood risk elsewhere. The Flood Risk and Hydrology Assessment concludes that the potential impacts upon the Projects during construction, operation and decommissioning (across all Development Scenarios) results in a significance of effect which is no greater than **minor** adverse, not significant in EIA terms.	
6.16	Sustainable Urban Drainage Systems (SuDs) Para. 175	Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate. The systems used should: a) take account of advice from the lead local flood authority; b) have appropriate proposed minimum operational standards; c) have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and d) where possible, provide multifunctional benefits.	Sustainable Urban Drainage Systems (SuDs) Para. 182	Applications which could affect drainage on or around the site should incorporate sustainable drainage systems to control flow rates and reduce volumes of runoff, and which are proportionate to the nature and scale of the proposal. These should provide multifunctional benefits wherever possible, through facilitating improvements in water quality and biodiversity, as well as benefits for amenity. Sustainable drainage systems provided as part of proposals for major development should: a) take account of advice from the Lead Local Flood Authority; b) have appropriate proposed minimum operational standards; and c) have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development.	As part of the Flood Risk Assessment, the discharge of surface water from the Onshore Converter Stations has been considered within the context of the surface water flood risk and the need to ensure that any drainage solutions do not result in an increase in flood risk either to or from the Onshore Converter Stations. Surface water drainage requirements will be designed to meet the requirements of the NPPF, NPS EN-1 and the CIRIA SuDS Manual C753, as well as East Riding of Yorkshire Council's Combined Planning Note and Standing Advice on Sustainable Drainage Systems (SuDS) & Surface Water Drainage Requirements for New Development (2016). Runoff from the Onshore Converter Stations will be limited and discharged in accordance with best practice. Details of the proposed surface water drainage design, including the approach to the adoption of the SuDs Hierarchy, during construction and operation has been set out within the Outline Drainage Strategy. The production of detailed construction and operational drainage strategies has been secured via Requirement 16 of the dDCO.	**Volume 7, Appendix 20-4 - Flood Risk Assessment** [APP-168] **Volume 8, Outline Drainage Strategy (Revision 3)** [REP2-033] **Volume 3, Draft DCO (Revision 6)** [document reference 3.1]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.17	Coastal Change Paras. 176 and 178	In coastal areas, planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Integrated Coastal Zone Management should be pursued across local authority and land/sea boundaries, to ensure effective alignment of the terrestrial and marine planning regimes. Development in a Coastal Change Management Area will be appropriate only where it is demonstrated that: a) it will be safe over its planned lifetime and not have an unacceptable impact on coastal change; b) the character of the coast including designations is not compromised; c) the development provides wider sustainability benefits; and d) the development does not hinder the creation and maintenance of a continuous signed and managed route around the coast.	Coastal Change Paras. 183 to 185	In coastal areas, planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Integrated Coastal Zone Management should be pursued across local authority and land/sea boundaries, to ensure effective alignment of the terrestrial and marine planning regimes. Plans should reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast. They should identify as a Coastal Change Management Area any area likely to be affected by physical changes to the coast, and: a) be clear as to what development will be appropriate in such areas and in what circumstances; and b) make provision for development and infrastructure that needs to be relocated away from Coastal Change Management Areas. Development in a Coastal Change Management Area will be appropriate only where it is demonstrated that: a) it will be safe over its planned lifetime and not have an unacceptable impact on coastal change; b) the character of the coast including designations is not compromised; c) the development provides wider sustainability benefits; and d) d) the development does not hinder the creation and maintenance of a continuous signed and managed route around the coast.	The Applicants are cognisant of the importance of the UK Marine Policy Statement (MPS) and the relevant Marine Plans, being the East Inshore and Offshore Marine Plan (April, 2014) and the North East Inshore and Offshore Marine Plan (June, 2021), in decision making. The Applicants have undertaken a detailed review of the Projects' compliance with the above referenced Marine Plans through Tables 1-4 and 1-5 of the **Policy Compliance Assessment Tables** [APP-227]. The Marine Plans and the MPS present the national, regional and local planning policy that is relevant to the impact assessment of the Projects. Specific aspects of policy from the MPS and relevant Marine Plans relevant to each EIA topic are included in the appropriate chapters of the ES. Part of the Projects Landfall Zone lies within a Coastal Change Management Area, as designated by East Riding of Yorkshire Council. As such, the Applicants can confirm that: The Applicants assessment includes a greenhouse gas assessment and a CCRA. The assessment considers: several climate change variables (such as sea level rise, precipitation, and extreme weather events); the potential climate hazards which could arise (such as drought, storm events, storm surges and tidal flooding) and the possible receptors affected such as the coast. The CCRA concludes that all receptors, including the Landfall Zone, have a low vulnerability to climate variables and their resulting hazards. The Landscape and Visual Impact Assessment considers the landscape character of the coast, including designations, and concludes that the Landfall Zone's construction and operation will not result in an effect which is greater than **minor** adverse and so not significant in EIA terms.	**Volume 7, Chapter 3 Policy and Legislative Context** [APP-066] **Volume 7, Chapter 30 Climate Change** [APP-222] **Volume 7, Chapter 23 Landscape and Visual Impact Assessment** [APP-192] **Volume 7, Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] **Volume 7, Chapter 24 Traffic and Transport** [APP-195]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
					The Applicants have considered the impact on the maritime cliff and slope priority habitat adjacent to the Landfall Zone, within the Coastal Change Management Area, in terms of the emergency access to the beach. It was concluded that habitat would be suitably protected and monitored during the construction period and no residual significant effects in EIA terms. The Projects would make a significant contribution to the achievement of both the national renewable energy targets and to the UK's contribution to global efforts to reduce the effects of climate change. The Traffic and Transport Assessment concludes that no potential impacts of the Projects construction, operation, or decommissioning (across any Development Scenario) will result in an effect which is greater than **minor** adverse, and so not significant in EIA terms.	
6.18	Conserving and enhancing the natural environment Para. 180	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; 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;	Conserving and enhancing the natural environment Para. 187	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;	Opportunities for mitigation and the enhancement of landscapes have been identified where appropriate in the Applicants assessment. An outline approach to embedded design mitigation at the Onshore Converter Stations, which would be used to inform the detailed design of the landscape mitigation, is set out in the Outline Landscape Management Plan. The final written Landscape Management Plan (which would be required to accord with the Outline Landscape Management Plan) will be secured by Requirement 10 of the dDCO. The Terrestrial Ecology and Ornithology Assessment assesses the potential impacts of the Projects upon receptors which include but are not limited to: National statutory designated sites, Non-statutory designated sites, Reptiles and Over-wintering birds. Following the imposition of mitigation measures, (such as the Outline Code of Construction Practice and it's appendices, the Outline Project Environmental Management Plan	**Volume 8, Outline Landscape Management Plan (Revision 3)** [REP2-031] **Volume 3, Draft DCO (Revision 6)** [document reference 3.1] **Volume 7, Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019] **Volume 7, Appendix 18-10 - Biodiversity Net Gain Strategy** [APP-197]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		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.		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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs; 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.	and Outline Landscape Management Plan), the residual effects arising from the Projects are no greater than **minor** adverse, not significant in EIA terms across all Impacts besides: • **Moderate** adverse effect on Breeding birds during construction; and • **Moderate** adverse effect identified for impacts of Nitrogen deposition on Bentley Moor Wood LWS and the ancient woodland it is designated for: ○ Impact 2: Construction disturbance - Non-statutory designated sites; and ○ Impact 3: Temporary habitat loss / fragmentation (impact 2) relating to nitrogen deposition at Bentley Moor Wood and ancient woodland. In order to secure BNG for the Projects a BNG Strategy will be provided prior to the commencement of construction. The final BNG Strategy will be informed by the detailed design of the Projects, including landscape proposals, construction methods and Projects timescale. Based upon these parameters, the final BNG Strategy will: • Provide a finalised metric calculation to assess the on-site net change in biodiversity and the requirements to deliver a net gain; • Detail the on-site and off-site measures to deliver a no net loss, or where possible a net gain; and • Detail how compensation will be legally secured, managed and monitored for a minimum 30-year period. The Geology and Land Quality Assessment concludes that no construction, operation or decommissioning effect (across all Development Scenarios) will result in an effect which is greater than **minor** adverse, and so not significant in EIA terms.	**Volume 7, Chapter 19 Geology and Land Quality** [APP-158] **Volume 7, Chapter 21 Land Use (Revision 3)** [REP2-022]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
					The Land Use Assessment considers the economic and other benefits of BMV Land. The Assessment concludes that no construction, operation or decommissioning effect (across all Development Scenarios) will result in an effect which is greater than **minor** adverse, and so not significant in EIA terms besides operational Impact 2 Permanent Loss of Land for Agriculture on agricultural land whose residual effect is **major** adverse and is significant in EIA terms. The Applicants assessment concludes that all bar one impact on soil, air, water, or noise pollution or land instability result in residual effects which are no greater than **minor** adverse, and so not significant in EIA terms.	

6.19	Habitats and biodiversity
	
	Para. 186
	
	Presumption affecting habitats sites
	
	Para. 188
		When determining planning applications, local planning authorities should apply the following principles:
		
		a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
		
		b) development on land within or outside a Site of Special Scientific Interest, 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 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 Sites of Special Scientific Interest;
		
		c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly
			Habitats and biodiversity
			
			Para. 193
			
			Presumption affecting habitats sites
			
			Para. 195
				When determining planning applications, local planning authorities should apply the following principles:
				
				a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
				
				b) development on land within or outside a Site of Special Scientific Interest, 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 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 Sites of Special Scientific Interest;
					The Terrestrial Ecology and Ornithology Assessment assesses the potential impacts of the Projects upon receptors which include, but are not limited to: National statutory designated sites, Non-statutory designated sites, Reptiles and Over-wintering birds. Following the imposition of mitigation measures, (such as the Outline Code of Construction Practice and it's appendices, the Outline Project Environmental Management Plan and Outline Landscape Management Plan), the residual effects arising from the Projects are no greater than **minor** adverse, not significant in EIA terms across all Impacts besides:
					
					• **Moderate** adverse effect on Breeding birds during construction;
					• **Moderate** adverse effect identified for impacts of Nitrogen deposition on Bentley Moor Wood LWS and the ancient woodland it is designated for:
					  ○ Impact 2: Construction disturbance - Non-statutory designated sites; and
					  ○ Impact 3: Temporary habitat loss / fragmentation (impact 2) relating to nitrogen deposition at Bentley Moor Wood and ancient woodland.
						Volume 7, Chapter 18 Terrestrial Ecology and Ornithology (Revision 5) [REP2-019]
						
						Volume 7, Appendix 18-10 - Biodiversity Net Gain Strategy [APP-197]
						
						Volume 6, Report to Inform Appropriate Assessment Habitats Regulations Assessment Parts 1-4 [APP-045 to APP-048]
						
						Volume 6, Habitats Regulations Derogation: Provision of Evidence [APP-051]
						
						Volume 6, Appendix 1 – Project Level Kittiwake Compensation Plan

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		exceptional reasons67 and a suitable compensation strategy exists; and d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.		c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons70 and a suitable compensation strategy exists; and d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.	In order to secure BNG for the Projects a BNG Strategy will be provided prior to the commencement of construction. The final BNG Strategy will be informed by the detailed design of the Projects, including landscape proposals, construction methods and Projects timescale. Based upon these parameters, the final BNG Strategy will: • Provide a finalised metric calculation to assess the on-site net change in biodiversity and the requirements to deliver a net gain; • Detail the on-site and off-site measures to deliver a no net loss, or where possible a net gain; and • Detail how compensation will be legally secured, managed and monitored for a minimum 30-year period. The Applicants have submitted a Habitats Regulations Derogation Provision of Evidence document to provide evidence to support Stage 3 (Derogation) of the HRA Process. The cumulative residual impacts have been assessed within the RIAA. Following the employment of the mitigation hierarchy, the Habitats Regulations Derogation: Provision of Evidence' document, contains several appendices and annexes which include a suite of compensatory plans. These include the Kittiwake Compensation Plan, Guillemot and Razorbill Compensation Plan and Project Level Dogger Bank Compensation Plan. The Compensation Plan in relation to Razorbill is provided on a 'without prejudice' basis only. Where the Secretary of State concludes that the Projects would result in Adverse Effects on Integrity the Applicants are proposing that the compensatory measures will be secured in the dDCO. For all other sites and features assessed in the RIAA, a conclusion of no adverse effect on site integrity is reached.	**(Revision 4)** [REP2-010] **Volume 6, Appendix 2 - Guillemot [and Razorbill] Compensation Plan (Revision 3)** [AS-089] **Volume 6, Appendix 3 - Project Level Dogger Bank Compensation Plan (Revision 2)** [REP2-012]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
6.20	Ground conditions Paras. 189 and 190	Planning policies and decisions should ensure that: a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation); b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and c) adequate site investigation information, prepared by a competent person, is available to inform these assessments. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.	Ground conditions Paras. 196 and 197	Planning policies and decisions should ensure that: a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation); b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and c) adequate site investigation information, prepared by a competent person, is available to inform these assessments. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.	The existing ground conditions and potential sources of contamination has been identified. The baseline environment and assessment have been informed by the Geo-Environmental Desk Study and Preliminary Risk Assessment Report, which reviewed potential sources of contamination associated with the current and historical land uses within the study area. An assessment of the potential impacts associated with the construction and operation of the Projects have been undertaken. Potential mitigation measures, for example targeted ground investigations in areas of concern, are also discussed within the Geology and Land Quality Chapter of the ES. The Assessment concludes that all residual effects of the Projects' construction, operation and decommissioning will result in effects which are no greater than **minor** adverse, not significant in EIA terms.	**Volume 7, Chapter 19 Geology and Land Quality [APP-158]** - sections 19.5 and 19.6 **Volume 7, Appendix 19-2 - Geo-Environmental Desk Study and Preliminary Risk Assessment Report** [APP-161]
6.21	Pollution Para. 191	Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life; b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and	Pollution Para. 198	Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life72; b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and	In addressing each point in turn, the Applicants Noise Assessment concludes that no construction, operation or decommission impact of the Projects (across all Development Scenarios) will result in an effect which is greater than **minor** adverse, and so not significant in EIA terms. In relation to human health, the human health assessment concludes that no noise impact arising from the Projects construction, operation and decommissioning (across all Development Scenarios) on the general population and vulnerable group population will result in an effect which is greater than **minor** adverse, and so not significant in EIA terms. Operational lighting at the Onshore Converter Stations would be designed in accordance with latest guidance and legislation. The details of the location, height, design and luminance of lighting to be used would be provided as part of detailed	**Volume 7, Chapter 25 Noise (Revision 2)** [REP1-019] - section 25.6. **Volume 7, Chapter 27 Human Health** [APP-214] - section 27.6. **Volume 7, Chapter 23 Landscape and Visual Impact Assessment** [APP-192] - sections 25.5 and 25.6

