

FIVE ESTUARIES OFFSHORE WIND FARM

10.22 APPLICANT'S RESPONSE TO EXQ1

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ACRONYMS

Acronym	Definition	
AIL	Abnormal Indivisible Load	
AIS	Air Insulated Substation	
ANS	Artificial Nesting Structure	
AONB	Area of Outstanding Natural Beauty	
BMV	Best and Most Versatile	
CBRA	Cable Burial Risk Assessment	
CBS	Cement Bound Sand	
CFD	Contracts for Difference	
CNP	Critical National Priority	
DAS	Digital Aerial Surveys	
DCO	Development Consent Order	
DESNZ	Department of Energy Security and Net Zero	
EACN	East Anglia Connection Node	
ECC	Export Cable Corridor	
EIA	Environmental Impact Assessment	
ES	Environmental Statement	
FFC	Flaborough and Filey Coast	
HDD	Horizontal Directional Drill	
HGV	Heavy Goods Vehicle	
HRA	Habitats Regulations Assessment	
HVAC	High voltage alternating current	
LAT	Lowest Astronomical Tide	
LBBG	Lesser Black Backed Gul	
LPA	Local Planning Authority	
MCA	Maritime and Coastguard Agency	
MGN	Marine Guidance Note	
MLS	Margate and Long Sands	
MMO	Marine Management Organisation	
MOD	Ministry of Defence	



Acronym	Definition	
MRF	Marine Recovery Fund	
NGET	National Grid Electricity Transmission	
NIP	Navigation and Installation Plan	
NPS	National Policy Statement	
NRA	Navigational Risk Assessment	
NSIP	Nationally Significant Infrastructure Project	
ocss	Offshore Coordination Support Scheme	
OFTO	Offshore Electricity Transmission	
OLEMP	Outline Landscape and Ecological Management Plan	
OWF	Offshore Wind Farm	
PEIR	Preliminary Environmental Impact Assessment	
PINS	The Planning Inspectorate	
PROW	Public Right of Way	
PVA	Population Viability Analysis	
RIAA	Report to Inform Appropriate Assessment	
SAC	Special Area of Conservation	
SLVIA	Seascape, Landscape and Visual Impact Assessment	
SPA	Special Protected Area	
SSSI	Sites of Special Scientific Interest	
VE	Five Estuaries Offshore Wind Farm	
WTG	Wind Turbine Generator	



1 INTRODUCTION

1.1 PURPOSE OF THIS DOCUMENT

- 1.1.1 This document has been prepared by Five Estuaries Offshore Wind Farm Limited ('the Applicant') to respond to the Examining Authority's ('ExA') Written Questions (ExQ1) [PD-011].
- 1.1.2 All of the questions raised in EXQ1 have been included in this document, even where questions have been directed to specific Interest Parties and/or Local Authorities. In some cases the Applicant has made comment in relation to these questions where it believes that it would be helpful in understanding the related issues.

2 RESPONSES TO EXQ1

Reference	Question to	Question	Applicant's response
GENERAL AI	ND CROSS-TOPIC	QUESTIONS (GC)	
GC.1.01	Applicant	Status of Application documents The majority of the Application's written documents are prefaced by a generic liability statement which, amongst other things, states " Five Estuaries Offshore Wind Farm Ltd makes no warranty as to the accuracy or completeness of material supplied by the client or their agent Any persons intending to use this document should satisfy themselves as to its applicability for their intended purpose". The Applicant must clarify what credence the Secretary of State, the Examining Authority and Interested Parties can place on the accuracy or completeness of any of the Application documentation that is subject to previously quoted liability statement. The Applicant clarified during the Preliminary Meeting that the liability statement included within each of the Application documents should be disregarded. The ExA notes that the Applicant's Deadline 1 documents now include a revised liability statement.	Noted.
GC.1.02	Applicant	Status of the description of the Proposed Development and reporting on it in the Environmental Statement (ES) submitted with the Application Paragraph 1.3.3 of the Offshore Project Description [APP-069] states: "The description of the Proposed Development will be refined as the design continues to evolve through the key subsequent stages of the design, consultation and EIA process culminating in the Environmental Statement (ES) that will accompany the Development Consent Order (DCO) Application." Given what is stated in paragraph 1.3.3, does the description for the Proposed Development reflect what it is being proposed and has that development been comprehensively assessed for the purposes of the Environmental Impact	The Applicant can confirm that the design parameters set out in the Offshore Project Description [APP-069] have been assessed, with the Maximum Design Scenario (MDS) for all potential impacts on receptors being described in the individual Environmental Statement chapters. This text appears to be a hangover from the Preliminary Environmental Impact Report (PEIR); however it is the MDS as set out in the Offshore Project Description APP-069 that has been used in all EIA assessments. Any further refinements to the design, including the recent reduction in wind turbine generator tip height and the removal of gravity base foundations, are within or reduce the MDS (as secured in the Draft Development Consent Order – Revision B [REP1-008]) and therefore cannot lead to any new or materially different impacts to those assessed in the ES.

Reference	Question to	Question	Applicant's response
		Assessment Regulations and reported on in the submitted ES?	
GC.1.03	Applicant	Generating capacity of the Proposed Development Provide the following information: a) The anticipated generating capacity for the Proposed Development and the contribution that generating capacity would make to the Government's objective of delivering 50 gigawatts (GW) of offshore wind generation by 2030. b) The anticipated generating capacity for the "small" and the "large" wind turbine generators referred to in [APP-069], for example Table 1.8. c) With respect to connecting with the electricity transmission system, confirm what grid capacity limit has been allocated to the Proposed Development. The ExA finds it necessary to ask this question because a number of Application documents vaguely refer to the Proposed Development having an overall capacity of greater than 100 Megawatts (MW) with there being no indication of its actual anticipated generating capacity. 100MW is simply a threshold for determining whether a proposed offshore generating station in England would or would not be a Nationally Significant Infrastructure Project (NSIP) and be within the scope of the Planning Act 2008 (PA2008). The ExA considers that it and the Secretary State need to know what the anticipated generating capacity for the Proposed Development would be, because that is information which would need to be taken account of should it become necessary to weigh any effects arising from the Proposed Development against any public interest benefits, particularly when exercising duties under s122 of the PA2008 (Purpose for which compulsory acquisition may be authorised) and The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).	 a) The Applicant has secured a grid connection agreement with National Grid Electricity Transmission (NGET) that would allow for a connection capacity of up to 1080 MW. The generating capacity of the proposed development is expected to be close to 1GW, but the exact figure will depend on the final selection of wind turbines. This would contribute approximately 2% towards the Government's target of delivering 50 GW by 2030. The Applicant notes that NPS EN1 specifically states that the need for offshore wind, as a development type, is demonstrated and urgent and provides "The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS." (NPS EN1 at 3.2.8) b) The power would be generated by either a larger number of smaller turbines or a smaller number of larger turbines between the range of 79 small Wind Turbine Generators (WTG) and 41 large WTG depending on the turbine specification available at the time. For example, based around what is currently available on the market (and efficiency continues to improve), this could be: • 65 x 15 MW turbines = 975 MW generation capacity (i.e. a larger number of smaller turbines) or; • 46 x 21 MW turbines = 966 MW generation capacity (i.e. a smaller number of larger turbines). These examples are for illustrative purposes only. There could be other combinations that would generate a similar capacity. It should be noted that whichever turbine size/capacity is chosen that the turbine size would be uniform across both arrays i.e. for the entire project. c) As stated above, the Applicant's connection agreement with NGET is for a capacity of up to 1080 MW.
GC.1.04	Applicant	Significance of the Proposed Development's contribution to the United Kingdom's electricity generating capacity In paragraph 4.1.76 of the Habitats Regulations Assessment Derogation Case (Derogation Case)	Whilst the term 'estimated capacity of at least 100 MW' has been used in some of the VE application documents, this has been to recognise that the project is classified as an NSIP and is also a reflection that the final figure for generating capacity had not been determined. The basis of the proposed generating capacity is set out in the response to GC 1.03 above.

Reference	Question to	Question	Applicant's response
		[AS-003] it is stated "If VE is abandoned, a relatively low cost and low risk project with the scope to provide a large generational capacity producing clean and renewable energy estimated capacity of at least 100 MW before 2030 would be lost" (emphasis added by the ExA). That quote appears to be inconsistent with the claims made in the first bullet point of paragraph 5.3.30 "The VE development proposes a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity" and paragraph 5.3.31 "VE can make a large, meaningful, and timely contribution to decarbonisation and security of supply" of the Derogation Case. Explain what is meant by the emphasised text in paragraph 4.1.76 of the Derogation Case and calculate what 100 megawatts (MW) would be as a proportion of the Government's objective for delivering 50 gigawatts (GW) of offshore wind generation by 2030.	
GC.1.05	National Grid Electricity Transmission Plc (NGET)	Grid connection limit for the Proposed Development Confirm what grid connection limit has been agreed with the Applicant as part of the connection offer that has been secured. Answer provided by the Applicant under Agenda item 3.3 of Compulsory Acquisition Hearing 1 and referred to in Deadline D1 submission [REP1-059].	Noted.
GC.1.06	Applicant	Time limits for commencing the Proposed Development Comment on the compatibility of a time limit of seven years for commencing the Proposed Development, sought under the provisions of Requirement 1 of Schedule 2 of the draft Development Consent Order (dDCO) [REP1-008] with: a) the Government's policy ambition for delivering 50GW of offshore wind generation by 2030, as referred to for example in paragraph 3.3.21 of National Policy Statement (NPS) EN-1; and b) the claim within paragraph 5.3.70 of the Derogation Case [AS-003] that the Proposed	The Applicant seeks to deliver the project as soon as possible and within a timeframe which delivers in line with the 2030 target. The Applicant has, however, to allow for the reasonable worst case which includes unforeseen delays or delays outside its control, when drafting the dDCO The Applicant cannot, for example, rule out lack of success in Contracts for Difference auction rounds, or supply chain delays, or events outside its control such as the accident which closed the Suez canal to shipping causing worldwide delays, or another Covid outbreak requiring a lockdown. While the Applicant intends to commence first generation in 2030, it also notes that the Government's overall target for Net Zero is 2050 and that the commitment in 'Powering Up Britain – Energy Security Plan' (2023) is "The Government has committed to achieving fully decarbonised electricity by 2035". This project will make a meaningful contribution to those targets even if, which is not foreseen, it cannot commence operation by 2030. The policy support and overall benefits of the project are not removed or invalidated if the delivery is delayed. NPS EN-1 sets out the urgent need and strong support for critical national priority infrastructure (which includes offshore wind and all its enabling infrastructure). This need is stated to be to address the 2050 Net Zero target (EN1 at 4.2.1), not the 2030 interim target. NPS EN1 specifically provides that:

Reference	Question to	Question	Applicant's response
		Development " can be deployed within a relatively short time frame (before 2030)".	3.2.6 The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part.
			That weight is not time limited to developments which can deliver by the interim target of 2030.
			NPS EN3 sets out that the "ambition" is to deploy up to 50GW of offshore wind capacity by 2030, but also notes that there "will be a need for substantially more installed offshore capacity beyond this to achieve net zero carbon emissions by 2050" (NPS EN3 at 2.8.1).
			The Applicant notes that the Sheringham and Dudgeon Extension Projects were granted a DCO in 2024, and have the same 7 year period for commencement as is being sought by the Applicant. The Secretary of State ascribed substantial positive weight to the need for that development notwithstanding that the same policy points apply given that commencement of that development could also be after 2030. Hornsea project Four (granted 2023) also has a 7 year commencement period in common with other offshore wind DCOs.
GC.1.07	Applicant	Site Selection and Alternatives (Offshore) Paragraph 4.1.8 in [APP-066] states that " VE, along with North Falls and Sea Link (National Grid Electricity Transmission), applied as a consortium for grant funding as part of the Offshore Coordination Support Scheme (OCSS)". Given the relationship between these three projects why has the Applicant chosen to discount an alternative offshore connection solution, via Sea Link (EN020026), which would not necessitate any development onshore? The ExA considers that it and the Secretary State need to understand why an offshore connection to a proposed NSIP transmission project due for submission in the first quarter of 2025 [RR-078] has been discounted and not included as an option given the existing relationship with National Grid/North Falls and an application for grant funding (OCSS). Paragraph 2.13.14 of NPS-5 states "Co-ordinated transmission proposals are expected to reduce the overall environmental and community impacts associated with bringing offshore transmission onshore compared to an uncoordinated, radial approach. These reduced impacts could, for example, relate to fewer landing sites and reduced landfall impacts; reduced overall cable length and impacts; and	Noted.

Reference	Question to	Question	Applicant's response
		these". Paragraph 2.13.17 of NPS-5 states "Applicants are expected to be able to indicate how co-ordination including reduction in impacts have been considered"	
		The position with respect to connecting with the proposed Sea Link has been explained in section 2 of the Applicant's response to Relevant Representations [PD4-006] and Department for Energy Security and Net Zero's letter of 3 April 2024 to Essex County Council [AS-011]	
GC.1.08	Applicant	Site Selection and Alternatives (Onshore) Natural England (NE) in paragraph 5.10 of [RR-081] states "where significant development of agricultural land is demonstrated to be necessary, applicants should seek to use areas of poorer quality land". Provide an explanation as to why the proposed	As detailed in the Site Selection and Alternative ES Chapter [APP-066] the Applicant had due consideration in respect of Best and Most Versatile (BMV) land during their site selection work. Once NGET identified the refined search area for the East Anglia Connection Node (EACN) substation, the Applicant identified the onshore export cable corridors and a substation location in the vicinity of the EACN taking into account onshore environmental constraints. National Grid confirmed a reduced search focused immediately around the existing Lawford substation.
	onshore substation (OnSS) and export cable corridor (ECC) cannot be located in an area that is not Grades 1 to 3a best and most versatile (BMV) agricultural land? The ExA considers that it and the Secretary State need to understand the justification for locating the OnSS on Grade 1 BMV and the disturbance to Grade 2 and 3a BMV along the ECC. Paragraph 2.13.19 of NPS EN-5 states "There may be exceptional circumstances where multiple coordinated solutions have been explored and all those solutions would lead to adverse impacts (for example adverse effects on an environmentally protected site and where these could be avoided through radial connections. In these circumstances radial connections may be more appropriate. Evidence of the co-ordinated solutions assessed and likely adverse impacts would need to be provided by the applicant to clearly substantiate this. This includes demonstration of consideration of alternative co-ordination solutions which may not	corridor (ECC) cannot be located in an area that is not Grades 1 to 3a best and most versatile (BMV) agricultural land? The ExA considers that it and the Secretary State need to understand the justification for locating the OnSS on Grade 1 BMV and the disturbance to Grade 2 and 3a BMV along the ECC. Paragraph 2.13.19 of NPS EN-5 states "There may be exceptional circumstances where multiple coordinated solutions have been explored and all those solutions would lead to	The ES Site Selection and Alternatives chapter [APP-066] sets out at 4.10.2 "One of the key technical requirements was for the OnSS to be within around 3 km (maximum 5 km) from the grid connection point to minimise the length of the 400 kV connection."
			The land surrounding and over 3 km beyond the substation search area is all mapped as BMV land. Due to the need to locate the Onshore Substation (OnSS) in close proximity to the National Grid EACN substation and taking into account other environmental constraints, it has therefore not been possible to avoid BMV land.
			With regard to the Export Cable Corridor (ECC) the majority of the land is mapped as Grade 3 (undifferentiated) by the Natural England provisional Agricultural Land Classification mapping. In the assessment the Applicant has classified all of the Grade 3 land as Grade 3a land, therefore qualifying as Best Most Versatile land in order to present a worst case scenario of the potential impacts. The Applicant has committed to undertaking pre-construction soil condition surveys which will establish the extent of Grade 3a vs Grade 3b within the ECC.
		these could be avoided through radial connections. In these circumstances radial connections may be more appropriate. Evidence	The majority of the land within Essex is mapped as Grades 1-3. Within the surrounding area of the ECC, the land mapped as not BMV is located on the coast (where the VE landfall is located), in river and stream valleys and urban areas. It has therefore not been possible to avoid land mapped as Grade 1-3 when siting the ECC and the OnSS.
		The undertaking of the soil condition surveys would most likely lower the identified ALC grades in some sections to non BMV due to splitting Grade 3 into 3a and 3b classifications, as Grade 3b is not classed as BMV.	
		be in proximate locations".	The reference to EN-5 sets out the need to explore co-ordinated solutions. In this case the co-ordinated grid corridors are co-ordinated radial connections, co-ordination cannot be used to avoid impacts on BMV in the circumstances. The project cannot avoid BMV and connect to grid as per the connection agreement. Co-ordination does not cause and cannot be used to avoid this impact. In any case, North Falls must also connect in the same location and would also have to pass through BMV. Given that, the Applicant maintains that seeking to co-ordinate where possible to reduce impacts is the optimal approach.

Reference	Question to	Question	Applicant's response
GC.1.09	Applicant	Implications for the Proposed Development if the proposed Norwich to Tilbury reinforcement project did not proceed Should the proposed Norwich to Tilbury reinforcement project, including the provision of the proposed East Anglian Connection Node (EACN) substation, not proceed, explain what the implications would be for the Proposed Development? Matter addressed by the Applicant in its Preexamination Procedural Deadline D submissions and the evidence it gave during the first round of hearings.	Noted.
GC.1.10	Local Planning Authorities (LPAs)	Development Plan policies Confirm whether you are content with the Applicant's policy analysis. The local planning authorities in responding to this question should also advise on whether there have been any changes to the Development Plan operative in their respective areas following the submission of the Application for the Proposed Development and/or as to whether any changes are anticipated prior to 17 March 2025 the latest date by which the Examination must be completed.	This question is not directed to the Applicant.
GC.1.11	LPAs	Neighbourhood Plans Are there any relevant made or emerging neighbourhood plans that the ExA should be aware of? If there are, please: a) Provide details, confirming their status and, if they are emerging, the expected timescales for their making. b) Provide copies of the relevant parts of any made plan or emerging plan. Indicate what weight it is considered the ExA should give to these documents.	This question is not directed to the Applicant.
GC.1.12	LPAs	Updates on other development Provide an update on any planning applications that have been submitted or any permissions that have been granted following the submission of the Application for the Proposed Development which could either affect the Proposed Development or be affected by the Proposed Development and whether those developments would affect the conclusions reached in the Environmental Statement (ES).	This question is not directed to the Applicant, however the Applicant would like to note the following: Two small-scale Prior Approval applications have been submitted in Tendring (application references 24/00323/AGRIC and 24/00601/AGRIC) for an extension to a fertiliser storage and for a crop sprayer building respectively that share access tracks within the Order Limits. The scale of development proposed is not considered to affect the conclusions of the ES, nor does the Applicant anticipate any conflict between the use of the access tracks and the Project.

Reference	Question to	Question	Applicant's response
GC.1.13	Applicant	Design parameters for the proposed onshore export cable corridor (ECC) Provide a note setting out the technical assumptions that have been used to determine the width and depth for the proposed individual cable ducts and their spacing relative to one another within the onshore ECC, for example as shown on Figure 1.10 of the Onshore Project Description [AS-004]. In answering this question, the Applicant should amongst other things: a) cite and submit evidence of any relevant legislation, policy and technical guidance; b) identify any local geotechnical conditions affecting the indicative cross-sectional profile for excavating the cable trenches; explain why the stockpiles shown on Figure 1.10 appear to have around twice the volume of the cable trenches; c) provide evidence that there is sufficient subsoil available to achieve the volume of backfilling proposed in Figure 1.10; d) identify the thermal rating required for backfill material and provide evidence that the indigenous sub-soil meets the required rating; e) provide commentary on a fallback position should there be insufficient sub-soil of the required thermal rating necessary to backfill; and f) provide evidence that 0.9 metres is sufficient depth to restore the sub-surface hydraulic connectivity to its former state, or better, and to ensure that the efficiency of existing/re-instated agricultural irrigation and drainage infrastructure would not be compromised. The response to this question could be incorporated into the Technical Note to be submitted by the Applicant pursuant to the sixth action point arising from Compulsory Acquisition Hearing 1.	 a) The minimum cable burial depth has been designed following UKPN: UK Power Networks Installation of Underground Cables (ECS 02-0019). Additionally Statutory Undertakers, National Highways and Local Authorities have Design Codes which may stipulate the minimum burial depth of cables for the Applicant to comply with. The 900mm burial depth to top of the warning tape is to ensure that our cables are buried with sufficient depth to avoid interfering with farmers' equipment (machineries), road crossings, and local utilities (such as telecom cables, water pipes, domestic electrical cables). The depth of burial considers the thermal resistivity and cable heat dissipation for safe use of the cable. Spacing between the cables is determined by the required export power and the cable current rating according to IEC 60287 Electric cables. Calculation of the current rating. The spacing between cable ducts and 3rd party infrastructure is based on the following standards: BS EN 50443 Effects of electromagnetic interference on pipelines caused by high voltage a.c. electric traction systems and/or high voltage a.c. power supply systems. EN 50122-1 'Railway applications – Fixed installations – Electrical safety, earthing and the return circuit – Part 1: Protective provisions against electric shock' BS EN ISO 18086:2020 'Corrosion of metals and alloys – Determination of AC corrosion – Protection criteria b) Geotechnical investigation will provide information on the soil types and layers of soil. Figure 1.10 in the Onshore Project Description – Revision B [AS-004] provides an indicative visual representation of the excavation and stockpiles. Soil in the ground is naturally compacted, when it is excavated the compaction is disturbed and the soil takes recovers, as no more pressure is applied, which causes it to swell. Soils typically swell by a factor of 1.25-1.3, dependent on the soil characteristics. The profile of the soil in the stockpile will also differ from the cable trench cros