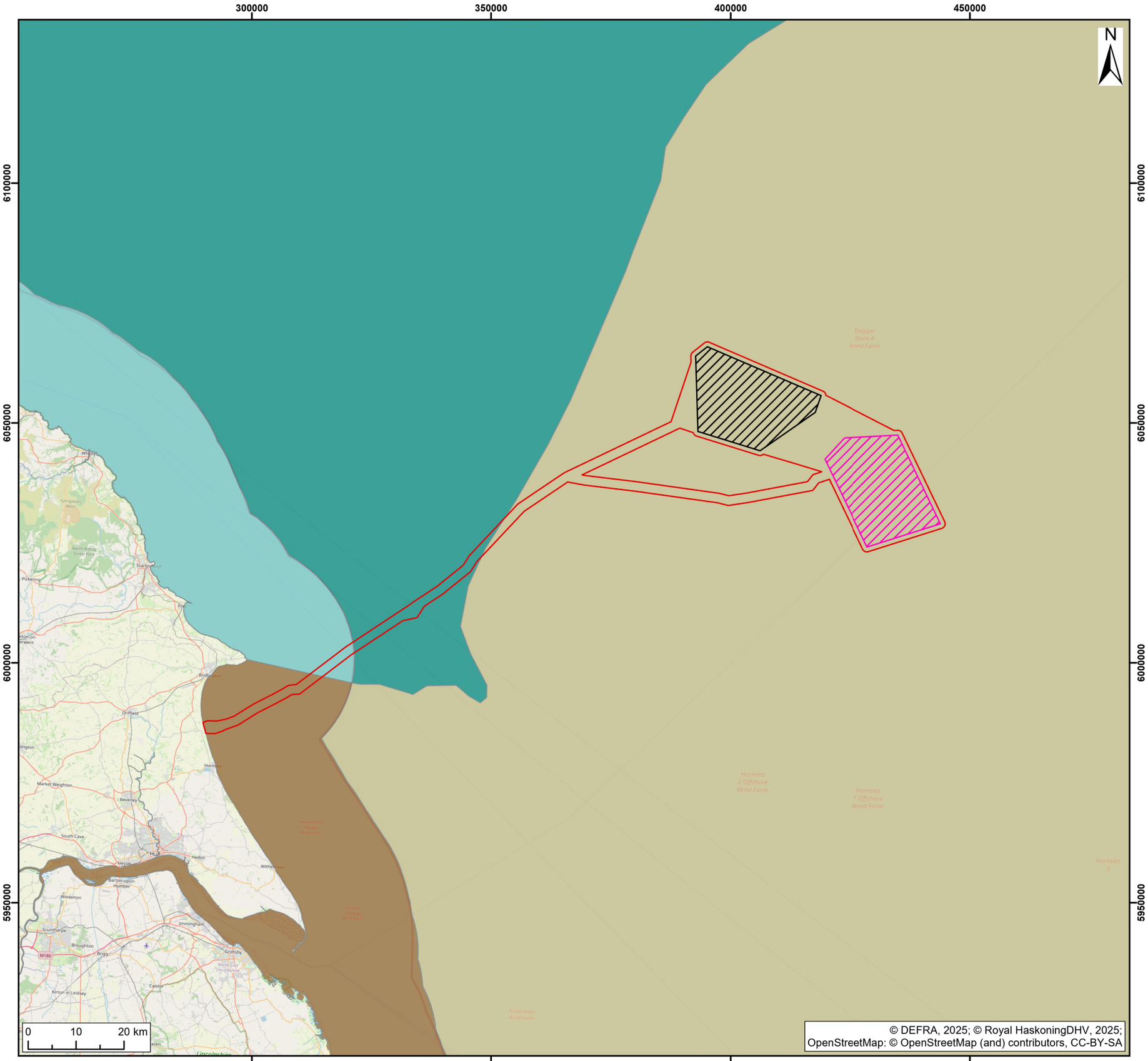
Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.		c) c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.	design for the Onshore Converter Stations. No permanent night-time lighting would be required. Security lighting will be installed as agreed in the written scheme for the management and mitigation of artificial light emissions during the operation, which would be developed at the detailed design as set out in Requirement 22 of the dDCO.	
6.22	Pollution – Air Quality Para. 192	Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.	Pollution – Air Quality Para. 199	Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.	The Air Quality Assessment considers the likely significant effects of the Projects on local air quality. The Chapter provides an overview of the existing environment for the Onshore Development Area. The Assessment considers any relevant Local Air Quality Management Areas. The Assessment concludes that East Riding of Yorkshire Council has not declared any statutory AQMAs within its area of jurisdiction. Meanwhile, Hull City Council has declared a statutory AQMA for exceedances of the NO_2 annual mean around the A63 trunk road which runs through the centre of the City. The air quality study area falls within the Hull AQMA No.1. The Assessment concludes that no construction, operation or decommissioning impact (across all Development Scenarios) leads to a residual effect which is greater than not significant in EIA terms, where mitigation measures are implemented. The Projects Outline Code of Construction Practice forms part of the embedded mitigation for Air Quality impacts.	**Volume 7, Chapter 26 Air Quality** [APP-208] **Volume 8, Outline Code of Construction Practice (Revision 3)** [REP1-025]
6.23	Proposals affecting heritage assets Paras. 200, 205	In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using	Proposals affecting heritage assets Paras. 207, 212	In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate	An assessment of aerial photographic and LiDAR data and historic map regression, a heritage walkover survey and geoarchaeological desk-based assessment has been undertaken. In addition, the Applicants have utilised other data sources such as, but not limited to: National Heritage List for England (NHLE), Humber Historic Environment Record, CITiZAN Dataset, Relevant Regional, Local and Period Archaeological Studies and Journals, The Archaeology Data Service, Cartographic	**Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] - section 22.6

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.		expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.	sources (the East Riding Archives, National Mapping Programme and Envirocheck Report) and Aerial Photographic Data (Historic England Archive and the Humber HER, and ortho-rectified mosaics of vertical aerial photographs at Google Earth). The above data sources have served to inform an understanding of the known and potential onshore archaeological and cultural heritage resource (and the significance of the asset(s)) within the defined study areas. The potential monitoring requirements of the Onshore Archaeology and Cultural Heritage have been informed by an Archaeological Desk Based Assessment (ADBA), Aerial Photograph assessment, Heritage Walkover Survey, Settings Assessment, Geoarchaeological Desk Based Assessment (GDBA) and Geophysical Survey. The dDCO secures the completion of detailed onshore and offshore WSIs. The detailed Written Archaeological Scheme of Investigation (Onshore) is secured through Requirement 18. The Onshore Archaeology and Cultural Heritage Assessment concludes that no impact arising from the Projects will result in a residual effect, post-imposition of mitigation measures, which is greater than **minor** adverse, not significant in EIA terms.	**Volume 7, Appendix 22-1 - Onshore Archaeology and Cultural Heritage Consultation Response** [APP-174] **Volume 7, Appendix 22-2 - Archaeological Desk Based Assessment** [APP-175] **Volume 7, Appendix 22-3 - Assessment of Airborne and Satellite Remote Sensing Data and Map Regression Analysis for Archaeology** [APP-176] **Volume 7, Appendix 22-4 - Heritage Walkover Survey Report** [APP-177] **Volume 7, Appendix 22-5 -Onshore Infrastructure Settings Assessment** [APP-178] **Volume 7, Appendix 22-6 - Geoarchaeological Desk Based Assessment** [APP-179] **Volume 7, Appendix 22-7 - Geophysical Assessment Report** [APP-180] **Volume 3, Draft DCO (Revision 6)**

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
						[document reference 3.1]
6.24	Proposals affecting heritage assets Para. 208	Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.	Proposals affecting heritage assets Para. 215	Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.	The Projects will lead to 'less than substantial harm' to the significance of designated heritage assets. This harm, which is not significant in EIA terms, is weighted against the substantial contribution the Projects will make in meeting the demand for greater energy to be produced from renewable sources, improve energy security and assist in meeting UK decarbonisation targets and global commitments to mitigating climate change.	**Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] - section 22.6
6.25	Considering potential impacts Para. 211	Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.	Considering potential impacts Para. 218	Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.	Archaeological mitigation is envisaged to comprise a combination of the following recognised standard approaches: • Further advance and enacting of preservation in situ options and requirements (e.g. avoidance/micro-siting/HDD etc., where possible); • Archaeological excavation: including subsequent post-excavation assessment, and analysis, publication and archiving; • Archaeological monitoring/watching brief: including subsequent post-excavation assessment, and analysis, publication and archiving (where appropriate); and • Earthwork condition surveys: including subsequent reporting and archiving (followed by backfilling and reinstatement, where required on a case-by-case basis). The dDCO secures the completion of detailed onshore WSIs. The detailed Written Archaeological Scheme of Investigation (Onshore) is secured through Requirement 18.	**Volume 7, Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092] - section 22.6 **Volume 3, Draft DCO (Revision 6)** [document reference 3.1]
6.26	The sustainable use of minerals Paras. 215 and 218	It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to	The sustainable use of minerals	It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be	Land within the Onshore Development Area is designated as being located within a MSA. The minerals associated with the designations are sands and gravels (throughout the Onshore Development Area) and chalk (Onshore Substation Zone). The safeguarded areas are not present as	**Volume 7, Chapter 19 Geology and Land Quality** [APP-158]

Ref.	Topic and NPPF (2023) Paragraph	Relevant Paragraph Text from NPPF (2023) as assessed in Policy Compliance Assessment Tables [APP-227]	Topic and NPPF (2024) Paragraph	Relevant Paragraph Text from NPPF (2024)	Assessment	Relevant Documents
		be made of them to secure their long-term conservation. Local planning authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working.	Paras. 222 and 225	worked where they are found, best use needs to be made of them to secure their long-term conservation. Local planning authorities should not normally permit other development proposals in Mineral Safeguarding Areas if it might constrain potential future use for mineral working.	continuous features, but as localised areas throughout landfall, Onshore Export Cable Corridor and Onshore Substation. The total area of MSAs within the Onshore Development Area is approximately 32ha (30ha within the Onshore Export Cable Corridor and 2ha within the Substation zone, which represents approximately 0.03% and 0.002% respectively of the total MSA within the East Riding of Yorkshire Council boundary). The Geology and Land Quality Assessment concludes that: For the Projects construction (across all Development Scenarios), Impact 4: Sterilisation of future mineral resources on MSAs results in a **minor** adverse residual effect, where a Mineral Resources Assessment is undertaken. For the Projects operation (across all Development Scenarios), Impact 10: Sterilisation of future mineral resources on MSAs results in a **minor** adverse residual effect so long as the extraction of feasible mineral resources is undertaken and a Minerals Resources Assessment is developed prior to commencement of construction works.	**Volume 7, ES Chapter 19 - Geology and Land Quality Figure 19-1 to Figure 19-9 (Revision 2)** [REP1-013] -Figure 19-7 Mineral Safeguarding Areas (a - c)

Appendix B – WQ BGC.1.5 - Marine Plans in Relation to the Offshore Development Area



Legend:

- Offshore Development Area
- DBS East Array Area
- DBS West Array Area

Marine Plans

- East Inshore
- East Offshore
- North East Inshore
- North East Offshore

S2	P01	06/03/2025	Suitable for Information	JH	SM	CC
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Marine Plans in relation to the Offshore Development Area

Figure: 1

Drawing No: PC2340-RHD-OF-ZZ-DR-Z-1019

Co-ordinate system: WGS 1984 UTM Zone 31N

Page Size: A3

Scale: 1:800,000

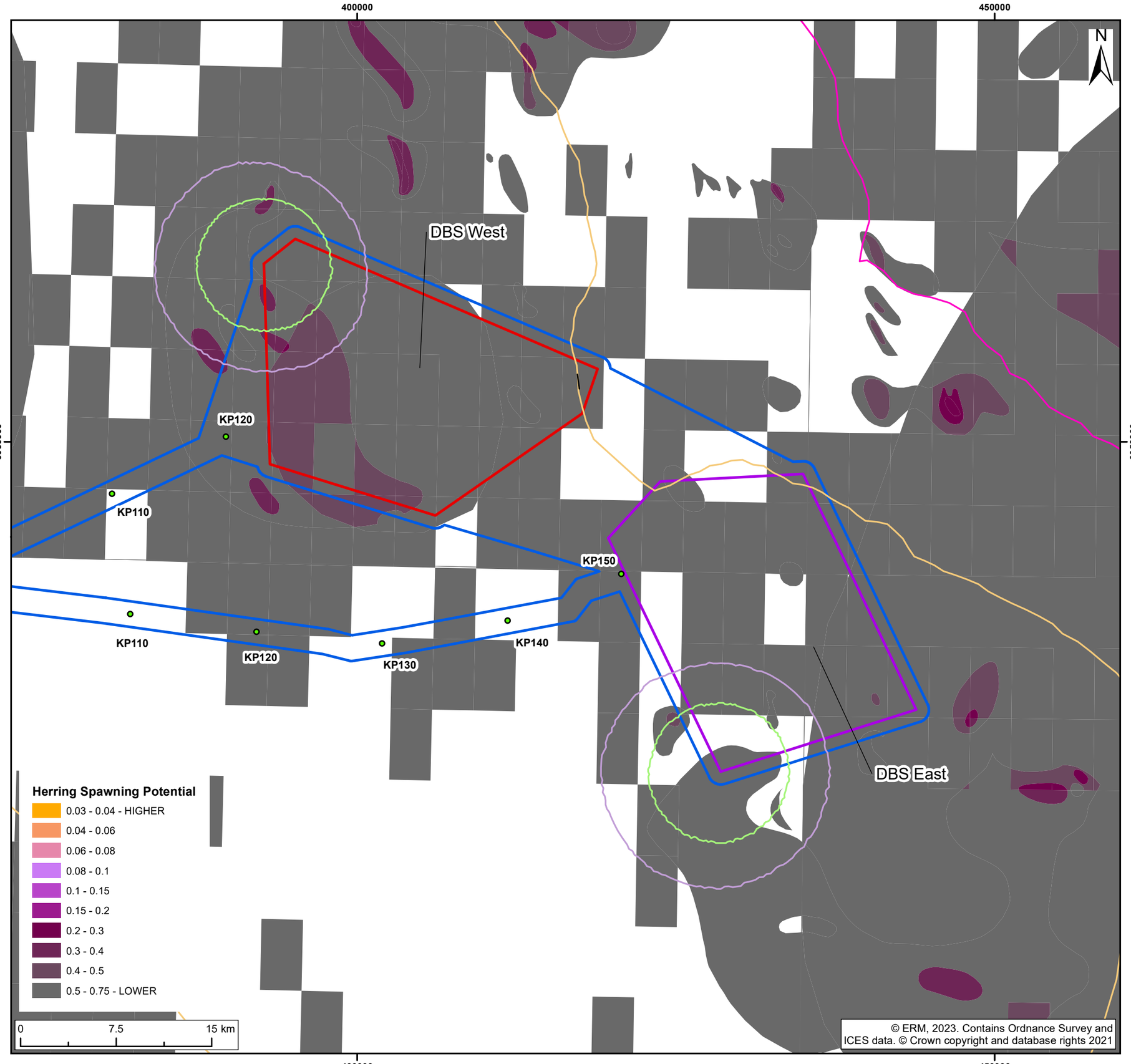
Project: Dogger Bank South Offshore Wind Farms

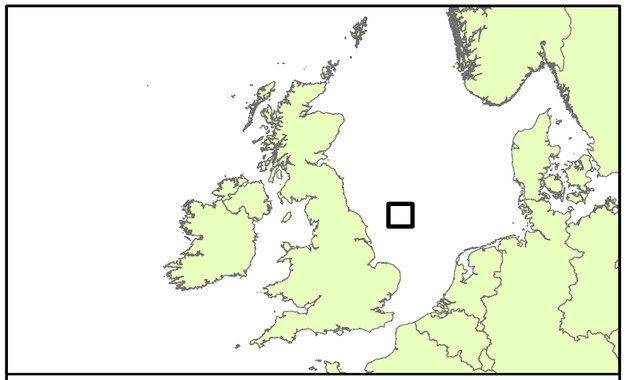
Report: Infrastructure and Other Users

Royal HaskoningDHV
Enhancing Society Together

RWE

Appendix C – WQ FSE.1.4 Fish and Shellfish Figure





Legend:

- DBS East Array
- DBS West Array
- Offshore Development Area
- KP Points
- Fish and Shellfish Ecology Study Area
- UK 12 nm limit
- ICES Rectangles

Disturbance Threshold (based on Hawkins et al., 2014)

- 135 dB re 1 μPa^2s SEL_{ss} (Behaviour Threshold)

Key UWN Thresholds (Popper et al., 2014)

- 186 dB re 1 μPa^2s SEL_{cum} (TTS) 186
- 203 dB re 1 μPa^2s SEL_{cum} (Recoverable Injury) 203
- 207 dB re 1 μPa^2s SEL_{cum} (Mortality/Potential Mortal Injury) 207

S1	P01	04/03/25	PB2340-MAR-OF-ZZ-DR-Z-0025	IW	OW	OW
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Potential spawning habitat heat map for Atlantic herring in the vicinity of Dogger Bank South Offshore Wind Farms. Produced following approaches from Kyle-Henney et al. (2024). The underwater noise (UWN) contour used within the EIA has been included for reference.

Figure:	Drawing No:		
Co-ordinate system: WGS 1984 UTM Zone 31N	Page Size: A3	Scale: 1:300,000	
Project: Dogger Bank South Offshore Wind Farms	Report: The Applicants' Responses to the Examining Authority's Written Questions - Fish and shellfish ecology		

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Appendix D – WQ GD.1.8 Good Design - National Grid's Guidelines on Substation Siting and Design, The Horlock Rules

National Grid's Approach to Design and Siting of Substations (Overall System Options and Site Selection)	Dogger Bank South Onshore Converter Station Considerations
In the development of system options including new substations, consideration must be given to environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects, in order to keep adverse effects to a reasonably practicable minimum.	Environmental constraints and opportunities have been considered throughout the development phase of the projects, alongside technical and engineering considerations. These are reported within **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017].
Amenity, Cultural or Scientific Value of Sites	
The siting of new National Grid Company substations, sealing end compounds and line entries should as far as reasonably practicable seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections.	Internationally and nationally designated sites have been avoided, and the Onshore Substation Zone is not located within a: • National Park; • AONB; • Heritage Coast; • World Heritage Site; • Ramsar Site; • SSSI; • National Nature Reserve; • SPA; and/or • SAC. The Onshore Converter Stations would be located within the Yorkshire Wolds Important Landscape Area (ILA). The presence of the ILA designation is taken into account in the assessments presented in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. Consideration has also been given to historic sites with statutory protection. See **Chapter 22 Onshore Archaeology and Cultural Heritage (Revision 2)** [AS-092].
Local Context, Land Use and Site Planning	
Areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas should be protected as far as reasonably practicable.	Areas of local amenity value, important existing habitats and landscape features, surface and ground water sources have been protected as far as reasonably practical as outlined in **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017] and the following ES chapters: • **Chapter 23 Landscape and Visual Impact Assessment** [APP-192]. • **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-109]. • **Chapter 20 Flood Risk and Hydrology (Revision 2)** [REP1-014] As outlined in the **Outline Landscape Management Plan (OLMP) (Revision 3)** [REP2-031] Bentley Moor Wood ancient woodland and Local Wildlife Site (LWS), would be maintained and enhanced as part of the Projects to assist in securing the long term health of the ancient woodland, which would have benefits for local biodiversity, for the landscape, and for visual screening of the proposed Onshore Converter Stations.