Reference	Question to	Question	Applicant's response
			cable route, with relevant controls in place and ensuring it complies with the CL:AIRE Definition of Waste Code of Practice as appropriate. In the event soil is not available or it is not appropriate to move soil, soils will be imported to the site, although this is very rarely done as indigenous soils are the preferred option and it is very unlikely that there would be insufficient excess soil.
			d) Cement bound sand (CBS) is a soil composition that is designed to fit the specific thermal requirements of the cable rating. The use of CBS in the onshore high voltage alternating current (HVAC) cable installation is to help meet heat dissipation requirements for the cable. The volume of CBS used is calculated based on the properties of the indigenous soil. CBS is used in the area surrounding the cable ducts before indigenous soil is used to backfill the remainder of the trench.
			At this stage of the project development, an initial geotechnical investigation has been carried out to determine the thermal resistivity of the soil. These values are compared to published values in order to define values assumed in cable modelling to provide an indicative quantity of CBS required. The exact values of CBS required will be calculated following further geotechnical investigations post consent. During cable installation, on-site tests are carried out to validate the earlier testing and ensure that the indigenous soil is within the range of properties assumed during the design phase.
			e) This question is answered in the response to c) and d).
			f) The 0.9m depth to warning tape is chosen to provide safe and sufficient space between the cable and the depth that farming equipment could plough into. A cross section is shown in Figure 1.11 in the Onshore Project Description – Revision B [AS-004]. Agricultural systems that are placed below the ground (e.g land drains, or any buried water pipes transmitting water for irrigation) that may need to be intercepted will be clearly documented before being intercepted to allow trenching and then reinstated after backfilling. The post construction drainage design will follow best practice and holistically consider the hydraulic connectivity of the cable trenches within the agricultural drainage environment. The Landowners will be consulted regarding the draft Design for the Post construction drainage.
GC.1.14	Applicant	Overall width of onshore cable corridor Explain how the overall width of the onshore cable corridors quoted in Figures 1, 2 and 3 in the Coordination Document [APP-263], respectively for scenarios 1, 2 and 3, have been calculated given that the sum of the widths for the top and subsoil stockpiles, cable trenches and haul roads do not add up to the overall widths quoted in the previously mentioned figures.	Figures 1, 2 and 3 in the 9.30 Coordination Document [APP-263] display key widths of the stockpiles, trenches and haul roads. There are buffers in between these for walkways and safe working clearance, typically 0.5-1.5m. The sum of the buffers and the quoted widths provides the overall quoted widths within the figures.
GC.1.15	Applicant	Designing the proposed onshore substation Section 2.3 of the onshore substation design	As outlined in Document 9.4 Onshore Substation Design Principles Document [APP234], para 2.3.8:

Reference	Question to	Question	Applicant's response
		principles document [APP-234] refers to a design review process being used to finalise the design for the proposed onshore substation. Who would be the "Project Design Champion" and who would be the members of the "Design Review	"The Design Champion and Design Review Panel will include person(s) not directly involved in the design development and person(s) with the authority to influence the project within the project organisation. They will be selected based on design experience, commitment to the design principles and seniority to hold the project team to account and challenge decisions when appropriate."
		Panel"?	The Project Design Champion will lead the Design Review Panel. The composition of the Design Review Panel is an internal panel although the members are not yet finalised.
			The Applicant can confirm that the Project Design Champion is intended to be a representative from RWE but who is independent from the project organisation, and while not yet confirmed this could be a role similar to the Director of Offshore Engineering.
GC.1.16	Applicant	Onshore substation design principles In terms of selecting a location for the proposed onshore substation, paragraph 3.2.5 of the OnSS design principles document [APP-234] refers to,	The Horlock Rules are guidelines for the design and siting of substations which focus on the impact of electrical infrastructure to the surrounding environment. The Horlock Rules were established by National Grid in 2009 in pursuance of its duties under Schedule 9 to the Electricity Act 1989. A copy of the Horlock Rules has been included as Appendix 2 in this document.
		amongst other things, "The Horlock Rules". What are the Horlock Rules? In answering this question a copy of the Horlock rules should be submitted.	Please see table 4.4 6.14 Site Selection and Alternatives [APP-066] on how the Applicant considered the Horlock Rules in its site selection
GC.1.17	Applicant	Offshore Decommissioning Within the Application documentation it is submitted that the effects associated with the decommissioning of the offshore works would be similar to the offshore construction works for the Proposed Development, is that proposition correct? For example, would the process of dismantling the wind turbine generators, including removing their piled foundations, have effects for marine ecology similar to those associated with the undertaking of piling and the pouring of concrete?	The Technical Note provided to address ISH1 AP-5 and submitted at Deadline 2 (10.20.2 Technical note: Offshore Decommissioning) responds to this point, with regard to the process of decommissioning and the similarities with the construction works.
			With regard to marine ecology, the Applicant notes that any final decommissioning plan must be accompanied by an EIA (Decommissioning of Offshore Renewable Energy Installations Under the Energy Act 2004 – Guidance notes for industry (England and Wales), BEIS 2019) and a comparative assessment of different decommissioning approaches. Impacts to marine ecology from removal infrastructure will primarily relate to disturbance and temporary or short-term habitat loss, with long-term or permanent benefits. Impacts would be similar or, more likely, less than those associated with construction. As an example, noise emissions associated with vessel movements, cutting of piles etc would be orders of magnitude lower than those associated with piling.
CLIMATE CHA	ANGE (CC)		
No Questions	at this time		
DRAFT DEVE	LOPMENT CONS	ENT ORDER (DDCO)	
Note All refere	nces to the number	ering of Articles and Schedules (including Requiremen	nts have been updated to refer to those used in the version of the dDCO submitted at Deadline 1 [REP1-008]
DCO.1.01	Applicant	References to units of distance, area or volume Units of distance, area and volume, kilometres, metres and square metres etc, should be quoted in long form throughout a Development Consent Order (DCO). Within the submitted dDCO metre, square metre and cubic metre have been abbreviated to "m", "m²" and "m[³]", see for example Table 1 in Requirement 2 in Schedule	Noted.

Reference	Question to	Question	Applicant's response
DCO.1.02	Applicant	2. The Applicant must therefore review the use of distance, area and volume units throughout the entirety of the dDCO and ensure they are quoted in their long form throughout the next version of the dDCO that is submitted as an Examination document. Matter addressed by amendments made to the dDCO at Deadline 1 [REP-008]. Article 2 (Interpretation) a) Include, in the next version of the dDCO the full citation for "the 2016 Regulations" ie the Environmental Permitting (England and Wales)	a) This amendment has been made in the Deadline 1 revision (revision B) of the Draft Development Consent Order [REP1-008]. b) This definition has been deleted in the Deadline 1 revision (revision B) of the Draft Development Consent Order [REP1-008].
		Regulations 2016 and thereafter amend all of the references to these regulations to refer to the short form. b) "address" includes any number or address used for the purposes of electronic transmission. As Article 44 (Services of notices) is the only article referencing "address" and provides clarity with respect to electronic transmission, why is it necessary to list address in Article 2? c) "apparatus" has the same meaning as in Part 3 (street works in England and Wales) of the 1991 Act. See Articles 18, 30 36 and 37 below. Why has an interpretation been included in Article 2 when there are other articles not related to street works referencing the term apparatus? d) "buoy", "cable crossings" and "cable protection" interpretations included in Article 2 have been replicated in full, amended or expanded upon in Schedule 11 Part 1 (1). Only one interpretation is necessary and the dDCO should be revised accordingly. The entire dDCO should be revised accordingly. The entire dDCO should be checked for any other duplication of interpretations included in both Article 2 and any other parts (schedules) of the dDCO and any duplications beyond Article 2 should be deleted. e) "foundation" appears to reference construction associated with offshore only. However, throughout the dDCO foundation is also mentioned in relation to onshore construction. Amend this interpretation for clarity to include any onshore foundation types.	c) This definition covers all apparatus not just that in streets, It is a wide, well known and frequently used definition that is familiar to owners and operators of apparatus and is well precedented in DCOs. Creating a bespoke definition of the term is unnecessary given that this statutory definition is already commonly used. d) As noted in ISH2 (and summarised in REP1-059 at 3.2.7), the Applicant considers it necessary to repeat definitions in the deemed marine licences (DMLs) as these are required to 'stand alone' going forward and this duplication is accordingly necessary. Post any DCO being granted, the DMLs will be administered and where necessary (and as is common) varied by the MMO. The DMLs will therefore change over time and the Applicant's understanding is that the MMO will raise an objection to deletion of definitions from these as the DMLs cannot then be administered in isolation as will happen in practice. The Applicant accordingly has not deleted any duplication between article 2 and the DMLs. e) In the DCO, the term foundation is only used to refer to anything other than a WTG and offshore platform foundation on 7 occasions. The Applicant has replaced the references relating to onshore construction in the Deadline 1 revision (revision B) of the dDCO [REP1-008].
DCO.1.03	Applicant	Article 37(2)(b) (Felling or lopping of trees and removal of hedgerows)	A further explanation was added to the Explanatory Memorandum (EM) in the Deadline 1 revision (Revision B) of the EM [REP1-010] at 4.127.

Reference	Question to	Question	Applicant's response
		Article 37(2)(b) states "from constituting an unacceptable source of danger (whether to children or to other persons)". There is no justification for this particular provision given in the Explanatory Memorandum. A justification for Article 37(2)(b) should be included in the Explanatory Memorandum or this provision should be deleted from the dDCO.	
DCO.1.04	Applicant	Article 45 (No double recovery) What is the justification for Article 45's inclusion and would the inclusion of this Article in any made DCO be consistent with recent practice? Should the Applicant remain of the view that there is a need for Article 45 it should provide examples where this type of article has been included in very recent DCOs. Matter addressed in Deadline 1 submission	Noted.
DCO.1.05	Applicant	REP1-059]. Numbering and formatting for the works comprising the proposed authorised works in Schedule 1 The ExA considers the Applicant's approach to the numbering and formatting of works within Schedule 1 to be inconsistent with normal practice. For example, for Work Numbers 1 and 2 for each work three sub-works are listed, however, for Work Number 2 rather than its sub-works being listed as (a) to (c) they have been listed as (d) to (f) rather than (a) to (c). Thereafter in later Work Numbers sub-works start at (g) and culminate in (aa) to (cc) in Work Number 15B. However, for Work Numbers 15C, 15D and 16 the listing of the sub-works commence at (a). For the associated development for Work Numbers 1 to 3, the listing commences with (e) running initially running through to (l), while the associated development for Work Numbers 4 to 18 the listed items commence at (a). Work Numbers 15C to 15E are randomly preceded by paragraph numbers (49 to 51), suggesting injudicious cutting and pasting from another document. The inclusion of "Work No. 4B" as an unused work number amounts to poor drafting practice. The Applicant must therefore correct and simplify	Noted.

Reference	Question to	Question	Applicant's response
		Schedule 1 and ensure that in reformatting this schedule normal drafting conventions are used. In revising Schedule 1 of the dDCO the Applicant will also need to review all of the Application documents that refer to Works Numbers, including the onshore Works Plans [APP-010] and make any amendments as necessary to ensure consistency with the revisions that need to be made to Schedule 1.	
DCO.1.06	Applicant	Schedule 2 (Requirements) – references to paragraphs and sub-paragraphs within individual requirements Some requirements (R) with multiple parts, make cross reference to paragraphs in other parts of the same R, see examples in R3(3), R19. There is a lack of consistency in other Rs in which crossing referencing uses the term sub-paragraph, for example 4(3), 5(2). The ExA considers that the usual convention is to use the term sub-paragraph, rather than paragraph, as the means for making cross references to other parts in Rs. The Applicant should review the drafting for all multi part Rs in Schedule 2 of the dDCO and replace the word paragraph with the word sub-paragraph as necessary.	The dDCO will be amended as requested in the next revision.
DCO.1.07	Applicant	Clarification with respect to the form in which details for discharging requirements should be presented Example: R5 (1) (Construction of Work No. 15B [the onshore electrical substation]) states Work No. 15B " must not commence until details of have been submitted to and approved" Clarity is required as to how the details to be submitted for approval by the relevant planning authority should be presented, ie in drawn form on plans or drawings and/or in a written specification. The Applicant should review all of the Rs in Schedule 2 requiring the submission of details for approval and amend their wording to make clear whether the details to be submitted should be in drawn and/or written form.	The Applicant considers that seeking to specify this is impractical and likely to be unhelpful as in most cases a submission will be formed of both written details and plans/drawings. For example the written details will require plans (for layout and services) and details in writing (describing surfacing materials or the drainage strategy), which may also be supported by drawings or elevations. The Applicant notes that the drafting used follows model provisions and DCO precedent. For example model requirement 5 provides: "5. No [stage of the] authorised development shall commence until details of the layout, scale and external appearance of the following elements of the authorised development [within that stage] have, after consultation with the relevant planning authority, been submitted to and approved by the Commission]". The drafting in the dDCO also reflects that used in the 2024 Sheringham and Dudgeon Extension Projects DCO.