National Grid's Approach to Design and Siting of Substations (Overall System Options and Site Selection)	Dogger Bank South Onshore Converter Station Considerations
	As outlined in the **OLMP (Revision 3)** [REP2-031] consideration has been given to integrating new landscape structure planting with existing woodland plantations at Johnson's Pit, Eleven Acre Plantation and Bentley Moor Wood ancient woodland, to utilise existing screening.
The siting of substations, extensions and associated proposals should take advantage of the screening provided by land form and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum.	As outlined in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192], a single site for both Onshore Converter Stations was selected which avoided some of the most sensitive landscape and visual receptors. The chosen site is located in a relatively flat landscape, with some existing landscape structure in place, and with few landscape features which could be lost to development. It is considered that the landscape of the chosen site is capable of accommodating large scale development. The site avoids the candidate Yorkshire Wolds AONB to the north, and large numbers of residential receptors located at Beverley in the north-east. In addition, the construction of the Projects on the site would not obstruct view of Beverley Minster, a key feature on the skyline, in views from the A1079. Selection of a single site for both Onshore Converter Stations ensures that effects on landscape and visual receptors are localised to a single area, rather than being more widely spread across two separate locations.
The proposals should keep the visual, noise and other environmental effects to a reasonably practicable minimum.	Visual, noise and other environmental effects have been minimised as far as possible through the site selection process as outlined in **Chapter 4 Site Selection and Consideration of Alternatives (Revision 2)** [AS-017]. For example, consideration was given to the use of existing screening and locating away from built up and residential areas. See **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] and **Chapter 25 Noise and Vibration (Revision 2)** [REP1-019] of the ES.
The land use effects of the proposal should be considered when planning the siting of substations or extensions.	The effects on land use have been considered as part of the site selection process. The impacts on land use are considered within **Chapter 21 Land Use (Revision 3)** [REP2-022].
Design	
In the design of new substations or line entries, early consideration should be given to the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.	As outlined in **Chapter 23 Landscape and Visual Impact Assessment** [APP-192], a single site for both Onshore Converter Stations was selected which avoided some of the most sensitive landscape and visual receptors. Landscape and visual impact will be minimised by avoiding the use of tall structures and buildings wherever possible. The Onshore Converter Stations will be subject to detailed design post consent. The DAS sets out the design principles that would be applied to the detail design of the Projects. This would ensure that a sense of place is considered and integrated throughout the design process and adverse environmental effects are mitigated where possible.
Space should be used effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation.	All parameters for the Projects described in **Chapter 5 Project Description (Revision 3)** [REP1-009] such as Onshore Converter Station dimensions and working widths, are the smallest that can reasonably be defined at the time of DCO application. The Projects comprise two HVDC Onshore Converter Stations which require less space than HVAC technology. In committing to HVDC technology, the overall area which would be occupied by the Projects would be reduced compared to if a HVAC option was taken forward. As such, direct effects related to land take would be reduced with the HVDC option due to the smaller footprint of the Onshore Converter Stations. In addition, the Applicants submitted a Change Request in the Examination (accepted on 21st January 2025) to reduce the size of the Onshore Converter Stations footprint (**Project Change Request 2 - Onshore Substation Zone** [AS-152] when design development and supply

National Grid's Approach to Design and Siting of Substations (Overall System Options and Site Selection)	Dogger Bank South Onshore Converter Station Considerations
	chain engagement provided further certainty that a smaller Onshore Converter Station footprint is required. As a result, the potential adverse effects on existing land use and rights of way have been minimised as far as reasonably practical as outlined in **Chapter 21 Land Use (Revision 3)** [REP2-022] and **Chapter 29 Tourism and Recreation** [APP-219].
The design of access roads, perimeter fencing, earth shaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings.	The design of access roads, perimeter fencing, earth shaping, planting and ancillary development will be subject to final detailed design, however these will be designed in accordance with principles of the **DAS (Revision 2)** [REP2-027] to minimise impacts on surroundings. The **DAS (Revision 2)** [REP2-027] sets out the design principles that would be applied to the detail design of the Projects. This would ensure that a sense of place is considered and integrated throughout the design process and adverse environmental effects are mitigated where possible.
Line Entry	
In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance. The inter-relationship between towers and substation structures and background and foreground features should be studied to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.	The design of the Projects will be subject to final detailed design; however, these will be designed in accordance with principles of the **DAS (Revision 2)** [REP2-027] to minimise impacts on surroundings. **Chapter 5 Project Description (Revision 3)** [REP1-009] outlines the details with regards to the project description. All cables to the connection point will be buried underground.

Appendix E – WQ HRA.1.5 - Summary of the Potential Effects of the Projects

Table E-1 Summary of the Potential Effects of the Projects, Including Condition Status of Each Qualifying Feature

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
Terrestrial Ecological Sites			
Humber Estuary SPA	**Breeding bird species:** Favourable Condition[70] Great bittern; Common shelduck; Hen harrier; Pied avocet; European golden plover; and Black-tailed godwit. Unfavourable Condition No Change[70] Dunlin; and Ruff. Unfavourable, Declining[70] Bar-tailed godwit; and Common redshank. Not Recorded[70] Red knot; **Non-breeding bird species** Favourable Condition[70] Great bittern; Eurasian marsh harrier; and Pied avocet. Not Recorded[70] Little tern.	Impacts on functionally linked land.	No potential for adverse effect on site integrity.
Annex I Habitats			
Dogger Bank SAC	Unfavourable Condition, Restore Objective[71]	Physical change (to another seabed type) Physical change (to another sediment type)	Potential for adverse effect on site integrity for Projects together and in-combination

[70] Latest condition assessment based on Humber Estuary SSSI, provided in https://designatedsites.naturalengland.org.uk/SiteFeatureCondition.aspx?SiteCode=S2000480&SiteName=Humber%20Estuary%20-%20200048o%20SSSI

[71] Latest condition assessment provided in https://data.jncc.gov.uk/data/26659f8d-271e-403d-8a6b-300defcabcb1/dogger-bank-saco-v2.pdf

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
	Sandbanks which are slightly covered by sea water all the time.	Habitat structure changes – removal of substratum (extraction) Abrasion / disturbance of the substrate on the surface of the seabed Penetration and / or disturbance of the substratum below the surface of the seabed, including abrasion Changes in suspended solids (water clarity) Smothering and siltation rate changes (Heavy) Smothering and siltation rate changes (Light) Electromagnetic changes Hydrocarbon & Polyaromatic Hydrocarbon (PAH) contamination Introduction or spread of invasive non-indigenous species (INIS) Synthetic compound contaminant (including pesticides, antifoulants, pharmaceuticals) Transition elements & organo-metal (e.g. TBT) contamination	No potential for adverse effect on site integrity.
Flamborough Head SAC	Reefs[72] Submerged or partially submerged sea caves[72]	Smothering and siltation rate changes (Heavy and Light)	No potential for adverse effect on site integrity
Humber Estuary SAC	Mudflats and sandflats not covered by seawater at low tide[73].	Smothering and siltation rate changes (Heavy and Light) Introduction of other substances (solid, liquid or gas)	No potential for adverse effect on site integrity
Annex II Migratory Fish			
River Derwent SAC	Unfavourable Recovering Condition[74] Sea lamprey River lamprey (present as a qualifying feature, but not a primary reason for site selection)	Underwater noise and vibration impacts due to UXO clearance	No potential for adverse effect on site integrity

[72] Information on the Unit condition of the Flamborough Head SSSI (which encompasses the same geographical footprint as that of the SAC) indicates the habitat is in good overall condition (Natural England, 2021). Of the locations assessed within the SSSI, 67.3% is noted as being in favourable condition, 3.81% in unfavourable recovering and 28.89% as unfavourable declining.
[73] There is no current publicly available information regarding the current condition of the qualifying features screened in for assessment within the Humber Estuary SAC or SSSI.
[74] Latest condition assessment provided in https://designatedsites.naturalengland.org.uk/SiteSACFeaturesMatrix.aspx?SiteCode=UK0030253&SiteName=River%20Derwent%20SAC

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
Humber Estuary SAC	Sea lamprey[75] River lamprey	Underwater noise and vibration impacts due to UXO clearance	No potential for adverse effect on site integrity
Annex II Marine Mammals			
Southern North Sea SAC	Favourable[76] Harbour porpoise	Physical or auditory injury resulting from underwater noise Behavioural impacts resulting from underwater noise Disturbance from vessels due to presence and underwater noise Barrier effects from underwater noise Vessel interaction (increase in risk of collision) Barrier effects due to the physical presence of offshore infrastructure Changes to prey availability	No potential for adverse effect on site integrity
Humber Estuary SAC	Favourable Condition[77] Grey seal	Physical or auditory injury resulting from underwater noise Behavioural impacts resulting from underwater noise Disturbance from vessels due to presence and underwater noise Barrier effects from underwater noise Vessel interaction (increase in risk of collision) Disturbance at seal haul-out sites Barrier effects due to the physical presence of offshore infrastructure Changes to prey availability	No potential for adverse effect on site integrity

[75] There is no current publicly available information regarding the condition of river lamprey or sea lamprey populations within the Humber Estuary SAC or SSSI.
[76] Latest condition noted in https://jncc.gov.uk/our-work/southern-north-sea-mpa/#monitoring-and-evidence
[77] Latest condition assessment based on Humber Estuary SSSI, provided in https://designatedsites.naturalengland.org.uk/SiteFeatureCondition.aspx?SiteCode=S2000480&SiteName=Humber%20Estuary%20-%20200048o%20SSSI

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
The Wash and North Norfolk Coast SAC	Favourable – Unfavourable Recovering[78] Harbour seal	Physical or auditory injury resulting from underwater noise Behavioural impacts resulting from underwater noise Disturbance from vessels due to presence and underwater noise Barrier effects from underwater noise Vessel interaction (increase in risk of collision) Disturbance at seal haul-out sites Barrier effects due to the physical presence of offshore infrastructure Changes to prey availability	No potential for adverse effect on site integrity
Berwickshire and North Northumberland Coast SAC	Unfavourable, Recovering[79] Grey seal	Physical or auditory injury resulting from underwater noise Behavioural impacts resulting from underwater noise Disturbance from vessels due to presence and underwater noise Barrier effects from underwater noise Vessel interaction (increase in risk of collision) Disturbance at seal haul-out sites Barrier effects due to the physical presence of offshore infrastructure Changes to prey availability	No potential for adverse effect on site integrity
Moray Firth SAC	Favourable Maintained[80] Bottlenose dolphin	Physical or auditory injury resulting from underwater noise Behavioural impacts resulting from underwater noise Barrier effects from underwater noise Vessel interaction (increase in risk of collision) Changes to prey availability	No potential for adverse effect on site integrity

[78] Latest condition assessment based on The Wash SSSI, feature is Favourable – Unfavourable Recovering depending on the feature unit surveyed, detailed in https://designatedsites.naturalengland.org.uk/SiteSACFeaturesMatrix.aspx?SiteCode=UK0017075&SiteName=The%20Wash%20and%20North%20Norfolk%20Coast%20SAC

[79] Latest condition assessment based on Farne Islands SSSI (found within the SAC), provided in https://designatedsites.naturalengland.org.uk/SiteSACFeaturesMatrix.aspx?SiteCode=UK0017072&SiteName=Berwickshire%20and%20North%20Northumberland%20Coast%20SAC

[80] Latest condition assessment provided in https://www.nature.scot/sites/default/files/special-area-conservation/8327/conservation-and-management-advice.pdf

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
Doggersbank SAC	Harbour porpoise[81] Harbour seal[81] Grey seal[81]	Underwater noise from piling Underwater noise from other noisy activities Underwater noise from vessels Underwater noise from operational WTGs Barrier effects from underwater noise Collision risk Prey availability / habitat quality Water quality	No potential for adverse effect on site integrity
Klaverbank SAC	Harbour porpoise[82] Harbour seal[82] Grey seal[82]	Underwater noise from piling Underwater noise from other noisy activities Underwater noise from vessels Underwater noise from operational WTGs Barrier effects from underwater noise Collision risk Prey availability / habitat quality Water quality Disturbance at seal haul-out sites	No potential for adverse effect on site integrity
Marine Ornithological Features			
Greater Wash SPA[82]	Red-throated diver, non-breeding Common scoter, nonbreeding	Disturbance and/or Displacement effects Indirect impacts through effects on habitats and/or prey species Collision Risk Barrier Effects	No potential for adverse effect on site integrity
Flamborough and Filey Coast SPA	Favourable[83] Gannet, breeding Razorbill, breeding Puffin, breeding		No potential for adverse effect on site integrity

[81] There is no current publicly available information regarding the current condition of the qualifying features screened in for assessment within the Doggersbank SAC.
[82] There is no current publicly available information regarding the current condition of the qualifying features screened in for assessment for this SPA.
[83] Latest condition assessment based on Flamborough Head SSSI (found within the SPA), details provided in https://designatedsites.naturalengland.org.uk/SiteFeatureCondition.aspx?SiteCode=S1002289&SiteName=Flamborough%20Head%20SSSI

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
	Favourable Guillemot, breeding Unfavourable, Declining Kittiwake, breeding		No potential for adverse effect on site integrity from Projects together. Potential for adverse effect on site integrity for the Projects in-combination
Coquet Island SPA[82]	Puffin, breeding		No potential for adverse effect on site integrity
Farne Islands SPA	Unfavourable, Recovering[84] Guillemot, breeding Kittiwake, breeding Puffin, breeding		No potential for adverse effect on site integrity
St Abbs Head to Fast Castle SPA	Favourable, Maintained[85] Guillemot, breeding Razorbill, breeding Unfavourable, Recovering[85] Kittiwake, breeding		No potential for adverse effect on site integrity
Forth Islands SPA	Favourable, Maintained[86] Gannet, breeding Guillemot, breeding Razorbill, breeding Puffin, breeding Unfavourable, No change[86] Kittiwake, breeding		No potential for adverse effect on site integrity
Fowlsheugh SPA	Favourable, Maintained[87] Guillemot, breeding Razorbill, breeding Unfavourable, Declining[87] Kittiwake, breeding		No potential for adverse effect on site integrity

[84] Latest condition assessment based on Farne Islands SSSI (found within the SPA), details provided in https://designatedsites.naturalengland.org.uk/SiteFeatureCondition.aspx?SiteCode=S1000660&SiteName=Farne%20Islands%20SSSI
[85] Latest condition assessment provided in https://sitelink.nature.scot/site/8579
[86] Latest condition assessment provided in https://sitelink.nature.scot/site/8500
[87] Latest condition assessment provided in https://sitelink.nature.scot/site/8505

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
Buchan Ness to Collieston Coast SPA	Favourable, Maintained[88] Guillemot, breeding Unfavourable. No Change[88] Kittiwake, breeding		No potential for adverse effect on site integrity
Troup, Pennan and Lion's Heads SPA	Favourable, Recovered[89] Kittiwake, breeding Unfavourable Recovering[89] Guillemot, breeding Unfavourable Declining[89] Razorbill, breeding		No potential for adverse effect on site integrity
East Caithness Cliffs SPA	Favourable, Maintained[90] Kittiwake, breeding Guillemot, breeding Razorbill, breeding		No potential for adverse effect on site integrity
North Caithness Cliffs SPA	Favourable, Maintained[91] Guillemot, breeding Razorbill, breeding Unfavourable, No change[91] Kittiwake, breeding Unfavourable, Declining[91] Puffin, breeding		No potential for adverse effect on site integrity
Copinsay SPA	Unfavourable, Declining[92] Kittiwake, breeding Guillemot, breeding		No potential for adverse effect on site integrity

[88] Latest condition assessment provided in https://sitelink.nature.scot/site/8473
[89] Latest condition assessment provided in https://sitelink.nature.scot/site/8587
[90] Latest condition assessment provided in https://sitelink.nature.scot/site/8492
[91] Latest condition assessment provided in https://sitelink.nature.scot/site/8554
[92] Latest condition assessment provided in https://sitelink.nature.scot/site/8485

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
Hoy SPA	Unfavourable, No change[93] Guillemot, breeding Unfavourable, Declining[93] Kittiwake, breeding Puffin, breeding		No potential for adverse effect on site integrity
Rousay SPA	Unfavourable, No change[94] Guillemot, breeding Unfavourable, Declining[94] Kittiwake, breeding		No potential for adverse effect on site integrity
Calf of Eday SPA	Unfavourable, No change[95] Kittiwake, breeding Guillemot, breeding		No potential for adverse effect on site integrity
Marwick Head SPA	Unfavourable, Recovering[96] Kittiwake, breeding Unfavourable, No Change[96] Guillemot, breeding		No potential for adverse effect on site integrity
West Westray SPA	Unfavourable, No Change[97] Guillemot, breeding Unfavourable, Declining[97] Kittiwake, breeding Razorbill, breeding		No potential for adverse effect on site integrity

[93] Latest condition assessment provided in https://sitelink.nature.scot/site/8513
[94] Latest condition assessment provided in https://sitelink.nature.scot/site/8573
[95] Latest condition assessment provided in https://sitelink.nature.scot/site/8478
[96] Latest condition assessment provided in https://sitelink.nature.scot/site/8544
[97] Latest condition assessment provided in https://sitelink.nature.scot/site/8589

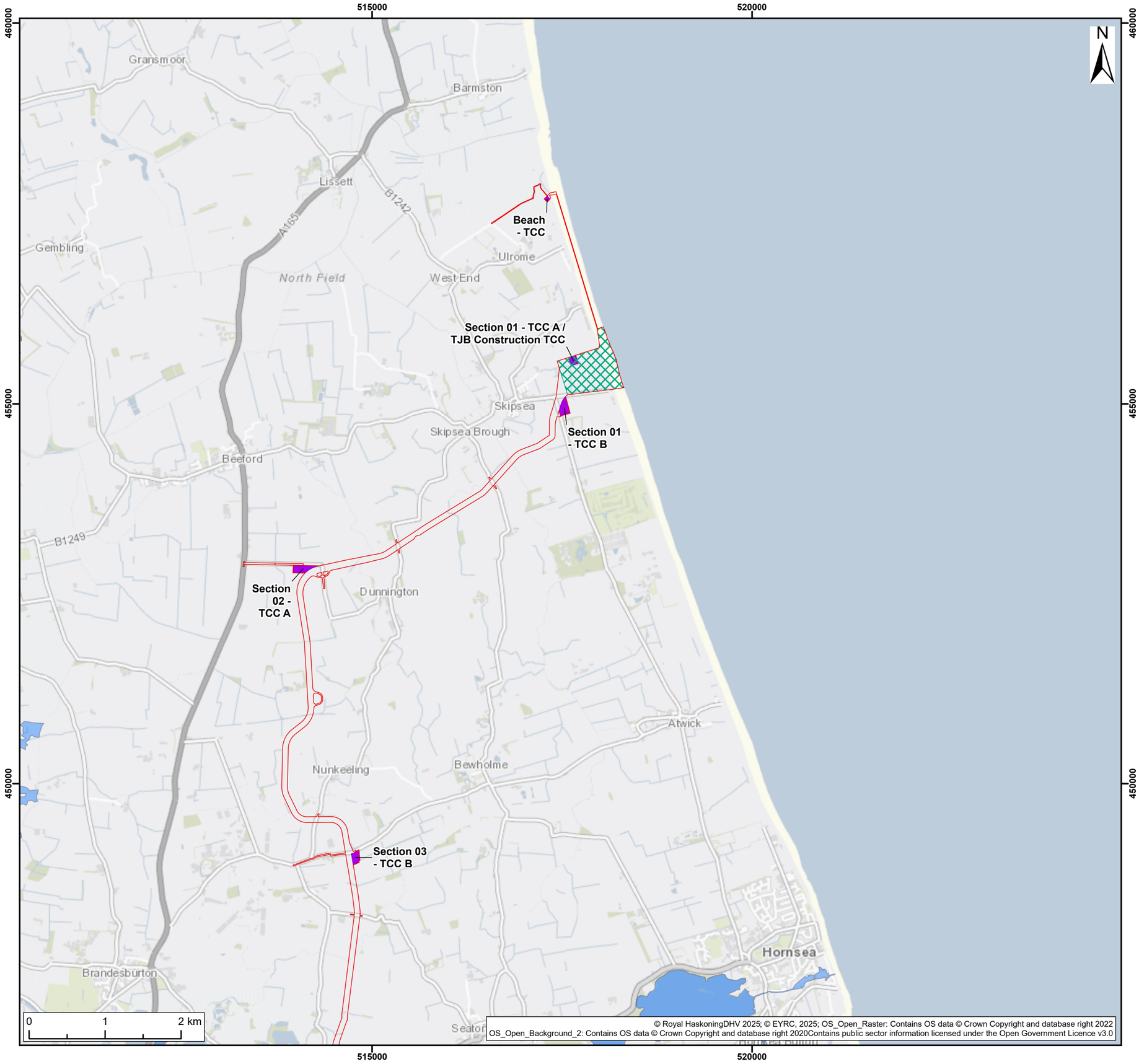
Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
Fair Isle SPA	Favourable, Maintained[98] Gannet, breeding Unfavourable, No Change[98] Guillemot, breeding Razorbill, breeding Unfavourable, Declining[98] Kittiwake, breeding Puffin, breeding		No potential for adverse effect on site integrity
Sumburgh Head SPA	Favourable, Recovered[99] Guillemot, breeding Unfavourable, Declining[99] Kittiwake, breeding		No potential for adverse effect on site integrity
Noss SPA	Favourable, Maintained[100] Gannet, breeding Unfavourable, No Change[100] Guillemot, breeding Unfavourable. Declining[100] Kittiwake, breeding Puffin, breeding		No potential for adverse effect on site integrity
Foula SPA	Unfavourable, Recovering[101] Kittiwake, breeding Razorbill, breeding Unfavourable, No Change[101] Puffin, breeding Unfavourable, Declining[101] Guillemot, breeding		No potential for adverse effect on site integrity

[98] Latest condition assessment provided in https://sitelink.nature.scot/site/8496
[99] Latest condition assessment provided in https://sitelink.nature.scot/site/8582
[100] Latest condition assessment provided in https://sitelink.nature.scot/site/8561
[101] Latest condition assessment provided in https://sitelink.nature.scot/site/8504

Site	Qualifying Features and Feature Condition	Potential Effects	Potential for adverse effect on site integrity alone / in combination?
Hermaness, Saxa Vord and Valla Field SPA	Favourable, Maintained[102] Gannet, breeding Unfavourable, Recovering[102] Puffin, breeding Unfavourable, Declining[102] Kittiwake, breeding Guillemot, breeding		No potential for adverse effect on site integrity

[102] Latest condition assessment provided in https://sitelink.nature.scot/site/8512

Appendix F – WQ HF.1.1 & HF.1.3 Hydrology and Flooding Figure



Legend:

- Onshore Development Area
- Landfall Zone
- Indicative Temporary Construction Compound Zones
- Flood Zone 3b (presented in the Level 1 SFRA (November 2019))

S2	P01	12/03/2025	Suitable for Information	JH	SB	SI
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

East Riding of Yorkshire Council Functional Floodplain 3b

Figure: 1a

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-1020

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:50,000

Project:

Dogger Bank South Offshore Wind Farms

Report:

The Applicants' Responses to ExQ1 - Hydrology and Flooding

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Hempholme
Nunkeeling
Bewholme
Tophill Low
Burshill
Brandesburton
Seaton
Sandfield
Aike
A1035
Siggiesthorne
Leven
Catwick
Holderness
Section 03 - TCC B
Section 04 - TCC A
Section 07 - TCC A
Section 06A - TCC A
Section 05 - TCC D
Section 06B - TCC B
Tickton
Hull Bridge
Section 08 - TCC-B
Long Riston
Rise
Arnold
Weel
Meaux
Skirlaugh
New Ellerby

0 1 2 km

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OS_Open_Background_2: Contains OS data © Crown Copyright and database right 2020Contains public sector information licensed under the Open Government Licence v3.0

Legend:

- Onshore Development Area
- Indicative Temporary Construction Compound Zones
- Flood Zone 3b (presented in the Level 1 SFRA (November 2019))

S2	P01	12/03/2025	Suitable for Information	JH	SB	SI
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

East Riding of Yorkshire Council Functional Floodplain 3b

Figure: 1b

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-1020

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:50,000

Project:

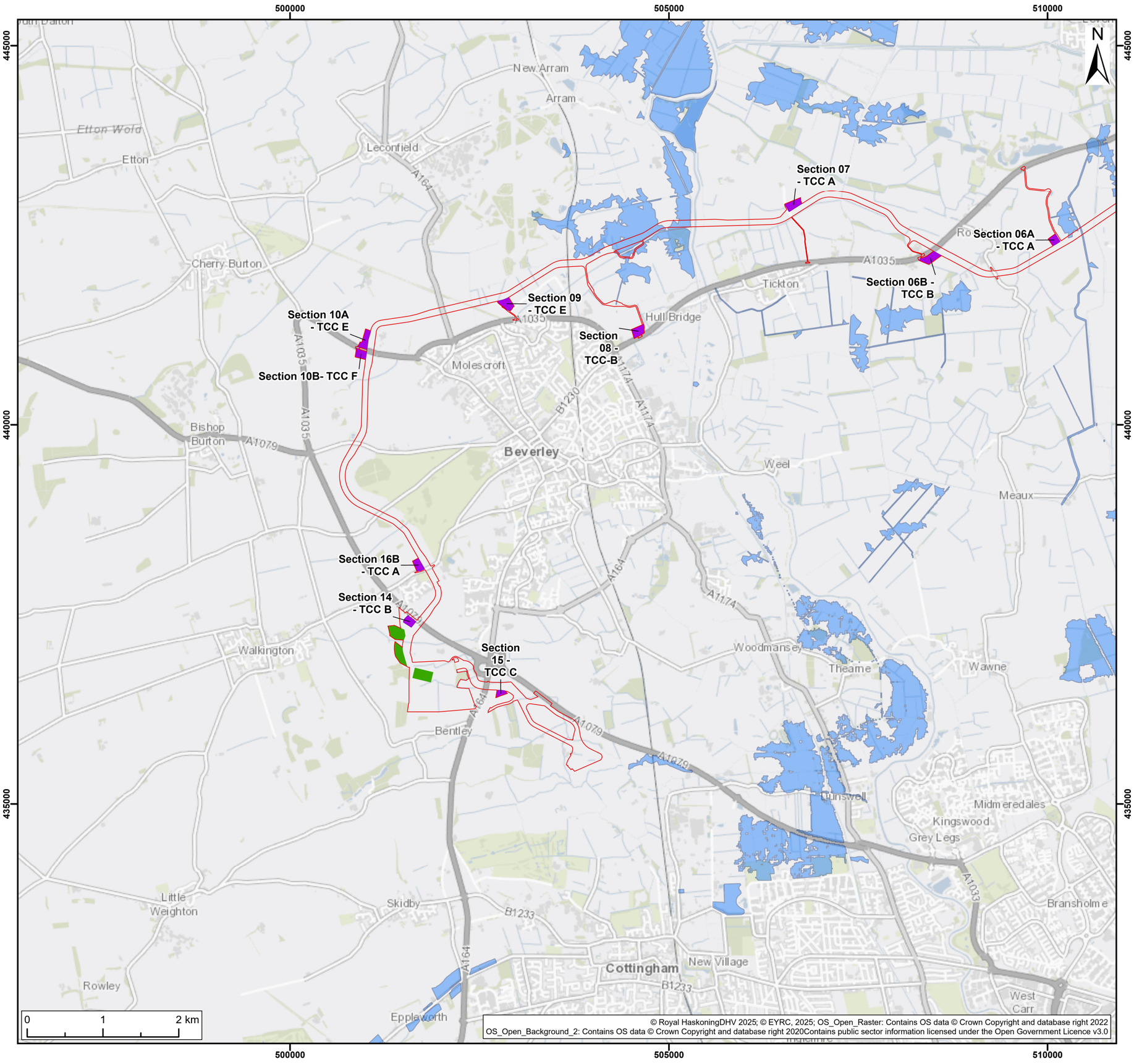
Dogger Bank South Offshore Wind Farms

Report:

The Applicants' Responses to ExQ1 - Hydrology and Flooding

Royal HaskoningDHV
Enhancing Society Together

DBS Offshore Wind



Legend:

- Onshore Development Area
- Substation Temporary Construction Compound
- Indicative Temporary Construction Compound Zones
- Flood Zone 3b (presented in the Level 1 SFRA (November 2019))

S2	P01	12/03/2025	Suitable for Information	JH	SB	SI
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

East Riding of Yorkshire Council Functional Floodplain 3b

Figure: 1c

Drawing No: PC2340-RHD-ON-ZZ-DR-Z-1020

Co-ordinate system: British National Grid

Page Size: A3

Scale: 1:50,000

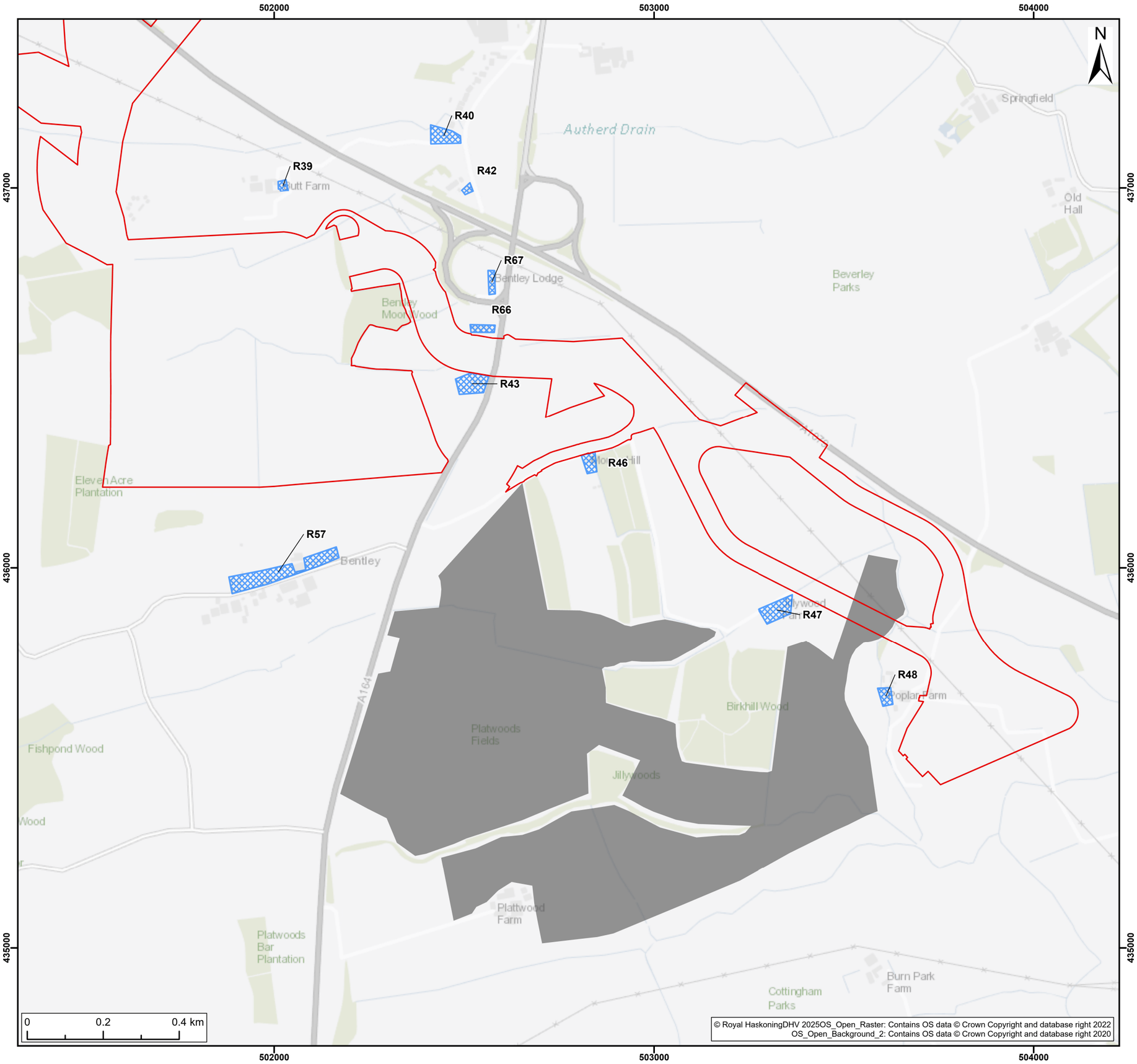
Project: Dogger Bank South Offshore Wind Farms

Report: The Applicants' Responses to ExQ1 - Hydrology and Flooding

Royal HaskoningDHV
Enhancing Society Together

DBS Offshore Wind

Appendix G – WQ NV.1.9 Noise and Vibration Figure



Legend:

- Onshore Development Area
- Creyke Beck Solar Farm (21/02335/STPLF)

Noise and Vibration Sensitive Receptors

- Residential

S2	P01	18/03/2025	Suitable for Information	JH	SM	ND
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Title:

Onshore Cumulative Schemes in Response to ExQ1 NV.1.9

Figure: 1	Drawing No: PC2340-RHD-ON-ZZ-DR-Z-1025

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Project: Dogger Bank South Offshore Wind Farms	Report: The Applicants' Responses to ExQ1 - Noise and Vibration

Royal HaskoningDHV
Enhancing Society Together

DBS Offshore Wind

Appendix H – WQ OR.1.33, OR.1.34 & OR.1.36 - Updated Offshore Ornithology NPS-EN3 Compliance Table