Reference	Question to	Question	Applicant's response
DCO.1.08	Applicant	Enforceability Example: R5 (2) states "The details submitted under subparagraph (1) of this requirement must be in accordance with requirement 6 (detailed design parameters onshore) and substantially in accordance with the onshore substation design principles document." The term "substantially" in this R and other Rs in Schedule 2 is imprecise for the purposes of enforcement. The Applicant should review all of the Rs in Schedule 2 and remove the word "substantially".	The Applicant notes that the Planning Inspectorate drafting guidance (Planning Act 2008: Content of a Development Consent Order required for Nationally Significant Infrastructure Projects) provides that some flexibility between outline/certified plans and the final versions submitted for approval stating requirements "should not prevent the discharging authority from approving details which would lead to environmentally better outcomes where appropriate". The Applicant accordingly does not accept that the wording is imprecise but rather submits it follows the guidance in allowing some minor deviation. The Applicant also submits that this is not an enforcement issue but an approval – accordance would not be enforced but rather the LPA could refuse to approve due to the lack of accordance with the outline/certified plan. That will always involve an element of judgement.
DCO.1.09	Applicant	Implementation Example: R7(3) (Provision of landscaping) lacks precision with respect to the implementation of the landscaping works pursuant to any approval granted under sub-paragraph (1). R7(3) should be amended to state that the landscaping must be carried in accordance with the details approved under sub-paragraph (1). The Applicant should review all of the Rs in Schedule 2 and amend them as necessary to ensure they make it clear that implementation must be carried out in accordance with the details to be approved under the provisions of a preceding sub-paragraph.	Noted.
		Matter addressed by amendments made to the dDCO submitted at Deadline 1 [REP1-008].	
DCO.1.10	Applicant	Omissions Example: - R6(1) (Code of construction practice [CoCP]) refers to sub-paragraph (3) – there is no sub-paragraph (3), which appears to be an omission. Is the CoCP a draft or final document? At this stage of the planning for an NSIP the ExA would expect the CoCP to be a draft document, to be finalised once the detailed design has been completed and a contractor has been appointed. If the submitted CoCP [APP- 253] is an outline document then R8 needs to be amended to include an approval mechanism for a final version by the relevant local planning authority R9 (3) should reference sub-paragraph (1).	The Applicant considers all of the requirements are appropriately drafted in accordance with DCO precedent and that the Examination is the appropriate opportunity for LPAs to comment on the document. As set out in 3.2.26 of 10.16 Applicant's Summaries of Oral Submissions [REP1-059], "The Applicant considers that enough information is available at this time for a full plan to be produced."

Reference	Question to	Question	Applicant's response
		Addressed by amendments made to the dDCO at Deadline 1 [REP1-008]. The Applicant should review all of the Rs in Schedule 2 and ensure that they are complete, ie include all of the necessary limbs to make the R precise, implementable and enforceable etc.	
DCO.1.11	Applicant	Clarity Examples: • R6 (Detailed design parameters onshore) and R7 (Provision of landscaping) R6 and R7 appear to be related to works specifically for Work No. 15B (onshore substation) as set out in R5. Given that there are other onshore works listed within Schedule 1 of Part 1 (Authorised development), for clarity consideration should be given to combining R5, R6 and R7 or amending R6's subheading to read "Detail design parameters for the onshore substation" and R7 to read "Provision of landscaping for the onshore substation". If R5, R6 and R7 are combined all subsequent requirements should be renumbered.	The Applicant has revised the applicable parts of the CoCP to provide more detail on soils in Revision B [REP1-041] in section 4, in particular section 4.2. The Applicant considers that this sets out what the SMP must include. The Applicant is reviewing the wording of the requirement to see if it can be made clearer.
		Irrespective of whether R5, R6 and R7 are to be combined or remain as separate Rs the design parameters currently included in R6 should precede what is currently stated in R5 because it is those parameters that inform the nature of the details to be submitted for approval, with any departures, in effect, meaning that the submitted details could not be approved because they would not accord with the parameters. Addressed by amendments made to the dDCO at Deadline 1 [REP1-008].	
		traffic management. To avoid confusion with R8 (CoCP) should R9 be preceded by a subheading of something like "Construction traffic management".	

Reference	Question to	Question	Applicant's response
		Addressed by amendments made to the dDCO at Deadline 1 [REP1-008]. • R11 (1) (Soil management plan) states "in accordance with the measures set out in the code of construction practice" however, R6 (1) does not include sufficient clarity to ensure that a soil management plan would form part of the code of construction practice. Would it be clearer in R13(1) if the reference was to a draft CoCP (see the point raised above to the status of [APP-253]) or would it be more appropriate for a draft soil management plan to be submitted as a standalone document? The Applicant should review all of the Rs in Schedule 2 and amend the wording, where duplication of terms or lack of detail is present and may lead to a lack of clarity.	
DCO.1.12	Applicant	R14 (European protected species onshore) The subheading for R14 is inconsistent with the range of species covered in the R's wording. R14 is not restricted to the consideration of European protected species, given the references to the Wildlife and Countryside Act 1981. R14's subheading should be amended to accurately reflect the coverage R14. Matter addressed in the version of the dDCO submitted at Deadline 1 [REP1-008].	Noted.
DCO.1.13	Applicant	R13 (Ground water monitoring) Paragraph 6.9.2 of ES Chapter 6 (Hydrology, Hydrogeology and Flood Risk) [APP-088] states "The mitigation includes measures such as design changes and applied mitigation which is subject to further study or approval of details; these include avoidance measures that will be informed by pre-construction surveys, and necessary additional consents where relevant. The composite of standard and applied mitigation measures apply to all parts of the VE	Para 6.10.34 of Hydrology, Hydrogeology and Flood Risk [APP-088] "The risk assessment identifies a number of licenced groundwater abstractions and PWS sources which will require further detailed assessment post consent and where required, will be subject to groundwater monitoring" identifies the need for groundwater monitoring secured by Requirement 13 this monitoring and the creation of the strategy is likely to precede construction so has been included in a standalone Requirement. This strategy will be captured in a Groundwater Monitoring Plan. Control measures during construction are included in the Code of Construction Practice – Revision B [REP1-041]. The Applicant has reviewed and update the CoCP submitted at Deadline 1 to ensure that all construction controls identified in table 6-12 of Hydrology, Hydrogeology and Flood Risk [APP-088] are included. This is secured through Requirement 6 – Code of Construction Practice – Revision B [REP1-041].

Reference	Question to	Question	Applicant's response
		development works, including pre-construction, construction, O&M and decommissioning."	The Applicant is not aware of any other mitigation identified in the ES for the water environment which is required to be secured through either this or an additional requirement.
		The scope of R13, as written, does not fully address impacts in both the hydrological and hydrogeological environments.	
		The Applicant should consider expanding this requirement to include all aspects of the water environment using the mitigation identified in the ES as the starting point for R15.	
DCO.1.14	Applicant	R19 (Onshore build options) a) The Proposed Development under "build option 2" would be a 'paired back' development involving the installation of two buried cable circuits alone for the proposed Five Estuaries Wind Farm. While R19, as drafted, would require the relevant local planning authority to be notified by the Undertaker that either build option 1 or	a) The Applicant reiterates the core point that all of the works identified in schedule 1 of the dDCO form part of the authorised development for which consent is granted. Build option 2 would only be 'pared back' in that certain elements of the authorised development would not be taken forward. That is no different to any other scheme or development where not every element consented may be built and no different to, for example, not building out the maximum number of turbines consented. The approach to the plans would not change.
		build option 2 was being pursued under build option 2 there would be no requirement for a revised set of drawings, most particularly an amended set of Onshore Works Plans [APP-10], to be submitted. The ExA considers that omission to be a deficiency of the wording of R19 or any other part of the dDCO. That Is because under build option 2 it would be unclear precisely	The DCO, as with other offshore wind DCOs and most other linear development including for example pipelines, uses a corridor approach wherein the DCO order limits set out a corridor within which the infrastructure can be delivered. The corridor approach always allows for a wider area than is necessary to carry out the development to allow for detailed design and micro siting within the corridor. The final land take post build is always smaller in order to minimise the use of CA but there is no step in any legislation or guidance that requires the shrinking of the corridor as an intermediate step.
		what land was to be used to implement what would be a 'lesser' development in land take terms. The Applicant should therefore incorporate a mechanism within R19 that would ensure that if build option 2 was being pursued a revised set of Onshore Works Plans would be	Hornsea project 4 as an example has an 80m wide temporary easement extending to 120m for crossings (granted 2023). The HyNet Carbon Dioxide pipeline order limits are generally 100m wide for a single pipeline (granted 2024). The corridor sought is accordingly not unduly wide or out of line with other linear development.
		b) Part of R19's purpose is to ensure that the compulsory acquisition powers included in any made DCO could not be exercised until the notification of which build option was to be pursued had been submitted to the relevant local planning authority. Articles 21 to 34 in Part 5 of	The reduction of the corridor is not as simple as reducing the width by x metres along the cable corridor extent as appears to be envisaged. Access is taken from both sides of the corridor and would need to be retained in all locations, in effect widening back out to connect. Compounds are located on both sides and need to connect to the cable corridor as do haul roads. Additionally, Five Estuaries even in an uncoordinated build scenario cannot prevent the delivery of North Falls so cannot simply 'snake' the corridor from side to side to align with the accesses and compounds (cable bend restrictions could also restrict that approach).
		the dDCO address the proposed powers of acquisition. Affected Persons would be more likely to be drawn to the provisions of Part 5 of the dDCO and would not necessarily be minded to undertake a search of the relevant local planning authority's planning register to determine which build option was being pursued	As the Works Plans are documents certified by the Secretary of State post consent but pre detailed design, a 'new' set of works plans would not have any status, the certified plans would remain the Works Plans to which the DCO consent applies. The Applicant declines to make the amendment requested by the ExA as it is contrary to DCO practice and precedent and in any case could not act to override the certified plans and would not result in the outcome the request presupposes.