NPS Requirement	NPS Reference	ES Section Reference
EN-3 NPS for Renewable Energy Infrastructure		
In addition, applicants should have regard to the specific ecological and biodiversity considerations that relate to proposed offshore renewable energy infrastructure developments, namely Birds	EN-3 Paragraph 2.8.98	**Chapter 12 Offshore Ornithology (Revision 2)** [AS-057] specifically covers these receptors.
Applicants must undertake a detailed assessment of the offshore ecological, biodiversity and physical impacts of their proposed development, for all phases of the lifespan of that development, in accordance with the appropriate policy for offshore wind farm EIAs, HRAs and MCZ assessments (See Sections 4.3 and 5.4 of EN-1).	EN-3 Paragraph 2.8.101	This has been conducted in the ES: construction (section 12.7), operation (section 12.8) and decommissioning (section 12.9) of **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057].
Applicants should consult at an early stage of pre-application with relevant statutory consultees and energy not-for profit organisations/ non-governmental organisations as appropriate, on the assessment methodologies, baseline data collection, and potential avoidance, mitigation and compensation options which should be undertaken.	EN-3 Paragraph 2.8.104	The Applicants have consulted with Natural England on these matters. The record of consultation is provided in **Volume 7, Appendix 12-1 Offshore Ornithology Consultation Responses** [APP-104].
In developing proposals applicants must refer to the most recent best practice advice originally provided by Natural England under the Offshore Wind Enabling Action Programme, and/or their relevant SNCB.	EN-3 Paragraph 2.8.105	The Applicants have used the most recent best practice guidance and other Statutory Nature Conservation Bodies guidance when developing the Projects.
Any relevant data that has been collected as part of post-construction ecological monitoring from existing operational offshore wind farms should be referred to where appropriate. A range of research programmes are ongoing to investigate impacts of offshore wind farm development, including, but not limited to: BEIS SEA Research Programme, ORJIP, ScotMER, the ORE Catapult and OWEC. Applicants should explain why their decisions on siting, design, and impact mitigation are proportionate and well-targeted, referring to relevant scientific research and literature as appropriate.	EN-3 Paragraph 2.8.106, 107	Relevant studies whether academic, strategic or project specific are referred to throughout this assessment.
Applicants are expected to have regard to guidance issued in respect of Marine Licence requirements and consult at an early stage of pre-application with the MMO or NRW.	EN-3 Paragraph 2.8.108	The Applicants have consulted with the MMO on statutory and non-statutory basis through the EPP since 2021. The EPP is divided into several ETGs which follow the majority of topics covered by the EIA and HRA. The MMO have been a part of all ETGs relating to offshore topics.
Applicants should have regard to duties in relation to Good Environmental Status (GES) of marine waters under the UK Marine Strategy and MPA target (including any interim target) in England, set under the Environment Act 2021.	EN-3 Paragraph 2.8.109	The ES has considered the international, national, regional and local planning policy and legislative context that is relevant to the impact assessment of the Projects. This includes the Marine Strategy Framework Directive.
Applicants should demonstrate that their site selection, project design, and (where relevant) mitigation plans have been determined considering relevant evidence.	EN-3 Paragraph 2.11.37	This paragraph in the NPS EN-3 is specific to Tidal Stream developments. As such it is not relevant to the Projects.
Offshore wind farms have the potential to impact on birds through: Collisions with rotating blades; 1. Direct habitat loss; 2. Disturbance from construction activities such as the movement of construction/decommissioning/maintenance vessels and piling;	EN-3 Paragraph 2.8.136	These potential impacts have been assessed in section 12.7 – 12.9 of **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057].

NPS Requirement	NPS Reference	ES Section Reference
3. Displacement during the operational phase, resulting in loss of foraging/roosting area; 4. Impacts on bird flight lines (i.e. barrier effect) and associated increased energy use by birds for commuting flights between roosting and foraging areas. 5. Impacts upon prey species and prey habitat; and 6. Impacts on protected sites.		
Currently, cumulative impact assessments for ornithology are based on the consented Rochdale Envelope parameters of projects, rather than the 'as-built' parameters, which may pose a lower risk to birds.	EN-3 Paragraph 2.8.137	Cumulative assessments are based on current advice and do not consider headroom (see section 12.10 of **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057])
The applicant must ensure any draft consents include provisions to define the final 'as built' parameters (which may not then be exceeded). These parameters must be used in future cumulative impact assessments.	EN-3 Paragraph 2.8.138	Provisions to define and confirm the 'as built' parameters for the Projects' wind turbines following completion of construction so that these can be used in Cumulative Impact Assessments (CIAs) for future developments is included as a condition of the Deemed Marine Licences (Schedules 10 and 11 of the Draft DCO).
Applicants should discuss the scope, effort and methods required for ornithological surveys with the relevant statutory advisor, taking into consideration baseline and monitoring data from operational windfarms. Applicants must undertake Collision Risk Modelling, as well as displacement and population viability assessments for certain species of birds. Applicants are expected to seek advice from SNCBs.	EN-3 Paragraph 2.8.143, 2.8.144	As noted in **Volume 7, Appendix 12-1 Offshore Ornithology Consultation Responses** [APP-104], The Applicants have consulted with Natural England on these matters.
Where necessary, applicants should assess collision risk using survey data collected from the site at the pre-application EIA stage.	EN-3 Paragraph 2.8.145	In order to provide site specific and up to date information on which to base the impact assessment, 24 months of digital aerial survey have been completed. The survey methodology was discussed and agreed with Natural England through the ETG process.
Aviation and navigation lighting should be minimised and/or on demand (as encouraged in EN-1 Section 5.5) to avoid attracting birds, taking into account impacts on safety. Subject to other constraints, wind turbines should be laid out within a site, in a way that minimises collision risk.	EN-3 Paragraph 2.8.240	In accordance with ANO Article 223, lighting intensity would be reduced at and below the horizontal and further reduced when visibility in all directions from every wind turbine is more than 5km.
Turbine parameters should also be developed to reduce collision risk where the assessment shows there is a significant risk of collision (e.g., altering rotor height)	EN-3 Paragraph 2.8.241	The Projects' locations and design have given consideration to ornithological receptors, as detailed in Table 12-4 of **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057].
Construction vessels and post-construction maintenance vessel traffic associated with offshore wind farms and offshore transmission should, where practicable and compatible with operational requirements and navigational safety, avoid rafting seabirds during sensitive periods and follow agreed navigation routes to and from the site and minimise the number of vessel movements overall.	EN-3 Paragraph 2.8.242	Embedded mitigation for the Projects regarding vessel traffic and offshore ornithology is detailed in Table 12-4 of **Chapter 12 Offshore Ornithology (Revision 2)** [AS-057].
With increasing deployment of offshore wind farms and offshore transmission, environmental impacts upon SACs SPAs, and Ramsar sites and MCZs (individually and as part of a network) may not be addressed by avoidance, reduction, or mitigation alone, therefore compensatory measures (through derogation for SACs SPAs, Ramsar sites, and MCZs may be required at a plan or project level where adverse effects on site integrity and/or on conservation objectives cannot be ruled out. For many receptors, the scale of offshore wind and offshore transmission developments, and potential in-combination effects, means compensation could be required and applicants must refer to the latest Defra compensation guidance when making their assessments.	EN-3 Paragraph 2.8.265, 2.8.266, 2.8.267 and 2.8.269	Details of the HRA process followed by the Projects is contained within the RIAA document. The RIAA has been consulted upon during the pre-application period and all HRA matters discussed with relevant stakeholders through the EPP. The Habitats Derogation Provision of Evidence document outlines the evidence to support Stage 3 (Derogation) of the HRA Process. The cumulative residual impacts have been assessed within the RIAA. Following the employment of the mitigation hierarchy, the Habitats Regulations Derogation: Provision of Evidence' document, contains several appendices and annexes which include a suite

NPS Requirement	NPS Reference	ES Section Reference
If, during the pre-application stage, SNCBs indicate that the proposed development is likely adversely to impact a protected site, the applicant should include with their application such information as may reasonably be required to assess potential derogations under the Habitats Regulations or the Marine and Coastal Access Act 2009. This information includes: assessment of alternative solutions, showing the relevant tests on alternatives have been met; a case showing that the relevant tests for IROPI or Measures of Equivalent Environmental Benefit have been met; and appropriate securable environmental compensation, which will ensure no net loss to the MPA network and help ensure that the MPA target (including any interim target) set under the Environment Act 2021 targets can be met.		of compensatory plans. These include the Kittiwake Compensation Plan, Guillemot and Razorbill Compensation Plan and Project Level Dogger Bank Compensation Plan. The Compensation Plan in relation to Razorbill is provided on a 'without prejudice' basis only. Where the Secretary of State concludes that the Projects would result in Adverse Effects on Integrity the Applicants are proposing that the compensatory measures will be secured in the dDCO. The Habitats Regulations Derogation: Provision of Evidence explains the long list of alternative solutions/ measures considered by the Applicant. These alternatives include: alternative Offshore windfarm locations; Alternative Scale; Alternative Design and Method; Alternative Timing. However, the RIAA confirms that none of these alternative solutions are feasible and so a HRA derogation case has been made and concludes a commitment to compensatory measures.
It is vital that applicants consider the need for compensation as early as possible in the design process, as 'retrofitting' compensatory measures will introduce delays and uncertainty to the consenting process. Applicants are encouraged to include all compensatory measures considered, with reasoning for why they have been discounted. Applicants should work closely at an early stage in the pre-application process with SNCBs, and Defra, in conjunction with the relevant regulators, Local Planning Authorities, National Park Authorities, landowners and other relevant stakeholders to develop a compensation plan for all protected sites adversely affected by the development. Before submitting an application, applicants should seek the views of the SNCB and Defra, as to the suitability, securability and effectiveness of the compensation plan to ensure that the overall coherence of the National Site Network for the impacted SAC/SPA/MCZ feature is protected. Consultation should also take place throughout the pre-application phase with key stakeholders (e.g. via the evidence plan process and use of expert topic groups). In cases where such views are provided, the applicant should include a copy of this information with the compensation plan in their application for further consideration by the Examining Authority and Secretary of State.	EN-3 Paragraph 2.8.272 to 2.8.275	Through early consultation, the Applicants have worked closely with SNCBs, and Defra, in conjunction with the relevant regulators to develop appropriate compensation proposals. The Habitats Regulations Derogation: Provision of Evidence explains the long list of alternative solutions/ measures considered by the Applicant. These alternatives include: alternative Offshore windfarm locations; Alternative Scale; Alternative Design and Method; Alternative Timing. However, the Habitats Regulations Derogation: Provision of Evidence confirms that none of these alternative solutions are feasible and so a HRA derogation case has been made and concludes a commitment to compensatory measures. In addition to these effects and in relation to HRA, cumulative residual impacts have been assessed within the RIAA. Following the employment of the mitigation hierarchy, the Habitats Regulations Derogation: Provision of Evidence' document, contains several appendices and annexes which include a suite of compensatory plans. These include the Kittiwake Compensation Plan, Guillemot and Razorbill Compensation Plan and Project Level Dogger Bank Compensation Plan. The Compensation Plan in relation to Razorbill is provided on a 'without prejudice' basis only. Where the Secretary of State concludes that the Projects would result in Adverse Effects on Integrity the Applicants are proposing that the compensatory measures will be secured in the dDCO.
Not every impact for every project will initially fall within the strategic compensation proposals, so applicants should continue to discuss with SNCBs and Defra the need for site specific or strategic compensation at the earliest opportunity.	EN-3 Paragraph 2.8.282	The Applicants consulted with SNCBs and Defra regarding strategic compensation measures through the pre-application stage of the Projects (as evidenced in the **Consultation Report, Appendix F - Non-statutory consultation and engagement** [APP-043]) and will continue consultation through the Projects lifetime.

Appendix I – WQ PPC.1.1 Planning and Policy

1 Site Selection Consultation Responses

1.1 Introduction

1. This appendix covers responses that were received at the pre-application stage including in response to the Scoping Report (2022), Preliminary Environmental Information Report (PEIR) (2023), statutory consultation under Sections 42 and 47 of the Planning Act 2008 (2023), and Expert Topic Group (ETG) meetings to assist in answering The Examining Authority's Written Questions (ExQ1) [PD-014] PPC.1.1, *"Can you provide an overview of comments received during the pre-application stage regarding site selection and assessment of alternatives and the Project Response, as has been provided for most other ES chapters (for example [APP-073], [APP-082], [APP-087])?"*

2. Response from stakeholders and regard given by the Applicants have been captured in Table I-1.

Table I-1 Consultation Responses Related to Chapter 4 Site Selection & Assessment of Alternatives (Revision 2) [AS-017]

Comment	Project Response
Site Selection Expert Topic Group (ETG) 04th May 2022	
North-eastern Inshore Fisheries and Conservation Authority (IFCA) confirmed they would defer to Nature England on this issue but asked if the Flambourgh Head reef would be impacted.	Confirmed that the offshore cable route currently avoids the Flamborough Head Special Area of Conservation (SAC) and the reef, however, the survey information would provide more detail in terms of the extent of the reef outside the boundary of the SAC if this option is taken forward.
Yorkshire Wildlife Trust commented the reef feature shown in the Natural England data set may not necessarily show the full extent so a review of survey information will be required to understand the full extent/potential impacts. The timing of the survey work will need to consider cetaceans in the area.	Confirmed the issue of cetaceans and surveys seasons would be discussed with Natural England.
East Riding of Yorkshire Council (ERYC) commented the views of zone 1 to and from Beverley Minster will need to be a key consideration if that zone is selected.	The Applicants acknowledge this comment.
ERYC commented building height is fundamental to understanding impacts. While the Important Landscape Area is not nationally designated it is locally very sensitive and there is a desire to protect it.	The Applicants acknowledge this comment.
ERYC commented Figham Common, especially the north/east is very wet and therefore summer working is likely to be required.	It would be the Applicants' preference to use trenchless technology to cross the River Hull and the Barmston Drain, however further investigation is required. It may be possible to cross both watercourses using one trenchless crossing but this will also require further investigation prior to commencing construction.
ERYC asked if the cable routes interact with the historic landfill near Hornsea Mere. These are potential dilute and disperse landfills and there is groundwater flow west to east that may lead to contaminated ground.	The historic landfills have been avoided, however, the Applicants will investigate the groundwater flow further.
Site Selection ETG 23rd May 2022	
Natural England have expressed significant concerns over the potential impacts to Smithic Bank as part of the Hornsea FOUR examination. While the sandbank itself is not designated, it seems to influence local coastal processes, therefore any impacts could lead to significant indirect impacts to designated sites to the north and south. There is concern over the cumulative impacts of other projects (Dogger Bank A&B and Hornsea FOUR) and the need for cable crossings on the sandbank.	The Applicants confirmed that surveys would be undertaken on 1km wide corridors, as opposed to the 2km wide corridors presented in the presentation.
Natural England commented that when considering the siting of offshore substations, the impacts of lighting on the Dogger Bank SAC and any nearshore impacts to the Flamborough Headland Heritage Coast should be considered.	The Applicants acknowledge this comment.
Planning Inspectorate Scoping Opinion 2nd September 2022	
The Inspectorate acknowledges the Applicant's description of work undertaken to date regarding site selection as set out in Section 1.6 of the Scoping Report. No reference to alternatives in relation to turbine array layout is made, however it is noted that Paragraph 35 in Section 1.5 discusses factors that will influence the final layout. The Environmental Statement (ES) should explain how these factors have been considered within the discussion of alternatives, where alternative layouts have been assessed. The Inspectorate would expect to see a discrete section in the ES that provides details of the alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison	Addressed in **Chapter 4 Site Selection and Assessment of Alternatives (Revision 2)** [AS-017].