Reference	Question to	Question	Applicant's response
		and how that might ultimately affect an Affected Person's land. Accordingly, the ExA is of the view that within Part 5 of the dDCO a provision should be incorporated that would ensure that there would be notification by the undertaker to all of the Affected Persons of a determination having been made as to which build option was to be pursued, with those notifications being issued concurrently with the notification required under R19 being submitted to the relevant local planning authority. The ExA is further of the view that the revision to Part 5 of the dDCO to be made in this regard should include an obligation ensuring the Affected Persons' notification would be accompanied by an updated Works Plan confirming the land to which the works to be implemented would apply.	 b) The Applicant, noting the criticism of this part of requirement 19, which has deleted in the latest version of the dDCO. The Applicant has two objections to the request set out by the ExA. The first is that, as set out above, the use of a corridor approach is normal and well precedented for linear development and the 'shrinking' off that corridor would be done at detailed design in the normal manner which does not require the submission of new plans. The second is that notification based on works plans and build options would do little to assist landowners, would add an unnecessary stage of notification and would most likely result in confusion and cut across other processes. This is because, for CA purposes, the use of land would be notified to landowners either through the voluntary land agreement process or notices for use of powers. Those communications would be landowner specific and relate to the title parcels – not provision of a second set of works plans showing the whole development which is what is requested. The updating of works plans would also have no effect on the certified lands plans which detail and limit where CA powers apply. Landowners could not rely on such plans as somehow acting to limit CA powers over the certified land plans. This process accordingly does not serve a useful purpose, would provide landowners with less useful information than the normal land acquisition processes and is liable only to cause delay and confusion.
DCO.1.15	Applicant	R21 (Reuse of temporary works with the onshore works for North Falls) The penultimate line in R21 refers to "paragraph (2)", however, there is no second paragraph. Are R21 and R22 intended to be distinct or is R22 intended to part of R21? Paragraphs 5.15 and 5.16 in the Explanatory Memorandum [APP-025] suggest that R21 and R22, as numbered in the dDCO, were intended to be one R. Are R21 and R22 intended to be one requirement? The Applicant must review the drafting of R21 and R22 and amend as necessary. In the event that R21 and R22 are to be merged then subsequent requirements will need to be renumbered. Matter addressed in the version of the dDCO submitted at Deadline 1 [REP1-008]	Noted.
DCO.1.16	Applicant	R23 (Requirement for written approval) R26 is a freestanding R which requires that approvals and agreements for details being discharged be issued in writing. Is R23 a requirement? It does not seem to relate	The Applicant considers that R23 prevents the need to duplicate the provision in each requirement and prevents any inconsistency. The Applicant notes that this drafting has been routinely approved by the Secretary of State. The Secretary of State would be the approving authority on appeal. The inclusion 'of any other person' reflects the wording of the drafting guidance. At this stage, the Applicant agrees that no other persons are

Reference	Question to	Question	Applicant's response
		to any specific requirement bearing upon the undertaker but rather to actions to be taken by the relevant planning authority. This appears to be an adjunct paragraph and the ExA considers it would be more appropriate for any R requiring details to be submitted for approval to include the phrase ' submitted to and approved in writing by the relevant local planning authority'. Making that amendment to the relevant Rs would make R23 unnecessary. Additionally, as none of the details to be submitted for approval pursuant to Rs contained in Schedule 2 would be for the Secretary of State's approval or another person, the inclusion of " the Secretary of State or another person" appears to be unnecessary and should be deleted from R23 if this R is to be retained.	specified and that this remains the Applicant's preferred approach, however various bodies have sought amends to requirements that would alter this.
DCO.1.17	Applicant	Process for discharging requirements Schedule 2 sets out all of the proposed Rs, while Schedule 13 sets out the means for seeking approvals under the provisions of the requirements (discharge mechanism). It is common DCO drafting practice for requirements and the discharge mechanism to be included in a single two part schedule. The Applicant is requested to merge Schedules 2 and 13 with one another to create a two part Schedule 2. If the Applicant is unwilling to make this drafting change to the dDCO it should give its reasons for that. If the Schedules are combined then Schedules 14 to 17 should be renumbered and any other amendments to the dDCO necessitated by that change should be made to ensure there is consistency between any relevant Articles and Schedules.	Noted.
		Matter addressed in the version of the dDCO submitted at Deadline 1 [REP1-008].	
DCO.1.18	Applicant	Schedule 7 (Land in which only new rights etc. may be acquired) a) For column 2 in the table within Schedule 7 explain the source/meaning for the emboldened numbers "28.", "29.", "30." and "31." or delete/correct as	Noted.

Reference	Question to	Question	Applicant's response
		necessary. b) With respect to the formatting in column 2 in the table within Schedule 7 from the bottom of page 67 of the dDCO onwards, clarify whether: i. the list of "Access rights" restrictions relating to plots 02-002 through to 17-018 should commence at (f), as drafted, or (a); ii. the rights relating to the National Grid substation works area should commence with a paragraph numbered 1, followed by subparagraphs commencing at (p) (a continuation of the list included in the preceding "Access rights" section) or commence at (a). iii. "(f) 1. Drainage rights" (top of page 71) and "(w) 2. Restrictive Covenant" (towards the top of page 72) these are subheadings that should be unnumbered or differently numbered; iv. "(bb)) Compensatory works, works rights" has been correctly labelled and/or is needed as entry in the table; and v. items "(ce)", "(jj)" and "(qq)" (on pages 72 and 73) should respectively be followed by "1.", "2." and "1.". The formatting in this table needs to be fully reviewed and amended as necessary. Matter addressed in the version of the dDCO submitted at Deadline 1 [REP1-008].	
DCO.1.19	NGET	Schedule 9 (Protective Provisions) Submit details of your preferred Protective Provisions for inclusion in the Applicant's dDCO.	The Applicant notes that agreement has been reached with NGET that standard protective provisions are not required in this case and the holding draft in the dDCO will be deleted in the next revision. Work on bespoke protective provisions is ongoing.
DCO.1.20	Affinity Water	Schedule 9 (Protective Provisions) Submit details of your preferred Protective Provisions for inclusion in the Applicant's dDCO.	This question is not directed to the Applicant.
DCO.1.21	Marine Management Organisation	New Question Deemed Marine Licensing – Articles 5 (Deemed marine licences under the 2009 Act and 7) Do the changes made by the Applicant to the drafting of Article 7 in the version of the dDCO submitted at Deadline 1 [REP1-008] address the MMO's concerns with respect to this article, as expressed most particularly in section 1.2 of your Deadline 1 written submission [REP1-064])? If the amendments made to Article 7 have not	This question is not directed to the Applicant.

Reference	Question to	Question	Applicant's response
		addressed your concerns, explain why that is the case, providing any suggested alternative wording	
DC0.1.22	Marine	New Question	This question is not directed to the Applicant.
	Management Organisation	Deemed Marine Licensing – Articles 5 (Deemed marine licences under the 2009 Act and 7)	
		Do the changes made by the Applicant to the drafting of Article 7 in the version of the dDCO submitted at Deadline 1 [REP1-008] address the MMO's concerns with respect to this article, as expressed most particularly in section 1.2 of your Deadline 1 written submission [REP1-064])? If the amendments made to Article 7 have not addressed your concerns, explain why that is the case, providing any suggested alternative wording.	
DCO.1.23	Applicant	New Question	The Applicant will revise the dDCO for the next revision.
		Requirement 5 (Onshore substation works)	
		Following the merging of the originally drafted R5 and R6 the wording of sub-paragraph (2) requires reviewing to remove the reference to the former R6 and replacement with wording that reflects the merging of two Rs.	
DCO.1.24	Applicant	New Question	The Applicant is reviewing the Schedule of Mitigation – Routemap [APP-264] (the Routemap) and will
		Accuracy within the Schedule of Mitigation - Routemap	provide an update at a future Deadline.
		The tables within the Schedule of Mitigation – Routemap [APP-264] (the Routemap) list the proposed mitigation measures on a topic by topic basis and identifies how it is proposed those mitigation measures would be secured. Does the Routemap accurately record how the proposed mitigation measures would be secured within the dDCO? For example, in Table 2.9 (Seascape, Landscape and Visual) for items 2 to 7 (inclusive) the proposed mitigation is identified as being within Part 1 of Schedule 1 of the dDCO. However, Requirement 2 (Offshore design parameters) in Schedule 2 of the dDCO would appear to be the means for securing measures to mitigate the seascape, landscape and visual effects of the Proposed Development. The Applicant should review the entire Routemap for	

Reference	Question to	Question	Applicant's response
		its accuracy and amend this document as necessary and resubmit it.	
DCO.1.25	Applicant	New Question	The Applicant's wording follows precedent orders and is based on previous DMLs. The master of a vessel
		Force majeure provisions in the deemed Marine Licences	must be able to take necessary actions to preserve the safety of their vessel and persons on it. 'Any other cause' covers unforeseen events that endanger a vessel and cannot therefore be listed. The Applicant notes that 'any other cause' is the wording used in precedent licences, including the 2024 Sheringham and
		In the Force majeure provisions stated in notes that 'any other cause' is the wording used in precedent licences, including Dudgeon order. The Applicant does not consider that making this change is desi	Dudgeon order. The Applicant does not consider that making this change is desirable given that it would create divergence from other licences administered by the MMO creating uncertainty in practice as to what
DCO.1.26	Applicant	New Question Changes to conditions included in the dMLs sought by the Maritime and Coastguard Agency (MCA)	The MMO is the regulator for these licences. The Applicant will arrange a meeting with the MMO to discuss. The Applicant considers that it would be inappropriate for it to make some of the changes sought by the MCA unless the MMO were in agreement. For example the MCA is seeking that its approval is required under the DML condition. The DML will be managed by the MMO under its statutory remit, the MCA has no such statutory role for marine licencing conditions and the Applicant would normally therefore reject this
			request from its perspective The MMOs views will be sought on all points and the Applicant will provide a
DCO.1.27	Applicant	New Question	The maximum design scenario (MDS) for the total rotor swept area remains the greater number of smaller
		Maximum total rotor swept area quoted in Requirement 2 in Schedule 2	turbines (79 WTGs with a 260m rotor diameter), as set out in table 4.15 in the Offshore Ornithology ES Chapter [APP-073]
		With a reduction in the maximum rotor diameter from 360 to 340 metres in the revised dDCO [REP1-008] would the maximum total rotor swept area quoted in Requirement 2 of Schedule 2 in	The swept area for the smaller number of large turbines (41 WTGs with a 340m rotor diameter) is 3,722,473m ² .

Reference	Question to	Question	Applicant's response
		the dDCO continue to be 4,194,340 metres squared or be a lesser area?	
HISTORIC EN	NVIRONMENT INC	LUDING MARINE ARCHAEOLOGY (HE)	
No Questions	at this time		
	S (COMPULSORY SESSION (TP) ETC	ACQUISITION (CA) AND TEMPORARY () (LR)	
LR.1.01	Applicant	Meeting the conditions under section 122 of the PA2008 in respect of the Onshore Export Cable Corridor (onshore ECC) The ExA notes that the Applicant is seeking CA powers that would facilitate the construction of enshore cable ducting for the proposed North Falls offshore wind farm (OWF). Having regard to: - the provisions of section 122 of the PA2008, most particularly the condition stated in section 122(2)(a) that the land " is required for the development to which the development consent relates", and - paragraph 11 of the "Planning Act 2008 Guidance related to procedures for the compulsory acquisition of land" (Department for Communities and Local Government, September 2013) (CA guidance), stating: " the applicant should be able to demonstrate to the satisfaction of the Secretary of State that the land in question is needed for the development for which consent is sought. The Secretary of State will need to be satisfied that the land to be acquired is no more than is reasonably required for the purposes of the development." Explain how the powers sought in connection with the onshore cable ducting for the proposed North Falls OWF would meet the conditions stated in section 122 of the PA2008. Matter addressed by the Applicant during Compulsory Acquisition Hearing 1 (CAH1) and in its post CAH1 written submissions [REP1-059].	Noted
LR.1.02	Applicant	Land required for the onshore ECC for the Proposed Development and the onshore ECC for the proposed North Falls OWF In paragraph 5.3.3 of the Statement of Reasons	The Applicant has addressed the question regarding reduced land take in a "North Falls free world" in the 10.20.4 Technical note: Onshore Civils and Electrical in response to action points CAH 1 - 6. It should be noted that this is analogous to Scenario 2 and 3 in the Onshore Project Description [AS-041].