Comment	Project Response
of the environmental effects, with reference to the Black-Red-Amber-Green ranking referenced in Paragraph 78.	
Paragraph 92 of the Scoping Report indicates that the onshore cable corridor scoping boundary comprises five route variations. These routes are not provided, either within a figure or accompanying text, and as such it is not clear where the routes would be. Paragraph 97 indicates that there are three onshore substation location zones, which are also not represented on a figure. The ES should clearly describe any alternative cable routes and substation locations assessed, including the use of appropriate figures, and provide a justification for the chosen options.	Addressed in **Chapter 4 Site Selection and Assessment of Alternatives (Revision 2)** [AS-017].
The Scoping Report describes the potential use of alternatives in the place of a 'conventional' connection (Section 1.1 Paragraph 5). The Inspectorate expects the ES supporting the application for the Proposed Development to describe the preferred option for connection and an assessment of the alternatives considered.	Addressed in **Chapter 4 Site Selection and Assessment of Alternatives (Revision 2)** [AS-017].
The ES should provide specific information on where any restricted working widths or seasonal restrictions are to apply during construction. The choice of construction methodology e.g., through open-cut trench or Horizontal Directional Drilling (HDD) or other trenchless methods, should be justified and explained in the ES. The Inspectorate advises that effort is made to commit to a construction method particularly in sensitive locations, and for the ES assessment to be based on the chosen method rather than introduce unnecessary uncertainty by retaining multiple options.	Addressed in **Chapter 4 Site Selection and Assessment of Alternatives (Revision 2)** [AS-017]; as well as being detailed in **Chapter 5 Project Description (Revision 3)** [REP1-009] and any seasonal restrictions included in **Outline Code of Construction Practice (OCoCP) (Revision 3)** [REP1-025].
The Inspectorate would expect the ES to explain how the outcomes of consultation with stakeholders has been used to refine the site selection options. This is likely to be particularly important where options for micro-siting infrastructure are limited by the presence of other existing or planned infrastructure proposals.	Addressed in **Chapter 4 Site Selection and Assessment of Alternatives (Revision 2)** [AS-017].
Environment Agency Scoping Response September 2022	
When narrowing site selection, we would ask the applicant to consider whether any locations could interact with any planned coastal flood or erosion schemes. This should include the Humber Strategy for any location(s) in the locality of Spurn Point. An example would be Tunstall Drain. It should also be ensured that, as part of data collection, the most recent scheme information is obtained, for example the Withernsea South coastal defence extension. We recommend both ERYC and the Environment Agency are contacted again as the landfall options are refined.	ERYC and the Environment Agency have been consulted throughout the site selection process and planned schemes have been considered where relevant, as referenced in the **ERYC Statement of Common Ground** [REP1-028] and **Environment Agency Statement of Common Ground** [REP1-029].
There are a number of 'main rivers' that outfall directly to the North Sea or have catchments that are near the existing coastline, as per para. 628 and Figure 3-16. We would expect to see the landfall options to avoid any main river channels or flood infrastructure (e.g., outfalls and flood defences) by at least 20 metres. As per para. 632, some of these 'main rivers' also have statutory designations.	The preferred landfall options selected for Preliminary Environmental Information Report (PEIR) avoid statutory main rivers and flood infrastructure. Further details are available in **Chapter 20 Flood Risk and Hydrology (Revision 2)** [REP1-014].
As there are three potential landfall areas identified at this stage, there is a vast amount of data and information to be considered in the time allowed for this consultation. We therefore encourage the applicant to continue to engage with us as the site selection process progresses, to ensure we can provide specific and relevant advice.	The Environment Agency has been consulted throughout the site selection process. Details of feedback on how this has been addressed in the site selection process is included throughout **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017].

Comment	Project Response
Ministry of Defence Scoping Response September 2022	
Similarly, the effect of the development on Air Defence Radar (ADR) is acknowledged at paragraph 441 which identifies the context of the application site relative to Remote Radar Head (RRH) Staxton Wold, RRH Trimingham, and RRH Brizlee Wood. The impact of the development on those radars should be considered as the design is progressed and any impact will need to be mitigated, it will be for the applicant to provide appropriate technical mitigation(s). Through paragraph 443 of the Scoping Report, it is acknowledged that the offshore array may fall wholly or partially within Southern Managed Danger Area (MDA) Practice and Exercise Areas (PEXA) D323B, D323C, and D323D. The lower vertical limits of blocks of danger area airspace are also noted. In addition, the cable route indicated in the Scoping Report passes through PEXA D323K, D323D, and D323C. The applicant should be advised to take account of the current published Ministry of Defence (MOD) PEXA in preparation of their development proposal. The MOD has highly surveyed routes which maybe relevant to the installation of the export cables & associated infrastructure. MOD should be consulted at the next stage of any application.	Potential impacts on the Staxton Wold RRH and overlap with PEXAs have been considered as a constraint as part of the site selection process. Further details on the potential impacts upon the Staxton Wold RRH and PEXAs are detailed in **Chapter 15 Aviation and Radar** [APP-125] and **Chapter 16 Infrastructure and Other Users (Revision 3)** [REP1-011].
Marine Mammals ETG Responses – Post PEIR 24th September 2023 Response received 24th October 2023	
Natural England advise that regarding the reductions in array area, it would be useful to see marine mammal and ornithology data sets used to inform this decision, in terms of the mitigation hierarchy.	Ornithology and marine mammal data sets were considered during this process. For marine mammals the data set did not highlight any significant "hot spot" areas within The Crown Estate Lease Areas and so these were given limited weight in the final Array Area refinements for ES. For birds, an outline of the factors considered in the boundary refinement exercise was presented as part of the minutes from the ornithology ETG meeting 6th February 2024). The refinements to the Array Area boundaries was, therefore, undertaken to help reduce impacts on important bird populations. More information about the refinement of the Array Areas is provided in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017].
Nunkeeling Re-route – Post- PEIR Amendment following ETG - Humber Archaeological Partnership (25th May 2023)	
At the Historic Environment ETG meeting of 25th May 2023, Humber Archaeological Partnership (heritage advisors to ERYC) advised that the upstanding earthworks at Nunkeeling Deserted Medieval Village (the presence of which had been confirmed during Heritage Walkover Surveys for the Projects) are of 'schedulable quality' and should be avoided if possible.	The Applicants amended the cable route to include a diversion around Nunkeeling Deserted Medieval Village which is now outside of the Order Limits.
Riston Grange Re-route – Post PEIR amendment following meeting – ERYC (22nd May 2023)	
As described in **Chapter 4 Site Selection** (Revision 2) [AS-017] following a desk based review and consultation with ERYC, it was found that the Onshore Export Cable Corridor routed through an Area of Search and Preferred Area for Sand and Gravel near Riston Grange. At a meeting with ERYC on 22nd May 2023 ERYC expressed their preference for the Onshore Export Cable Corridor to be re-routed to avoid/minimise impacts on this site, as the area is considered an important site in context of regional sand and gravel resource given its designation as a 'Preferred Area', and their being known aspirations from the existing landowner to extend the existing adjacent quarry.	Following a multi-disciplinary review the onshore export cable corridor alignment was amended in this location, to minimise impacts on the Preferred Site for Sand and Gravel whilst also taking into account the presence of nearby residential properties and a holiday cottage.
Section 47 Consultation June 2023	

Comment	Project Response
Requests for environmentally sensitive sites to be avoided / project to be constructed in the most environmentally sensitive way. Includes requests to: • Avoid residential properties; and • Avoid Old Hall Farm and Millenium Orchard.	This was raised three times during consultation. The Applicants have followed a comprehensive, iterative site selection process to develop the most appropriate Onshore Export Cable Corridor, as set out in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The process aimed to minimise impacts on the environment and local residents. The process took into account engineering assessments and technical feasibility, environmental considerations including ecology, designated sites, nature reserves, land use and historic features, local communities and consultation feedback as well as feedback from discussions with landowners. Beverley Westwood and the Burton Bushes which are designated as Ancient Woodland and a Site of Special Scientific Interest (SSSI), these areas and designations have been avoided and the Onshore Export Cable Corridor is routed to the west of these sites. During the site selection process the Applicants have sought to minimise impacts on trees through avoidance, use of trenchless crossing techniques to go underneath woodland areas and minimise any hedgerow clearance to the width of the haul road where trenchless crossing techniques are employed. Any indirect potential impacts are detailed in **Chapter 18 Terrestrial Ecology and Ornithology (Revision 5)** [REP2-019]. Full details of the consultation process is presented in **Consultation Report** [APP-034] submitted alongside the DCO application.
Concerns about routing through Beverley Westwood	This was raised 20 times during consultation. The Onshore Export Cable Corridor avoids Beverley Westwood.
Concerns about use of agricultural / greenfield land. Specific comments relate to: • Request to choose a brownfield site for the Substation Zone; and • Statements that prime agricultural land would be lost.	**Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] details the methodology and steps undertaken to identify the preferred locations of landfall, Substation Zone and the Onshore Export Cable Corridor. The Applicants did a full review of available sites within a 3km search area around Creyke Beck and completed a comprehensive, iterative site selection process to develop the most appropriate locations. The process aimed to minimise impacts on the environment and local residents. The process took into account engineering assessments and technical feasibility, environmental considerations including ecology, designated sites, nature reserves, land use (including green and brown field site), landscape and visual, and historic features, local communities and consultation feedback as well as feedback from discussions with landowners. Please see **Chapter 21 Land Use (Revision 3)** [REP2-022] for further details.
Comments about choice of cable route including: • Routing to the north of Beverley; • Why cable route cannot go to the south of Beverley; • Avoiding Yarrow Quarry; • Avoiding Historic Beverley and Racecourse; • Why cable route is so long; and • General support for the cable route.	This was raised 17 times during consultation. The Onshore Development Area was carefully developed in line with a multitude of design constraints such as engineering, ecological, designated sites, nature reserves, land use and historic features, as well as proximity to residential property and designated landscapes. The site selection process also took into account local communities and consultation feedback as well as feedback from discussions with landowners. The Applicants believe the proposed project development envelope on balance achieves the optimum design with all factors considered. **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] details how the preferred Onshore Export Cable Corridor was selected, the removal of options 1, 2, 4 and 5 and for Option 3 to be selected as the preferred Onshore Export Cable route. **Figure 4-25** [APP-068] presents the preferred options for the Onshore Export Cable Corridor. Option 1 was removed as *'This option was assessed as least favourable due to poor ground conditions, the crossing of a residential property, increased flood risk in comparison to other options and difficult access and therefore was removed from the process.*' Option 2 was removed as *'this Onshore Export Cable Corridor option was not taken forward as it would require a crossing of Figham Common which is common land and therefore the Applicants may require Special*

Comment	Project Response
	Parliamentary Procedures to undertake the work.' The Applicants will continue to develop and refine the design of the Projects within the Order Limits as they move towards construction. By design the Applicants have sought to avoid preferred areas of search for sand and gravel to mitigate the impact. The Onshore Export Cable Corridor was also amended to avoid Yarrow Quarry at Long Riston.
General comments on landfall selection. Comments include: • A request to only choose one landfall; and • Concerns about the environmental impact at the landfall location.	This was raised four times during consultation. As detailed in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] following the statutory consultation the Applicants chose to progress with Landfall Zone 8 which delivers the following advantages: • Provides beach emergency access without accessing Seaside Caravan Park at Ulrome; • Avoids the Holderness Inshore Marine Conservation Zone (MCZ); • Avoids Withow Gap SSSI; and • Simplifies the earthworks required for a trenchless crossing compound. **Chapter 5 Project Description (Revision 3)** [REP1-009] sets out details of the landfall located at Skipsea. Only one landfall location has been selected for the Projects.
Choice of landfall – preference for Landfall 9	This was raised five times during consultation. As detailed in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] following the statutory consultation the Applicants removed Landfall 9 from the Projects design envelope for the following reasons: • It would result in installation of the Offshore Export Cable within the Holderness Inshore MCZ; • There was an increased intensity in static fishing in comparison with landfall 8; • The Withow Gap SSSI is located within this option; and • There was high potential for significant archaeological remains to be impacted.
General commentary on Substation Zone selection; including: • Requests to put the Onshore Converter Stations close to the landfall • Statements regarding the high pressure gas pipeline in Zone 4 • A request to choose a site closer to the existing Creyke Beck substation • Comments on Substation Zone screening and access • Questions about the space required for the Onshore Converter Stations	This was raised 18 times during consultation. **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] details the methodology and steps undertaken to identify the preferred location for the Substation Zone. To maximise efficiencies in electricity transmission it is necessary to locate the Onshore Converter Stations as close to the National Grid Birkhill Wood substation as possible. The Applicants did a full review of available sites within a 3km search area around Creyke Beck and completed a comprehensive, iterative site selection process to develop the most appropriate locations. The process aimed to minimise impacts on the environment and local residents. The process took into account engineering assessments and technical feasibility, environmental considerations including ecology, designated sites, nature reserves, land use (including green and brown field site), landscape and visual, historic features, local communities and consultation feedback as well as feedback from discussions with landowners. Following PEIR feedback a decision was made to remove High Voltage Alternating Current (HVAC) technology, to transmit electricity from the offshore array to the Substation Zone, from the Projects design envelope. HVAC technology required a larger footprint for a substation which meant two Substation Zones would have been required as an HVAC substation and High Voltage Direct Current (HVDC) Converter Station could not be accommodated within one Substation Zone. HVAC would also have required a wider cable corridor. HVDC is included in the Projects Design Envelope to transmit electricity from the offshore arrays to the Onshore Substation Zone for both Projects.

Comment	Project Response
	An Onshore Converter Station is required for each project to convert the electricity generated from HVDC to HVAC prior to connection to the National Grid. Due to the smaller footprint required for HVDC Converter Stations it was possible to collocate the Converter Stations on Substation Zone 4, to the south-west of Beverley. Details of the size of the Onshore Converter Stations are included in **Chapter 5 Project Description (Revision 3)** [REP1-009].
Choice of Substation Zone – preference for Zone 1	This was raised six times during consultation. As detailed in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] following the statutory consultation the Applicants removed Substation Zone 1 from the Projects design envelope for the following reasons: • Presence of 33kV overhead power lines; • Geological risk from a linear feature traversing the eastern part of the Substation Zone 1 footprint; • Crossing of the National Gas Transmission (NGT) High Pressure Gas Main; • Areas of poor ground associated with alluvium to the north of the Zone; • Small areas at risk of surface water flooding within the north of the Substation Zone 1 footprint; • A co-located option was the overall preference across all environmental topic areas; • Substation Zone 1 could only accommodate one Converter Station and a split substation design was the least favourable from a construction costs and land rights perspective; and • Having two HVDC Converter Station construction sites would be less favourable from a health and safety management perspective.
Choice of Substation Zone – preference for Zone 4	This was raised once during consultation. As detailed in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] following the statutory consultation the Applicants chose to progress with Substation Zone 4 which delivers the following advantages: • Two Converter Stations could be accommodated within the Substation Zone enabling co-location; • A co-located option was the overall preference across all environmental topic areas; • Avoid splitting the Converter Stations over two Substation Zones which would be more favourable from a health and safety management perspective; and • Avoid crossing the NGT High Pressure Gas Main.
Section 42 Consultation – Health and Safety Executive 27th June 2023	
According to HSE's records, the proposed project components (Dogger Bank South Offshore Wind Farms, Location of the onshore project area, Figure 1-2 (Drawing No. PC2340-RHD-ON-ZZ-DR-Z-0502) from the PEIR, Non-Technical Summary, Document Reference: 004300140, Revision 04(28th April 2023)) cross a number of major accident hazard pipelines, associated with the following operators: • National Grid Gas PLC. • Northern Gas Networks. • INEOS Manufacturing (Hull) Ltd The Applicant should make the necessary approaches to the relevant pipeline operators. There are three particular reasons for this: i) the pipeline operator may have a legal interest in developments in the vicinity of the pipeline. This may restrict developments within a certain proximity of the pipeline;	Liaison with utilities providers is being undertaken as part of the Development Consent Order (DCO) process and the Applicants have been provided with safe working guidance documents by the pipeline operators. Details of mitigation measures to protect existing utilities are provided in sections 21.6.1.5 and 21.6.2.4 of **Chapter 21 Land Use (Revision 3)** [REP2-022]. Protective provisions for the benefit of gas undertakers are included in Part 1, Schedule 15 to the **Draft DCO (Revision 6)** [document reference 3.1].