Reference	Question to	Question	Applicant's response					
		[APP-030] it is stated "Scenario 1 would mean that land and rights beyond those strictly required to allow VE to be constructed and	Firstly, The Applicant would like to n [Please see Technical Note for onsheasement.			stood to refer to the Routing Corridor n] and not the working corridor or		
		operated are sought". In light of that comment and allied to question LR.1.01 the Applicant must quantify the amount of land (in square metres) for each work shown on the onshore	and which for Five Estuaries the Appropriate optimal route for a single project work.	olicant cannot uld go within th	draw where the ne Order Limits.	ing corridor is to be used for North Falls reduction would need to be or where the		
		onshore ECC for the Proposed Development and the onshore ECC for the proposed North Falls OWF. In answering to this question, the Applicant should: a) Identify in a table the Land Plots and show on plan(s) the plots, subject to the CA powers being	Instead, the Applicant can provide a the Order Limits that would result from			the routing corridor pre construction within equivalent to scenario 2 or 3).		
			width of the simple HDD crossings a section 1.4.1. The accesses and ten	s stated in the nporary constr circa 33% (102	Onshore Project uction compound 2 Ha) for the area	dor swathe of 90m, to 45m as this is the ct Description – Revision B [AS-004] ds (TCCs) would need to remain the a inside the onshore export cable corridorated		
		intended for the proposed North Falls OWF and required for both projects; and b) Clarify the minimum amount of land that would reasonably be required to provide an onshore ECC for the Proposed Development (assuming there was no proposal for the North Falls OWF).	would be required in reality (as it does which would be required if the corridinto the order limits) and does not rescenario where there is an increase a similar timeline and in this case if the project). In this case if the first project would be an increase in working correct.	es not for exar for width is red present a diffe d working corri the projects did ct didn't have t	mple seek to extended and would be rence in "land take it is scenario for the rights to instant to instant in the rights in the	on, is oversimplified compared to what end all the access routes and haul routes, bring some of the hectarage given back ake". In terms of working corridor the only 1 (where both projects are progressing on ghts to install the ducts for the other all the ducts for the second project there need 38m hence the 60m reduces the		
				working corridor by 16m).	working corridor by 16m).			
			Part of Onshore Civils Area	m2	Ha			
			Temporary Construction Compound	321813	32			
			Road Improvements	55260	6			
			O&M Access	63612	6			
			Landfall	402395	40			
			Access*	104654	10			
			Haul Road*	95785	10			
			Cable Routing Corridor	2040560	204			
			Total	3084081	308			
			Δ decrease in of routing corridor NF free world	50	1%			
			Reduction due to no allowance for installing NF Ducts	1020280	102			
			Total After reduction due to not installing	2063801	206			
			NF Ducts % reduction		3%			
			* these values would maginally increase if the round not possible to estimate this hence	iting corridor was na	rrower, however it is			
LR.1.03	Applicant	Delay to Heads of Terms (HoTs) negotiations prior to the Application's submission Explain: a) Why for a significant number of land interests	a) The Applicant disagrees that a 's Template cable easement and te	ignificant num mporary cons	ber' of heads of truction compou	terms negotiations have been delayed. nd (TCC) Heads of Terms were issued in y of landowners along the route who		

Reference	Question to	Question	Applicant's response
		HoTs negotiations have been delayed and had not been commenced prior to the Application's submission, as recorded in Schedule of Negotiations [APP-027]. b) Whether HoTs have been issued to the land interests that had not been in receipt of them prior to the Application's submission. c) What progress has been made towards agreeing HoTs with all land interests following the Application's submission.	formed the 'Land Agents Group'. The Applicant's land agent negotiated these template Heads of Terms for 12 months after which the Applicant issued populated Heads of terms in April 2024 to individual affected parties. The Applicant has been coordinating with North Falls OWF on joint Heads of Terms to minimise time and disturbance to affected parties. The Bentley road improvement works Heads of Terms were issued later than the cable easement Heads of Terms on 12th July 2024 due to evolving designs in coordination with NGET and North Falls OWF. The onshore substation Heads of Terms were first issued on the 15 May 2024 following coordination with North Falls OWF on the joint substation design. Core elements of the substation Heads of Terms are substantially aligned with the template cable easement Heads of Terms. This consistency reflects the Applicant's efforts to ensure a uniform approach across the agreements and reflecting the negotiations and engagement that took place prior to their issuance. The Applicant and their land agents met with the substation landowner on the 18" October to discuss Heads of Terms. a) All parties have now been issued with Heads of Terms, with the exception of: Timothy Simon Ecott; Elizabeth Birgitta Harris; Elizabeth Birgitta Harris and Peter Leslie Harris. Populated Heads of Terms will be issued to the affected parties once further assessment of the location of the EACN substation and the cable connection route has been made. Orford and Gedgrave Parish Council. The Applicant has identified that access over a jetty south of Orford Quay and part of the River Ore may be required and is investigating with the Land Interest the rights which may be necessary. Commercial negotiations will follow. John Charles Jiggens and John Harvey Jiggens. These interests are party to other proposed land agreements where Heads of Terms have been agreed. The affected parties jointly own a land parcel that is intersected by a proposed operations & maintenance (O&M) access. The Applicant will either i

Reference	Question to	Question	Applicant's response
			b) The Applicant directs the Examining Authority to the Land Rights Trackers – Revision B [PD3-002] for the current position. The Applicant has continued and will continue to engage with affected interests to progress voluntary agreements.
LR.1.04	Applicant and North Falls Offshore Windfarm Limited	Land required for the Proposed Development's onshore substation and the proposed North Falls OWF's onshore substation Allied to questions LR.1.01 and LR.1.02, having regard to the provisions of s122(2)(a) of the PA2008 and the CA guidance, explain why it is considered to be reasonably necessary to seek powers for the freehold acquisition of the entirety	Freehold acquisition is sought for plots 17-024 and 17-025, which constitute the substation area. This acquisition is essential to facilitate the development and operation of the substation, including fencing, creation of new access, drainage, screening, ecological mitigation and landscaping. These changes will result in a permanent change of land use, transitioning it from its current agricultural purpose. The degree of interference required and the necessity for the Applicant to control the land, including restricting access to authorised personnel only, make it impractical for the current landowner to continue using this land. Therefore, freehold acquisition is both appropriate and justified. As set out in previous responses, the North Falls substation footprint will end up surrounded by mitigation works and isolated from agricultural use. The Applicant considers it would be unreasonable not to acquire it given it will form a
		of Land Plots 17-024 (296,427 square metres (m²)) and 17-025 (182,196 m²) [APP-008] as part of the Proposed Development, when some of that proposed freehold acquisition would be for the construction of the onshore substation for the proposed North Falls OWF's onshore substation.	stranded site surrounded by landscaping and planting maintained by the Applicant. This response has been agreed with North Falls OWF.
LR.1.05	Applicant	Case for the freehold acquisition of Land Plots 17-024 and 17-025 Signpost where the case for the freehold acquisition on Land Plots 17-024 and 17-025, associated with the Proposed Development's onshore substation and the substation for the proposed North Falls can be found in the Statement of Reasons (SoR) [APP-030]. If no such case has been included in the SoR then an amended version of the SoR must be submitted that includes the Applicant's case for the freehold acquisition of Land Plots 17-024 and 17-025.	The Applicant has addressed this question in the updated Statement of Reasons – Revision B [REP1-014] submitted at Deadline 1
LR.1.06	Applicant and NGET	Acquisition of rights for the proposed National Grid East Anglia Connection Node (EACN) Allied to question LR.1.01, having regard to the provisions of s122(2)(a) of the PA2008 and the CA guidance, explain why it is considered to be reasonably necessary to acquire any rights or acquire rights of the scale proposed in respect of Land Plots 17-031 (338,602 m²), 18-001 (34,524 m²) and 18-002 (35,988 m²) [APP-008] when the rights sought are intended to facilitate a connection between the Proposed Development's onshore substation and the proposed EACN. Should any such rights be	The Applicant has had the benefit of seeing the NGET response to this question in draft and concurs with their submission that these powers appropriately sit in the Applicant's DCO. As set out in the Applicant's Summaries of Oral Submissions [REP1-059] to CAH1, the powers are necessary and sought over the whole area as it is not yet known where in the area identified National Grid will site the substation or where the connection point will be. The Applicant accordingly needs to be able to route the cables to any point that National Grid determine. That may involve both land that National Grid later acquires and land they do not. The Applicant also needs to be able to access those cables; the route through the wider site to the cables cannot yet be known and the rights are accordingly sought over the whole area. Where the final connection point is known before any rights have to be exercised, the Applicant will only take the cable and access corridors necessary to align with the EACN final design. The Five Estuaries connection does not form part of the NGET proposed DCO scheme, it is properly part of the Five Estuaries scheme. It must also be transferred by Five Estuaries to the OFTO and Five Estuaries must be able to affect that transfer.

Reference	Question to	Question	Applicant's response
		sought in connection with the Proposed Development or would it be more appropriate for NGET to include provision for a connection between EACN and the Proposed Development's onshore substation as part of the scheme NGET intends to promote?	It is not appropriate for NGET to consent the connection into the Five Estuaries substation as the obligation to install and maintain that infrastructure lies on Five Estuaries not NGET. The connection agreement only takes effect from the substation boundary, it is the responsibility of each developer to get their connection to that boundary. To do otherwise would require NGET to exercise their powers for connections outside their statutory undertaking for the benefit of private developers, NGET (or NGESO) does not provide others' grid connections outside of the connection agreement and the Applicant does not consider that it is appropriate, or that NGET would agree to do so in this case.
LR.1.07	Applicant	Notation discrepancy for The Crown Estate Commissioners' land shown on the Onshore Crown Land Plans [APP-022] Through the submission of an amended set of Crown Land Plans [APP-022], resolve the inconsistency between the yellow hatching for The Crown Estate Commissioners' land and the brown hatching shown for Land Plot 20-002 (sheet 2 of the Onshore Crown Land Plans). The ExA presumes the previously mentioned inconsistency is an error and that there are no further categories of Crown Land that were intended to be depicted on this set of Application plans.	This issue has been addressed on the 2.17 Crown Land Plan – Revision B submitted as part of the Applicant's Change Request [AS-029] – submitted on 10 October 2024.
LR.1.08	Applicant	Adequacy of Consultation – Pre-application In line with Human Rights legislation all reasonable efforts should be made to engage with Affected Parties as defined in s42(1) (d) of the Planning Act 2008. It is stated in the s51 advice to the Applicant [PD-003]: 'It is noted that the Book of Reference [APP-026] (Doc 4.1) (BoR) contains several parties who appear not to have been consulted under s42(1)(d) at the stage 2 and 3 consultations. The Applicant is advised to review the BoR and amend it before it serves notice under s56(2)(a) of PA2008." a) The applicant should provide a list of all those parties, listed in the BoR, not consulted during the second and third rounds of consultation at the pre-application stage; and b) The applicant should provide an explanation as to why in the later consultation rounds no direct consultation has taken place with those parties?	 a) A list of potentially affected parties (as defined by section 42(1) of the Planning Act 2008) identified after the third stage of consultation, and therefore not consulted during the pre-application period, has been included in Appendix 1a. The Applicant notes that these parties were notified under section 56(2) of the Planning Act 2008, setting out their ability to engage with the process and have their say. In addition, affected parties identified after the section 56 process have been listed in Appendix 1b. These affected parties have been contacted under section 102a of the Planning Act. b) All affected parties identified at the time of a consultation were included in those consultations. As set out in the 5.1 Consultation Report [APP-031], in Table 2.4, affected parties who were identified between Stage 2 and Stage 3 consultation were consulted during Stage 3 consultation. Affected parties identified after Stage 3 consultation were not consulted, but instead contacted to start the process of engagement. This is in line with the advice set out in the "What do applicants have to do to consult people with an interest in land?" section of 'Planning Act 2008: Pre-application stage for Nationally Significant Infrastructure Projects'.
LR.1.09	Applicant	New Question Land required to facilitate planting at OnSS	The Applicant agrees there was a misalignment between the proposed area for Work No. 15C shown on the Land Plans [APP-010] and on Figure 1 in the Outline Landscape and Ecological Management Plan (oLEMP) [AS-006]. This has been corrected and an updated Outline Landscape and Ecological Management Plan (oLEMP) – Revision C, with revised plans, submitted at Deadline 2.

Reference	Question to	Question	Applicant's response
		In respect of Land identified as 17-024 on Land Plans [APP-008], which relates to Works No. 15C, as illustrated on sheet 18 in [APP-010] appears not to reflect the proposed restoration in this area as outlined on Figure 1 in the Outline Landscape and Ecological Management Plan (oLEMP) [AS-006] which shows the tree/shrub planting area extending west into an area outside the area for Works No 15C shown on the Land Plans and identified as Works No 15 and Works No 15A/15E. Provide an explanation for why there is an apparent disparity between the proposed area for Work No. 15C shown on the Land Plans [APP-010] and planting and the proposed landscape planting shown in the oLEMP.	
MARINE ECO	LOGY (ME)		
GENERAL QU	JESTION		
ME.1.00	Applicant	Duration of offshore construction period In section 7.5 (Construction Programme) of the Report to Inform Appropriate Assessment [APP- 040] it is explained that under the indicative constructive programme that: 1) preliminary survey and clearance works would potentially taking place between 2026 and 2028; 2) main offshore construction works would be commenced in 2029; and 3) the wind farm becomes operational by 2030. However, the programme outlined in paragraph 7.5.2 does not appear to be consistent with what is shown in Figure 7.1 when the indicative durations for foundation, array cable and turbine installations and commissioning/snagging are aggregated. Provide the following clarifications: a) Estimates for how long (in months) it is expected it would take to install (in their entirety) the offshore: substation(s); cabling in the export corridor; and wind turbine generators (foundations, supporting structures and turbines etc). b) An estimate (in months) for undertaking the offshore construction works from start to completion in their entirety. c) The date by which the Proposed Development would be capable of generating at full capacity.	The Applicant is content that the indicative timeline of dates described in section 7.5.2 of the Report to Inform Appropriate Assessment [APP-040] is consistent with the indicative construction programme in Figure 7.1. Offshore construction works for the offshore substation, array cables, export cables, foundations and wind turbine generators should be considered to occur concurrently. a) As provided in Figure 7.1, it is estimated that the i. Offshore substation could take 12 months, ii. Offshore export cable could take 9 months iii. Foundations could take 12 months iv. WTGs could take up to 12 months between first installation & final energization (there needs to be time to connect array cables, commission & complete the whole string / loop before each WTG is energized). b) As provided in Figure 7.1, construction works would likely start with the Foundation installation and end with Wind Turbine Generator installation. This starts at Year 3, Q2 and ends in year 5, Q2. This indicative period is 27 months. c) The applicant does not intend to provide further detail beyond what has been produced in Figure 7.1. The timeline is indicative as it is highly dependent on determining the project route to market (each Contract for Difference (CFD) round specifies Delivery Years which form a backstop); secondly there is a backstop date in the Connection Agreement with National Grid. The level of information is consistent with similar offshore wind farm DCO applications. Finally, The Applicant notes that due to the high market demand for offshore wind the lead time for various components is unpredictable at this stage. Many of the components have lead times of multiple years. These lead times are also commercially sensitive . As such the Applicant is not able to confirm the exact lead times during the DCO Examination. It is in the interests of the project to have a short as possible time to commercial operation commencing.

Reference	Question to	Question	Applicant's response
		For the purposes of answering this question it should be assumed that if a Development Consent Order is made that decision would be made in the second half of 2025.	
ASSESSMEN	T METHODOLOGII	ES	
ME.1.01	Applicant, Natural England, MMO and RSPB	IP Methodological Concerns A number of methodological concerns have been raised by NE [RR-081], the Maritime Management Organisation (MMO) [RR-070] and the RSPB [RR-094]. An update should be provided explaining how the Applicant is addressing the IPs' methodological concerns. The ExA notes the documents submitted by the Applicant, together with updates to the Environmental Statement, pursuant to addressing the methodological concerns of Interested Parties. This includes a Herring Seasonal Restriction Note [REP1-024], an Apportioning Note [REP1-020], Guillemot and Razorbill Survey Reports [REP1-054], Population Viability Analysis [REP1-022] and Marine Mammal Modelling [REP1-056]. Can the Parties identify areas of outstanding disagreement with regard to assessment methodologies, as well as provide an update in relation to how such concerns are being addressed.	Benthic On methodology, the Applicant notes that NE have requested some additional numerical sediment plume modelling to supplement the existing analysis. That work has now been carried out, the Applicant has produced an interpretive report (10.14 Marine Geology, Oceanography and Physical Processes Sediment Plume Modelling (REP1-057)) as requested by NE and has been submitted at Deadline 1. The Applicant has been in discussion with NE on that work and understands that the modelling methodology will address NE's query. Ornithology The RIAA was updated to Revision B at Deadline 1 [REP1-016], to incorporate any updated positions from Natural England based on their Relevant Representations [RR-081]. This now presents one approach where there is full agreement, or both the Natural England and Applicant Approach where there are differences in assessment methodology. In addition an updated PVA assessment has been undertaken following Natural England's preferred methodology, where possible [REP1-022]. The Applicant believes that there are three key remaining areas of disagreement in the HRA assessments: 1. The Applicant's approach to apportioning adult birds for lesser black-backed gull. The Applicant has used the adult proportion from the stable age distribution calculated from robust measures of age-specific demographic rates (survival and productivity). Lesser black backed gull can be aged as non-adults from DAS data for part of their immature life, but then appear as adult, or inseparable from adult in DAS images, for some years before reaching maturity. The NE approach of aging these birds as adult will increase the number of adults recorded in a given area, and as such will inflate the adult proportion. Therefore, the NE approach to aging and adult proportions adds unnecessary further precaution to the breeding season impact assessment for lesser black backed gull. Therefore, the Applicant considers the stable age distribution to be the most appropriate method. 2. Displacement rates for auks. The Applicam
			calculating the compensation requirements. There are several additive levels of precaution already within the assessment process and the use of the UCI and a ratio further inflates the compensation requirements. The Applicant believes that delivering compensation back into the national site network, rather than into the impacted SPA is more ecologically relevant. Therefore, the application of a ratio and UCI is not required. Marine Mammals
			Maine Maininais

Reference	Question to	Question	Applicant's response
			1) Porpoise density
			Natural England has stated that the porpoise assessment should be based on the site-specific density estimate, rather than the SCANS III and IV density estimates. In response the Applicant would note that in 6.3.7 Marine Mammal Ecology [APP-076] the permanent threshold shift, temporary threshold shift and disturbance assessments do use the average site-specific density estimate of 1.82 porpoise/km2 that NE advise, as well as densities from SCANS III and SCANS IV. In the marine mammal baseline technical report [APP-126], the Applicant highlighted the issue with using the site-specific survey density to assess larger scale impacts such as disturbance and explained why the SCANS densities were presented in addition to the site-specific density estimate. All three density options are presented, and the assessment conclusions are based on the highest predicted numbers across these three densities, which comes from the site-specific Digital Aerial Surveys. The Applicant accordingly considers that the NE query is likely to be able to be resolved.
			2) Population modelling
			The Applicant has carried out the requested population modelling for the Project alone and is satisfied that the outputs support the conclusions for the disturbance from piling assessment reached in the ES. The iPCoD modelling outputs were submitted at Deadline 1 (10.13 Marine Mammal iPCoD Modelling for Project alone [REP1-056]. The Applicant accordingly considers that the NE query is likely to be able to be resolved.
			The Applicant has <u>not</u> undertaken iPCoD for in-combination impacts. This is because this would require detailed piling schedules for every project included in the in-combination assessment, which the Applicant does not have. As a result this is not an exercise the Applicant is in a position to undertake. The Applicant considers that it is not realistically practicable for any developer to carry out such modelling.
			<u>Fish</u>
			With regards to the original 6.5.6.4 Herring Seasonal Restriction Note [APP-125] submitted at Application the MMO raised queries regarding the methodology used to calculate the 'peak' herring spawning period, and thus the duration of the temporal restriction proposed by the Applicant.
			The Applicant held a meeting with the MMO's advisors Cefas on the 8 August 2024 and again on 2 October 2024 where these concerns were discussed in more detail. To address the MMO's concerns the Applicant has subsequently submitted a revised Herring Seasonal Restriction Note - Revision B [REP1-024] at Deadline 1. The following amendments have been made to the Herring Seasonal Restriction Note - Revision B [REP1-024], since its submission at ES:
			> Incorporation of latest publicly available IHLS data;
			> Interrogation of the individual survey periods of the IHLS data to better explore the refinement of the spawning restriction; and
			> Incorporation of variables (larval lengths, and water temperatures) from SNS Downs stock (as opposed to across the wider Downs stock in both the English Channel and SNS).
			The revised piling restriction for spawning herring now reflects spawning later in the season, with a piling restriction now proposed from 25th November to 3rd January.
			Notably, at Deadline 1 the MMO raised concerns about the yolk absorption periods and the growth rates used to inform the definition of a peak spawning period for herring. The Applicant maintains that the parameters used are appropriate, as they are based on temperatures that are comparable to the site. Furthermore, at Deadline 1, the MMO also recommended that a suitable buffer period is implemented into the proposed piling restriction for herring, to allow for settlement of seabed habitats and allow migration of