Comment	Project Response
ii) the standards to which the pipeline is designed and operated	
Section 42 Consultation – Econergy International Ltd (White Hall Solar Farm) 14th July 2023	
We neither support nor object to the substation itself. However, the wider area (marked in orange in the plan below) covers land which we have an interest in. I understand this orange area is allocated for environmental enhancement.	Noted. White Hall Farm is located partially within Substation Zone 1. As described in section 4.10 of **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] Substation Zone 1 is not being taken forward as part of the application and both converter stations will be located within Substation Zone 4.
We have been developing the site at White Hall Farm as a solar park. Our site boundary is attached. The orange shaded area overlaps the southern section of our development, and we would request that this area be precluded from your environmental enhancement boundary. The landholding in the attached site boundary is under an exclusivity agreement between us and the landowner and we have spent considerable time and effort in conducting detailed assessments of it.	The Projects Onshore Export Cable Corridor has been carefully developed considering design constraints such as engineering, ecological and heritage, as well as proximity to residential property and designated landscapes, as set out in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. White Hall Farm is no longer impacted by the Projects, as Zone 1 is no longer part of the Projects Design. Substation Zone 4 on balance of consultation feedback and other factors was deemed the preferred option. The Applicants believe the proposed Projects Development Envelope, set out in **Chapter 5 Project Description (Revision 3)** [REP1-009], on balance achieves the optimum design.
We do have a concern about shading from the substation. We understand the indoor substation will be up to 27m high and thus has a potential to cast shadows across our solar park. This may also be the case for any trees used to screen the substation's eastern boundary. Can you provide assurances that this will not be the case or locate the substation as far west as possible to minimise the impact of any shade cast by the substation or associated screening plants?	White Hall Farm is no longer impacted by the Projects, as Substation Zone 1 and is no longer part of the Projects design. Further information on the site selection process can be found as part of **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The Landscape Mitigation Plan (**Figure 23-6 (Revision 3)** [REP2-024]) is considered to be embedded mitigation for the Projects. However, it is recognised that mitigation planting will not be fully effective until plants begin to grow and mature. **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] therefore reports on effects at year 1 following completion, when the effectiveness of planting will be least. This represents a worst case assessment. **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] also reports on effects at year 10, assuming that planting is maturing and beginning to be more effective in mitigating the effects.
Section 42 Consultation – Beverley Ramblers – Ramblers Association 16th July 2023	
We would prefer to avoid another cable route from the coast to Beverley. We would prefer the route to go to the south of Beverley, using the same route as that which has been used for the Dogger bank site currently under construction. This would avoid tearing up more countryside North of Beverley.	The Applicants considered options for the Onshore Export Cable Corridor that routed to the southeast of Beverley however these routes were not taken forward and routed to the north of Beverley was selected. Reasons for not selecting the Onshore Export Cable Corridor to the southeast of Beverley included needing to pass through residential gardens and / or common land. Further details of the Onshore Export Cable Corridor route selection process are set out in section 4.12 of **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. Due to uncertainty about construction infrastructure requirements for other projects, and the environmental and engineering constraints identified in the vicinity of other projects, which have already been consented. It is not possible to locate the Projects together with Dogger Bank (A and B). **Appendix C Outline Public Rights of Way Management Plan** of the **OCoCP (Revision 3)** [REP1-025], which forms part of the embedded mitigation measures for the Projects (see Table 21-3) of **Chapter 21 Land Use (Revision 3)** [REP2-022], forms part of the DCO application. This includes measures to keep Public Right of Way (PRoW) open during construction and will be agreed with the ERYC prior to construction. Following construction, the Onshore Export Cable Corridor will be reinstated, a commitment has been made to reinstate between Jointing Bays within two years from the start of construction. All other areas will be reinstated, following the completion of construction.
We would prefer to keep the Substation Zone Option 1 as the preferred site. This would be alongside the existing site, keeping the sites close together.	Due to spatial constraints within Substation Zone 1, co-location of the Onshore Converter Stations within Substation Zone 1 was not considered possible. The site selection process did consider locating one HVDC Converter Station on

Comment	Project Response
	Zone 1 and one on Zone 4 however following a detailed site selection process, that has considered environmental, engineering and land considerations, Substation Zone 1 was discounted from consideration and Substation Zone 4 selected for both Onshore Converter Stations. Further details on the Substation Zone selection process is detailed in section 4.10 of **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017].
The Minster Way foot path to the North of Beverley would be adversely affected by the scheme, if the cable route were to the North of Beverley.	Details of PRoW, National Trails, Coastal Paths and Marked Routes present within the Onshore Development Area are included within section 21.5 of **Chapter 21 Land Use (Revision 3)** [REP2-022]. An assessment of the potential impacts to these features during construction and operation of the Projects is included within sections 21.6.1.6 and 21.6.2.5 of **Chapter 21 Land Use (Revision 3)** [REP2-022] respectively. The Minster Way foot path would remain open during construction with the measures set out in **Appendix C Outline Public Rights of Way Management Plan** of the **OCoCP (Revision 3)** [REP1-025], therefore no significant effects were identified in the Environmental Impact Assessment (EIA).
Section 42 Consultation – Beverley Butchers 17th July 2023	
Consideration should be given to locating the substation in the very south-western part of the zone	Substation Zone 1 presented at statutory consultation, is no longer included in the Onshore Development Area.
Section 42 Consultation – Doggerland Foundation 17th July 2023	
6. We ask RWE to stop development of the Dogger Bank as offshore wind energy area. We ask RWE and the UK government allow this protected area real protection; to maximize the benefits of MPAs to fix the biodiversity and climate crisis. To mitigate and adapt to climate change by promoting intact, complex ecosystems with high diversity and abundance of species. We ask that you work on solutions to both crises and not fix one by aggravating the other: wind energy inside a marine protected area is very difficult to justify in law and knowledge of natural ecosystem dynamics.	The representations made are acknowledged. However, the Applicants have undertaken a comprehensive and RIAA (**Report to inform Appropriate Assessment Habitats Regulations Assessment [APP-045, APP-047, AS-051** and **AS-85**]) for the Applicants to identify, reduce, mitigate and compensate for the likely significant effects and / or adverse effects on site integrity of the Projects as far as is practicable. These assessments include assessments pertaining to cumulative and in combination impacts. Following the completion of the EIA the Applicants continue to see the Projects as being representative of a good opportunity to deliver a significant contribution to the achievement of the UK's climate goals. As such, consent for the Projects is being applied for. As part of the consenting process the many merits and benefits of the proposals will be weighed against the likely impacts of the Projects under the applicable National Policy Statements. The relevant Secretary of State will subsequently form a view on whether or not consent for the Projects should be granted. **Planning Statement** [APP-226] prepared for the Projects provides a clear demonstration of how the proposed Projects satisfy relevant UK policies pertaining to the development of offshore windfarms in the UK.
Section 42 Consultation – Haven Leisure Ltd 17th July 2023	
Haven Leisure also requires further information on the nature of any impacts on any future use of Half Field should onshore cabling be routed through the site.	Following environmental, engineering, land and consultation feedback further refinement of the Projects landfall location concluded in the selection of the landfall adjacent to Skipsea (landfall 8) as outlined in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The assessments within the ES have been updated since the PEIR stage. Landfall 9 is no longer being considered so any direct impacts of Half Field have been removed from the Projects.
Impact on Half Field Half Field is located within a zone for the routing of the onshore cable corridor. It is understood that the exact routing and number of any required cabling and associated trenches is unknown at this stage and we appreciate the level of helpful information provided on likely construction impact in relation to the necessary works to lay cabling within that corridor.	Following environmental, engineering, land and consultation feedback further refinement of the Projects landfall location concluded in the selection of the landfall adjacent to Skipsea (landfall 8) as outlined in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The assessments within the ES have been updated since the PEIR stage. Landfall 9 is no longer being considered so any direct impacts have been removed from the Projects, including Half Field. Please see **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] for further details.

Comment	Project Response
However, and should cabling necessarily run through Half Field, insufficient information is available on any long term and operational impacts on Haven Leisure. In particular, clarification is required on whether the routing of cables under the site creates any restrictions on options for the future use of Half Field and whether it would 'sterilise' the ability to use the site for any long term use. Haven Leisure seeks further engagement to clarify any direct and long term impacts on future uses at Half Field should this location be used for onshore cabling. We reserve the right to provide further commentary once we have an opportunity to review the outcomes of the additional assessment work.	Following environmental, engineering, land and consultation feedback further refinement of the Projects landfall location concluded in the selection of the landfall adjacent to Skipsea (landfall 8) as outlined in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The assessments within the ES have been updated since the PEIR stage. Landfall 9 is no longer being considered so any direct impacts have been removed from the Projects, including Half Field. Please see **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] for further details.
However, the company is concerned that sufficient assessment of its operation at Far Grange has not yet been carried out and wishes to have greater clarity on the impacts on those staying at the park, particularly during any period of construction. Given the importance of this work in determining any selection of final landfall solutions, it is considered that this work should be conducted urgently and prior to any choices being made in respect of Zones 8 and 9.	Following environmental, engineering, land and consultation feedback further refinement of the Projects landfall location concluded in the selection of the landfall adjacent to Skipsea (landfall 8) as outlined in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The assessments within the ES have been updated since the PEIR stage. Landfall 9 is no longer being considered so any direct impacts have been removed from the Projects, including Half Field. Please see **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] for further details.
Section 42 Consultation – Historic England 17th July 2023	
19. 22.3.1 para 6: we note that there continue to be two possible landfall options. We welcome further clarification on this matter, in order to better understand the impact of the proposal.	As the EIA has progressed, further route refinement and micro-siting has been carried out, informed directly by the results of ongoing archaeological surveys i.e. geophysical survey to ensure areas of high archaeological potential are avoided, wherever possible within the confines of engineering and other environmental constraints. Only one landfall zone has been taken forward at application stage. Archaeology and cultural heritage considerations formed an important part of the site selection process.
21. 22.3.22, para 12 onwards: we note that there are two possible electrical solutions, with a number of final scheme permutations (para 12). We welcome further clarification on this matter in order to better understand the impact of the proposal. This is also related to paras 282 to 287 where the potential significance of effect varies from 'medium adverse to 'moderate to major'.	There is one electrical solution being considered for DBS West and DBS East, HVDC. Four export cables offshore are required for two HVDC projects. The two HVDC convertor stations would be located within the Onshore Substation Zone.
In paragraph 27 it is stated that "the avoidance of Archaeological Exclusion Zones (AEZs), and features of possible archaeological interest, has not been embedded in the design of the wind farm boundaries or offshore cable corridors to date (over and above the requirement to avoid historic wrecks as far as possible as a principal of site selection). However, the parameters of the Projects are sufficiently wide to accommodate micro-siting as part of the cable route refinement and wind farm design (which will be progressed post consent)". As such we understand this is in part related to the fact marine geophysical survey data has yet to be integrated into the early project planning stage. Additionally, however, we would like to have it clarified if the present Offshore Development Area buffers for the export cables are going to be revised or amended in any way at the ES stage? The reason being is that they appear to be of an approximate width of 250m (within the supporting figures (17-1a to 1e)), which if all six export cables are to be utilised does appear to leave limited buffer coverage to account for impact close to the edge of the focus of the Offshore Development Area and surrounding seabed.	The cable corridors assessed for the PEIR were 2km in width with a 4km landfall. The routes have been refined with the removal of route options and a reduced landfall area, although the corridors taken forward to the ES remain 2km wide across the majority of their length, including a construction buffer. The commitment to HVDC for energy export has reduced the numbers of cables required, and the commitment to cable bundling has further increased scope for micro-siting around AEZs.
Section 42 Consultation – Lincolnshire Wildlife Trust 17th July 2023	
2. Project Overview and Marine Environment Receptors The Dogger Bank South Offshore Wind Farms is a large Nationally Significant Infrastructure Project that intends to deliver 200 turbines within the Dogger Bank region of the southern North Sea. The offshore	Impacts of the proposed works on, and any relevant mitigation and compensation requirements for, National Site Network Sites are outlined in **Report to inform Appropriate Assessment Habitats Regulations Assessment [APP-045, APP-047, AS-051** and **AS-85**], with impacts on MCZs considered within **Stage 1 MCZ Assessment** [APP-241].

Comment	Project Response
area includes DBS East and DBS west arrays, where the wind turbines would be located, and the offshore export cable corridors that connect the array areas to the landfall. According to the information provided in the PEIR, the Projects are likely to overlap with important protected areas and features, including but not limited to the Dogger Bank SAC, Southern North Sea SAC, Flamborough Head SAC and SSSI, Dimlington Cliff SSSI, the Holderness Offshore MCZ, Holderness Inshore MCZ, the Flamborough and Filey Coast Special Protection Area (SPA), Greater Wash SPA, and Humber Estuary SPA.	
Section 42 Consultation – Mewburn - Landowner (Alnwick agent) 17th July 2023	
This land is being used for a ground source heat pump system coupled to a farmhouse included with the wider holding. Corridor needs to be moved eastwards.	The electrical infrastructure technology included in the Projects design is HVDC, this has reduced the Onshore Export Cable Corridor width presented at statutory consultation (excluding crossings) from 100m to 75m. The Applicants are unable to route further east due to other constraints further South on the route. There would be a temporary construction impact across a 75m corridor. The Projects would have a permanent easement of up to 24m during operation that would return to productive agricultural use and any reasonable loss of development will be a compensable matter. The Projects Onshore Export Cable Corridor has been carefully developed considering design constraints such as engineering, ecological and heritage, as well as proximity to residential property and designated landscapes, as set out in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The Applicants believe the proposed Project Development Envelope, set out in **Chapter 5 Project Description (Revision 3)** [REP1-009], on balance achieves the optimum design however the Applicants would seek to avoid further constraints including a ground source heat pump system at detailed design. The details of which remain unknown, but the Applicants would look to mitigate by design by using trenchless crossing techniques if there was a conflict at the detailed design stage.
Corridor needs to be moved eastwards to adjoin the field boundary to mitigate severance issues and long-term impact of the scheme.	The Projects Onshore Export Cable Corridor has been carefully developed considering design constraints such as engineering, ecological and heritage, as well as proximity to residential property and designated landscapes, as set out in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The Applicants are unable to route further east due to other constraints. There would be a temporary construction impact across a 75m corridor. The Projects would have a permanent easement of up to 24m during operation that would return to productive agricultural use and any reasonable loss of development will be a compensable matter. By consulting with landowners and occupiers, maintaining access to severed land, appropriate timings of works and reinstatement of land to pre-construction conditions as soon as reasonably practicable, it is likely that the amount of land temporarily unsuitable for agriculture would be reduced. Private agreements (or compensation in line with the compulsory purchase completion code) would be sought with relevant landowners / occupiers. By consulting with landowners and occupiers, maintaining access to severed land, appropriate timings of works and reinstatement of land to pre-construction conditions as soon as reasonably practicable, it is likely that the amount of land temporarily unsuitable for agriculture would be reduced. Private agreements (or compensation in line with the compulsory purchase completion code) would be sought with relevant landowners / occupiers. The Applicants believe the proposed Projects Design Envelope, set out in **Chapter 5 Project Description (Revision 3)** [REP1-009], on balance achieves the optimum design however the Applicants would seek to avoid further constraints at detailed design.

Comment	Project Response
No compounds to be placed on this land parcel at the landowners request. Landowners have suffered significantly as a consequence of the Dogger Bank A and B Scheme and are resistant to this scheme and any further compounds.	No Temporary Construction Compounds are proposed within this landholding.
Section 42 Consultation – Orsted 17th July 2023	
The closest point on the respective cable corridors between the two projects is immediately west of Beverley at Burton Bushes. The proposed cable route for Dogger Bank South Offshore Wind Project appears to be immediately adjacent to the cable for Hornsea Four. The Preferred Cable Route has a greater offset from the Hornsea Four cable corridor and does not appear to overlap, although there will be a requirement for coordination to ensure interfaces are managed appropriately.	Co-ordination with Hornsea Four to ensure interfaces are managed appropriately will continue as the Projects progress.
Offshore export cable corridor The proposed Dogger Bank South Offshore Wind Project offshore export cable corridor is 1km wide (with a 500m temporary working area buffer either side) but funnels out to up to 4km on approach to the landfall. We note that there are up to six cable crossings in close proximity of the landfall required with Hornsea Four Orsted would want to be consulted on the detailed routeing of the export cable/s at the pre-construction stage.	Consultation with Hornsea Project Four will continue as the Projects progress. It should be noted that following updates to the Projects design envelope, the offshore export cable corridor now funnels out to 3km but remains at just 1km in width where it intersects with the Hornsea Four corridor. The Applicants are engaged with Orsted on the form of commercial agreement required to manage the onshore and offshore interactions between respective projects. Comments on draft Heads of Terms were received from Orsted on 7th March 2025 and being reviewed by the Applicants.
Section 42 Consultation – Riplingham Estate 17th July 2023	
From the consultation interactive map it will be noted that the Indicative Preferred 100m Corridor and the Indicative Zone of Off Route Access both run approximately north-south right through approximately the centre of this land and very close to the farmhouse and buildings at Vinegar Hill Farm	The electrical infrastructure technology included in the Projects design is HVDC, this has reduced the Onshore Export Cable Corridor width presented at statutory consultation (excluding crossings) from 100m to 75m. There would be a temporary construction impact across a 75m corridor - the Projects would be sterilising 24m corridor during operation that would return to productive agricultural use and any reasonable loss of development will be a compensable matter.
wish to work positively with RWE to try to resolve the cable route in an acceptable manner to Riplingham Estates Ltd and the movement of the cable route to the north-west corner of Riplingham Estates Ltd ownership would be a much better situation.	The electrical infrastructure technology included in the Projects design is HVDC, this has reduced the Onshore Export Cable Corridor width presented at statutory consultation (excluding crossings) from 100m to 75m. There would be a temporary construction impact across a 75m corridor. The Projects would have a 24m permanent easement during operation that would return to productive agricultural use and any reasonable loss of development will be a compensable matter. Removal of Substation Zone 1 from the Project Design Envelope as outlined in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017] has allowed the movement of the cable route to the north-west corner of Riplingham Estates Ltd ownership Landowners and Agents have been kept informed of progress to date and the project held an agents briefing session to aide discussion and plan ahead.
Section 42 Consultation – Rowley Parish Council 17th July 2023	
1. Zone 4 Substation The proposed substation in Zone 4 (Bentley) is situated in a rural Hamlet and within Rowley Parish. The Parish Council unanimously support the residents and strongly object to a substation being built in this location. This will have a significant and detrimental impact on the residents of Bentley, there will also be harm to the visual amenity in an area of high landscape value. The sheer amount of land required for this project will have a sizeable impact on local farmers.	An extensive site selection process has been undertaken to identify the site as detail in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. **Chapter 23 Landscape and Visual Impact Assessment** [APP-192], identifies significant adverse effects from a representative viewpoint along Coppleflat Lane in section 23.6.2.3.2. However, it should be noted that significant visual effects are limited to within 1km of the Onshore Converter Station(s).

Comment	Project Response
	An **Outline Landscape Management Plan (OLMP) (Revision 3)** [REP2-031] has been developed for the Projects, reflecting the form and scale of the proposals, and the assessed landscape and visual effects. However, it is recognised that mitigation planting will not be fully effective until plants begin to grow and mature. The assessment and **Figure 23-8 (Revision 3)** [REP2-024] therefore include effects on the view from Coppleflat Lane at year 1 following completion, when the effectiveness of planting will be least (major adverse). This represents a worst-case assessment. **Chapter 23 Landscape and Visual Impact Assessment** [APP-192] also reports on effects at year 10, assuming that planting is maturing and beginning to be more effective in mitigating the effects. At this time the effects are considered to be reduced to moderate adverse, however still significant in EIA terms. The **Design and Access Statement (Revision 2)** [REP2-027] sets out the design principles for the Onshore Converter Station(s) and includes a requirement for a 'Design Champion' and 'Design Panel' with representatives to be agreed with the Planning Authority, who will work with the engineers at the detailed design stage to consider the external appearance of the buildings and ensure the detailed Landscape Management Plan maximises the screening opportunities set out in the **OLMP (Revision 3)** [REP2-031]. Effects on agricultural land are assessed in **Chapter 21 Land Use (Revision 3)** [REP2-022] this identifies a major adverse significance of effect at the Substation Zone in relation to the loss of agricultural land, however the site has been surveyed and is not classed as Best and Most Versatile Land. As detailed in the **OLMP (Revision 3)** [REP2-031] areas of land within the Substation Zone will be returned to agriculture, where planting is not required for the landscape and visual screening or sustainable drainage systems. A private land agreement will also be sought with the landowner.
Cable Corridor 2 Landfall sites suggested from the coast, one being Skipsea, bringing the cables in, and route 3 being a preferred option which will come in from the north side of Bentley to the suggested site compound. Why hasn't Hull City Council been used as a preferred option – Hull City Council have a list of Brownfield Sites, one being significantly and less damaging to residents to the Creyke Beck (National Grid Sub Station).	An extensive site selection process has been undertaken to identify the site as detail in **Chapter 4 Site Selection & Assessment of Alternatives (Revision 2)** [AS-017]. The Onshore Export Cable Corridor has been designed to connect to the Proposed Birkhill Wood National Grid Substation and therefore a route though Hull would not have been appropriate due to the large number of receptors, engineering constraints and its distance from the grid connection point.
Section 42 Consultation – Sinkler/Manor Farm 17th July 2023	
Out of the three above methods the only option which our Client considers viable is to directional drill from the east side of Meaux Lane to the west side of the poultry building and range access road.	The Applicants have met the landowners several times to discuss the potential implications of the Projects and how they can mitigate the impacts on the farm. Commitments have been made to utilise trenchless crossings on Meaux Lane and the A1035.
Section 42 Consultation – Los Trustee's 18th July 2023	
RWE do not know whether one HVAC and one HVDC or two HVDC projects and what he minimum and maximum easement widths will be	The electrical infrastructure technology included in the Projects design is HVDC, this has reduced the Onshore Export Cable Corridor width presented at statutory consultation (excluding crossings) from 100m to 75m as detailed in **Chapter 5 Project Description (Revision 3)** [REP1-009]. There will be a temporary construction impact across a 75m corridor. The permanent easement of the Onshore Export Cable Corridor is 24m during operation and any reasonable loss of development will be a compensable matter.
Section 42 Consultation – Walter Stuart Kirkwood 27th July 2023	
Land parcel 166. There is an outfall from this field which drains across the field immediately to the north owned by Messrs Mewburn, which is critical to our clients fields drainage, which needs accounting for in the positioning of the cable route	Land Drainage Consultancy Ltd have been appointed to develop conceptual pre- and post-construction drainage plans that will be shared with the main works contractor once appointed to implement where reasonably practicable. These

Comment	Project Response
	will be developed with landowners and agents outside the limitations of the DCO and will be agreed by private treaty, committed to as part of the Option Agreements.
Section 42 Consultation – National Grid Interconnector Holdings (NGIH) 15th September 2023	
The Continental Link and DBS projects are located within close proximity of each other. In light of surrounding technical, environmental and land constraints, NGIH asks that DBS actively engage with NGIH to ensure DBS proposals do not preclude the Continental Link project from securing a connection and coming forwards. In ensuring the above, NGIH requests: 1) Further consideration of proposals and corridors that would represent the most efficient use of land;	Email response sent 19th September 2023 requesting availability for a Teams call to discuss both project interactions in more detail. The Projects and NGIH held Teams meetings on the 31st January 2024 and 14th February 2024 to discuss project interactions, project timelines and ongoing consultation between the two projects to share updates going forward. Both parties agree to continue to work together to notify any key project updates. The project is considered cumulatively in the ES chapter, where potential impacts have been identified and included in **Appendix 6-1 Onshore Cumulative Effects Assessment Methodology (Revision 2)** [document reference 7.6.6.1].
2) Further refinement in relation to cable alignments, substation optionality and cable connection route within the Proposed Order Limits. Greater clarity on this would inform Continental Link project's	Email response sent 19th September 2023 requesting availability for a Teams call to discuss both project interactions in more detail. The Applicants and NGIH held Teams meetings on the 31st January 2024 and 14th February 2024 to discuss project interactions, project timelines and ongoing consultation between the two projects to share updates going forward. The Applicants supplied updated Onshore Export Cable Corridor plans and proposed order limits providing further clarification to NGIH on the likely interaction points. No concerns were identified. Both parties agree to continue to work together to notify any key project updates.
Section 42 Consultation - Walter Stuart Kirkwood 14th November 2023	
My field at Catfoss (166 I think), the route goes right over the outfall for the field drainage, as well as Mewburn's to the north where the outfall ends in the dyke. A small movement to the west for the cable route would make a big difference to the cost in renewing the outfall across both fields and still leave us with some sort of drainage while the work is carried out.	Land Drainage Consultancy Ltd have been appointed to develop conceptual pre- and post-construction drainage plans that will be shared with the main works contractor once appointed to implement were reasonably practicable. These will be developed with landowners and agents outside the limitations of the DCO and will be agreed by private treaty, committed to as part of the Option Agreements.

Appendix J – WQ SN.1.1 Shipping and Navigation DFDS Email

Outlook

RE: [EXTERNAL] Dogger Bank South / DFDS Seaways Consultation

From [redacted] dfds.com>
Date Mon 04/12/2023 3:40 PM
To [redacted] anatec.com>
Cc [redacted] dfds.com> [redacted] dfds.com [redacted] @anatec.com> [redacted] @anatec.com> [redacted] @rhdhv.com [redacted] @rhdhv.com> [redacted] @rwe.com [redacted] @rwe.com>

Dea [redacted]

Hope you are well,

The labelled key points and coordinates have been checked together with Immingham-Gothenburg route vessels regarding the project.
Our relevant vessels are passing on the export cable corridor coordinates and there is no close approach when passing through the west of the DBS area even during in heavy and adverse weather condition on Immingham-Gothenburg route.

So, the wind generator farm will not have any direct impact on our present Immingham-Gothenburg routes.

Best regards / Med venlig hilsen

[redacted]
Operational Fleet Manager

DFDS

DFDS A/S
Marmorvej 18

From [redacted]@anatec.com>
Sent: 2023 3:20 PM
T [redacted]@dfds.com[redacted]@dfds.com>
C [redacted] c.com [redacted] anatec.com [redacted]
[redacted]@rhdhv.com>[redacted]@dfds.com [redacted]@rhdhv.com>;
[redacted]@rwe.com>; dbs@rwe.com
er Bank South / DFDS Seaways Consultation

CAUTION:This is an external email - check sender address and use caution before you click links or open attachments. Please report suspicious emails.

Hi Both,

Just wondering if you've had a chance to digest the below and had any feedback you wished to share?

Thanks,
[redacted]

From [redacted]
Sent: Friday, November 3, 2023 5:05 PM
To [redacted]@dfds.com [redacted]@dfds.com>
C [redacted] anatec.co [redacted]@anatec.com [redacted]
[redacted]@rhdhv.com [redacted] dfds.com [redacted]@rhdhv.com>;
[redacted] rwe.com [redacted]rwe.com>; dbs@rwe.com
Subject: RE: [EXTERNAL] Dogger Bank South / DFDS Seaways Consultation

H [redacted]

At the link below I've included:

- Figure showing the project on a UKHO chart with key points labelled and corresponding coordinates below
- Figure showing the array areas alongside RoRo traffic which is largely your Immingham-Gothenburg route. On average the route passes around 6.4nm from the search area
- Also worth raising a search area that we have defined along the offshore export cable corridor which may contain a single platform – the link includes a figure of this search area alongside passenger vessel traffic

Point	Latitude	Longitude		Point	Latitude	Longitude
C	54° 38′ 32.07″ N	001° 44′ 33.30″ E		P	54° 30′ 03.24″ N	001° 46′ 42.44″ E
D	54° 36′ 38.22″ N	001° 43′ 29.49″ E		Q	54° 29′ 34.11″ N	001° 47′ 07.63″ E
E	54° 32′ 12.21″ N	001° 32′ 56.72″ E		R	54° 28′ 35.37″ N	001° 42′ 28.94″ E
F	54° 34′ 12.92″ N	001° 20′ 50.49″ E		S	54° 28′ 06.14″ N	001° 43′ 00.55″ E
G	54° 31′ 23.80″ N	001° 45′ 32.72″ E		T	54° 26′ 47.90″ N	001° 27′ 04.24″ E
H	54° 33′ 49.50″ N	001° 49′ 15.70″ E		U	54° 26′ 14.91″ N	001° 27′ 02.72″ E
I	54° 34′ 14.05″ N	001° 59′ 38.39″ E		V	54° 28′ 51.34″ N	000° 57′ 10.28″ E
J	54° 24′ 19.83″ N	002° 08′ 05.61″ E		W	54° 28′ 26.01″ N	000° 55′ 48.68″ E
K	54° 21′ 35.80″N	001° 53′ 59.58″ E		X	54° 17′ 54.38″ N	000° 37′ 23.41″ E
L	53° 59′ 22.22″ N	000° 12′ 18.59″ W		Y	54° 12′ 35.66″ N	000° 27′ 29.53″ E
M	54° 04′ 02.99″ N	000° 05′ 13.72″ E				

Let us know if you need anything else.

Thanks,
[redacted]

From [redacted]@dfds.com>
Sent: 5 PM
T [redacted]@anatec.com [redacted]@dfds.com>
[redacted]@anatec.com [redacted]anatec.com [redacted]
[redacted]@rhdhv.com [redacted]@dfds.com [redacted]@rhdhv.com>;
[redacted] @rwe.com [redacted] rwe.com>; dbs@rwe.com
ger Bank South / DFDS Seaways Consultation

H[redacted],

Let's start with the file.
Please in a scale where we can have same tested with our vessels and see how close we get.

Great weekend to you all

Best regards / Med venlig hilsen

[redacted]

report suspicious emails.

Good afternoon Both,

Hope you are doing well.

I'm getting in touch in relation to the Dogger Bank South project which is now approaching the consent application stage. Subsequently the NRA is being updated following PEIR.

We have been in touch previously through the regular operator consultation but don't believe you provided any feedback at that point. For completeness we did include an action in the PEIR NRA to consult with DFDS with particular consideration of adverse weather routeing (noting this has been an important topic of discussion with DFDS on previous projects). The PEIR NRA states:

It has been identified that the DFDS Seaways-operated Immingham-Gothenburg route occasionally passes west of the DBS array areas (likely beyond the DBS West study area [10nm buffer]) during periods of adverse weather, rather than passing to the south.

So just wanted to query whether there was any input you'd like to provide. We are holding a follow up Hazard Workshop next Thursday (remotely) which we'd be happy to extend an invitation to, or can arrange a separate meeting if preferable. We can also send across a shapefile of the DBS array areas / coordinates if this would be helpful.

Thanks and have a good weekend,

anatec

Anatec Limited
Risk based decision making
An Employee Owned Company

[redacted]
Senior Risk Analyst

Ema [redacted] anatec.com
Phon [redacted]
Website: www.anatec.com

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Appendix K – WQ TT.1.12 Traffic and Transport Abnormal Indivisible Loads Email

From: [redacted]@nationalhighways.co.uk>
Sent: Friday, January 6, 2023 12:42 PM
To: [redacted]@wynnslimited.com>; [redacted]@wynnslimited.com>
Cc: [redacted]@nationalhighways.co.uk>
Subject: RE: WYNL/85-1 - Dogger Bank

Thanks [redacted]

Prior to us processing your application; We have cleared structurally a heavy load route from Hull to Creyke Beck near Dogger Bank earlier this year on a 24 axle girder frame. I am keen to avoid any additional work if a heavy load route has been proven recently and I am happy to share the cleared route with you (we can look to request the height information outside of a formal application).

Please advise,

Kind Regards

[redacted] Strategy and Customer Manager
Operations Customer Services Division - Abnormal Indivisible Loads Team
National Highways | The Cube | 199 Wharfside Street | Birmingham | B1 1RN
[redacted]
Abnormal Loads Team: [redacted]
Web: www.nationalhighways.co.uk

I work on Wednesdays, Thursdays & Fridays. On other weekdays, please contact abnormal.loads@highwaysengland.co.uk

From: [redacted]@wynnslimited.com>
Sent: 05 January 2023 14:11
To: [redacted]@wynnslimited.com>; [redacted]@nationalhighways.co.uk>
Cc: [redacted]@nationalhighways.co.uk>
Subject: RE: WYNL/85-1 - Dogger Bank

Hi both,

No problem with this but we need to highlight to Yorkshire and North East that it is indicative only. We will be advising client not to procure transformer in excess of 4.87m transport height for carriage in UK on suitable frame trailers but whether they listen is not up to us. But yes, this will hopefully enable us to get at least indicative heights from them but what I cam keen to avoid is they say the route will not work as it is above 4.95m height.

Hope that makes sense.

Thanks

[redacted]

From: [redacted]@wynnslimited.com>
Sent: 05 January 2023 14:07
To: [redacted]@nationalhighways.co.uk>
Cc: [redacted]@wynnslimited.com>; [redacted]@nationalhighways.co.uk>
Subject [redacted]ogger Bank

[redacted]

Thanks for coming back to me,

I have just resubmitted with those height measurements changed and in the hope that by having the worst-case scenario it'll flush out any height restrictions we may come up against,

It should hopefully now be showing as WYNL/85-2

Thank you,

Kind Regards,

[redacted]
Transport Planner

[redacted]

Advance Notice of Leave:
Monday 13th February – Friday 17th February 2022

Find out more visit www.wynnslimited.com

Shaftesbury House, 2 High Street, Eccleshall, Staffordshire, ST21 6BZ

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From: [redacted]@nationalhighways.co.uk>
Sent: 05 January 2023 13:55
To: [redacted]@wynnslimited.com>
Cc: [redacted]@wynnslimited.com>; [redacted]@nationalhighways.co.uk>
Subject: RE: WYNL/85-1 - Dogger Bank

[redacted]

Before we proceed with consultation on this one, I note on the AL50 trailer than the max height is 5m which equals the piece height. Also on the Collett and AL50 trailer that the reduced height is 4.95m which exceeds the piece load of 5m. I appreciate the height is tbc but I would recommend it's worth going out with the worst case scenario to ensure any potential height issues are flagged.

Would you be happy with this approach? If so can I please ask that you revise accordingly.

Happy to discuss further if you wish,

Kind Regards,

[redacted] Strategy and Customer Manager
Operations Customer Services Division - Abnormal Indivisible Loads Team
National Highways | The Cube | 199 Wharfside Street | Birmingham | B1 1RN
[redacted]
Abnormal Loads Team: [redacted]
Web: www.nationalhighways.co.uk

I work on Wednesdays, Thursdays & Fridays. On other weekdays, please contact abnormal.loads@highwaysengland.co.uk

---

From: [redacted]@wynnslimited.com>
Sent: 05 January 2023 12:10
To: [redacted]@nationalhighways.co.uk>
Cc: [redacted]@wynnslimited.com>
Subject: WYNL/85-1 - Dogger Bank

Good Afternoon [redacted]

Hope your well,

This morning I have submitted a proposed route application via ESDAL for planned Transformer deliveries to proposed Dogger Bank South Offshore Windfarm on reference; ***WYNL/85.***

I have inserted into the notes, Transformer Height is indicative only and remains to be confirmed, it is possible it may be marginally in excess of standard motorway running heights and confirmation of headroom clearances would be appreciated. Happy to discuss in further details on our call with Yorkshire and North East on our planned Teams call on Friday 27th January.

Look forward to hearing back from you in due course,

Thank you,

Kind Regards,

[redacted]
Transport Planner

Tel: [redacted]
Mobile: [redacted]
Email: [redacted]

Find out more visit www.wynnslimited.com

RWE Renewables UK Dogger Bank South (West) Limited

RWE Renewables UK Dogger Bank South (East) Limited

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Wiltshire, SN5 6PB