Reference	Question to	Question	Applicant's response
			herring to their spawning grounds. The Applicant maintains that an overly precautionary approach has already been used to define the peak herring spawning period, with the following measures of conservatisms applied:
			> The earliest survey start date and latest survey end dates across all four hatch sizes have been used (extending the seasonal restriction period from 10 days to 39 days). The proposed piling restriction dates therefore encompass the greatest possible extent of the Downs spawning period;
			> The consideration of a four hatch sizes, from 5mm (the most conservative hatch size to determine the start date) to 11mm (the most conservative hatch size to determine the end date) as informed IHLS survey data; and
			> Additional conservatism was also applied through the inclusion of a 14-day egg development duration, a 7-day yolk absorption period and slower growth rate (0.34 mm d-1).
			The Applicant therefore maintains that further measures of conservatism are therefore not required.
COMPENSAT	TORY MEASURES		
ME.1.02	Applicant	Without Prejudice Derogation Conclusion – Gannet NE does not agree with the Applicant's conclusions of no adverse effect on integrity (AEoI) for the Gannet feature of the Flamborough and Filey Coast (FFC) Special Protection Area (SPA) (NE issue C41 in [PD2-005]). Table 1.1 in the Habitats Regulations Derogation Case [APP-046] shows that gannets were included in the "without prejudice derogation" conclusion of the Report to Inform Appropriate Assessment (RIAA). What compensatory measures would be associated with gannets under this scenario?	Natural England do agree with the Applicant's conclusions of no adverse effect on integrity (AEoI) for the Gannet feature of the Flamborough and Filey Coast (FFC) Special Protection Area (SPA) in-combination with other plans and projects. However, they state that they were "unable to agree the effects of the project" due to methodological differences. The updated Natural England approach and Applicant's approach have been presented in the updated Report to Inform Appropriate Assessment – Revision B [REP1-016]. The Applicant has been assured by Natural England through consultation that they do not request a without-prejudice derogation case be prepared.
ME.1.03	Applicant	Kittiwake Compensatory Measure - Artificial Nesting Structure (ANS) a) Provide an update in relation to negotiations with the undertaker for the Dogger Bank South OWF with regards to sharing the compensatory ANS. b) Is it the Applicant's intention that Kittiwake pairs occupying the ANS would be divided/shared between participating Projects? If so, what would the mechanism for that be and how would this be apportioned? Addressed through revision to ExQ1 ME.1.02 above.	An update to 5.5.4 Kittiwake – Evidence, Site Selection and Roadmap – Revision B has been submitted at Deadline 2 which outlines the proposed arrangements for the apportioning of the Dogger Bank South kittiwake tower, see section 3.4.
ME.1.04	Applicant	Marine Recovery Fund (MRF) a) Identify any effective strategic compensatory measures for delivery through the MRF that could be applicable for this Proposed	Benthic a) The Applicant has provided a without prejudice option to provide compensation for MLS SAC sandbank feature by utilising the strategic compensation mechanism. It is the Applicant's opinion that this would be the best available option for providing benthic compensation for MLS SAC if it is required by the SoS.

Reference	Question to	Question	Applicant's response
		Development. b) What would be the timeframes for the delivery of any such measures? c) Unlike for Guillemot and Razorbill, the MRF does not appear to be included as a possible measure for Kittiwake compensation. Are there different approaches to the MRF for different seabird species? If so, why? Is the MRF an option for Kittiwake compensation?	 b) The timeframes for delivery of that option would depend on agreement with Defra. Further details are provided in the Applicant's response to ME1.11. Ornithology a) Effective measures that have been signed off by the Secretary of State as strategic measures are offshore artificial nesting structures for kittiwake and predator control for auks. b) The current timeframes of the MRF are still uncertain. The Applicant understands that the MRF is planned to be in place in 2025. c) The Applicant would like to maintain the MRF as an option for all species included within a Derogation/Without prejudice Derogation case. This includes kittiwake and lesser black backed gull, in addition to auks. Confirmation of the potential to use a strategic kittiwake measure through the MRF was set out in the Kittiwake Implementation and Monitoring Plan – Revision B, section 2, submitted at Deadline 2.
ME.1.05	Applicant	Lanterns Marches Compensatory Site Following the Applicant's recent engagement with the National Trust [PD2-001], it would appear that Lanterns Marshes is now being considered as a potential Lesser Black Backed Gull (LBBG) compensation site. That was not included in the initial Application. The Applicant should provide a plan showing the location of the Lantern Marshes site relative to the proposed compensatory sites included in the submitted Application. The Applicant should advice on: a) Whether it intends to promote Lantern Marshes as a compensation site during the Examination; b) How the provision of Lantern Marshes as a potential compensatory site might be secured through a provision or provisions (Requirement or any other means) of the dDCO; c) Any compulsory acquisition implications for potentially introducing Lantern Marshes as a compensatory site; d) Any implications under the Environmental Impact Assessment Regulations and the Habitat Regulations, including how the site's use for LBBG compensation could affect other habitat for protected species; and e) Any other legal considerations. Applicant confirmed at ISH 1 that Lanterns Marshes no longer forms part of compensatory strategy.	Noted.
ME.1.06	Applicant	Assessing Compensatory Measure Success Can the Applicant explain how the success (or	Noted.

Reference	Question to	Question	Applicant's response
		otherwise) of compensatory measures will be monitored and assessed? Additionally, can it clarify the course of action that would be taken in the event that measures are found to be unsuccessful.	
		Applicant confirmed at ISH 1 that the monitoring of compensatory measure success, as well as the implementation of any measures necessary to achieve success, would be managed under relevant Monitoring Plans.	
BENTHIC AN	D MARINE MAMM	IAL ECOLOGY	
ME.1.07	Applicant	Cable Protection a) How has maximum length of cable protection required within Margate and Long Sands (MLS) Special Area of Conservation (SAC) been determined? b) What effects would the presence of cable protection within and outside of the MLS SAC have in relation to sediment transport processes, with particular regard to Annex I Sandbanks. c) Has the potential for the addition of further scour/cable protection, including any required as a result of cable repair and replacement or cable exposure during operation, been included within the calculations for the worst-case scenario for cable protection within the MLS SAC? If so, what assumptions have been made for worst-case assessments concerning cable protection exposure? d) What is proposed in terms of any cable protection at the decommissioning stage for the Proposed Development? How has this been considered in the assessments? Applicant confirmed at ISH 1 that a Technical Note will be provided by Deadline 2 at the latest addressing these issues.	As noted by the Examining Authority this is covered in 10.20.1 Technical note: Methodology for determining MDS (offshore) submitted in at Deadline 2.
ME.1.08	Applicant	Cable Burial Likelihood Item F10 in NE's RR Appendix F [PD2-008] advises that further geotechnical data is needed to inform the cable burial likelihood (and therefore any potential compensation level). Will any such geotechnical data be provided? If not, why not?	The available data on the ground conditions in the ECC in the M&LS SAC and outline CBRA work undertaken to date, illustrates that the cable will be buried either into sand or in the London clay that sits below these surficial sediments. Based on this information it is expected that it will be possible to effectively bury the cables in the M&LS SAC. However, it is not possible to completely rule out the potential need for cable protection if burial fails for any reason (e.g. due to presence of unexpected boulders/ cobbles in the London clay that may hamper burial). Obtaining geotechnical data (which is at discrete point sources typically 1-2 km apart) will not assist is the determination of the likelihood of encountering equipment breakdown, unexpected boulders.

Reference	Question to	Question	Applicant's response
			The level of information on the soils is sufficient to confirm that the cable can be buried. After DCO award there will be a detailed design process to determine the final route, and select the final burial tool, this will be informed by a detailed design geotechnical survey. It is not appropriate for the Applicant to conduct such work at this early stage, therefore a worst case scenario has been assessed, with the conclusion of no Adverse Effect on Integrity on the SAC. Cable burial will follow the burial hierarchy as set out in - 9.13 Margate and Long Sands SAC Benthic Mitigation Plan [APP-243]. The final approach to cable installation including that within the MLS SAC will be set out in the final Cable Specification and Installation Plan, however as noted above, the need for cable protection may only be realised during installation. The calculation of the Maximum Design Scenario of 5,400m² of cable protection is already highly
ME.1.09	Applicant	Decommissioning Mitigation The Schedule of Mitigation — Routemap [APP-264] states that the decommissioning phase for the Proposed Development would be a similar process to the construction phase but in reverse. Would the decommissioning mitigation measures be similar to those for the construction phase? a) Can the Applicant clarify the processes involved in decommissioning, with particular regard to those that differ from construction activities. b) Can the Applicant explain how differing decommissioning activities would be similar to construction activity in terms of noise generation, noting that they will likely include the breaking of concrete. Applicant confirmed at ISH 1 that a Technical Note will be provided by Deadline 2 at the latest	precautionary, with the likelihood being that cable protection will not be required in the MLS SAC. As noted by the Examining Authority this is covered in 10.20.2 Technical note: Offshore Decommissioning, submitted at Deadline 2.
ME.1.10	Applicant and Natural England	Addressing these issues. New Question Benthic Ecology Without Prejudice Compensatory Measures The Applicant [REP1-051] confirmed that discussions were ongoing with Defra regarding the proposed use of strategic compensatory measures (if required) for adverse effects on integrity to the MLS SAC. The likely measure appears to be an extension to a designated site or a new designated site with Annex I sandbank features. NE's advice [PD2-008] is that this measure would have the greatest likelihood of maintaining the coherence of the National Site Network but it identified risks with timing, location and	a) The strategic compensation measure is a Defra led programme and Defra will be able to provide information regarding the likely timeframe for delivery. The Applicant understands, through engagement with Defra, that there is an aim to release guidance and a ministerial statement on strategic benthic compensation in the near future and can be submitted into the examination. This should set out more information regarding timescales and provide the necessary security for the ExA and Secretary of State to have confidence in this measure. b) Defra have confirmed that the relevant contact is Mike Rowe, Director of Marine and Fisheries (Mike.Rowe@defra.gov.uk). c) Question directed to NE. This is noted by the Applicant. The Applicant would like to note that any compensation (strategic or otherwise) that may be required, will need to compensate for a potential impact and whilst it should aim to provide a net positive outcome, this is not a requirement. d) The Applicant's assessment is that there is not a significant effect on the site integrity of the Margate and Long Sands SAC, as there is only a very small amount of potential cable protection (5,400 m²) that may be

Reference	Question to	Question	Applicant's response
Reference		implementation given that the mechanism is not yet agreed and would be led by Defra. The ExA seeks further information as follows: a) The Applicant and NE are requested to provide more information about the likely timeframe for delivery of the identified strategic compensatory measure. b) The Applicant and NE are requested to confirm if there is a contact at Defra through which the ExA might seek direct updates on the progress of strategic compensation during the Examination and, if so, provide contact details. c) NE is requested to clarify its advice in F5 [PD2-008] regarding delivery timescales for the strategic compensatory measure, specifically when in the project lifecycle the measure would need to be implemented to ensure an overall environmental net positive outcome for the feature over the Proposed Development's lifetime. d) The Applicant is requested to explain, with supporting evidence and reference to relevant guidance, what weight it considers that the ExA could give to each of the non-strategic compensatory measures still being progressed (as set out in [APP-047]), based on the information currently submitted to Examination.	within the site, which would not impact site integrity. However, a without prejudice Benthic Implementation and Monitoring Plan (APP-048) has been produced should the SoS deem that this is necessary. The level of compensation proposed within the plan is proportionate to the very small area of potential impact predicted. The Benthic Compensation Strategy Roadmap [APP-047] lists the potential compensation options in the order of preference as assessed. The Applicant and Natural England's position is that the strategic compensation measure represents the most suitable measure, nonetheless the Applicant has provided other project-led measures that it considers would be appropriate. i) The strategic compensation option (SAC extension) should be given the highest weighting, as it is most likely to be successful and provide long-term benefits to a like-for-like feature in the same regional sea area. This option is being actively developed by Defra with input from amongst others, the NE. That provides considerable reassurance that delivery under this option would provide the best overall compensation outcome as it would be a cohesive scheme, designed to address multiple impacts from separate developments rather than different solutions being implemented by individual developers. Although the scheme is not yet in place, the governments intention for strategic compensation and the Marine Recovery Fund (MRF) is set out in the Energy Security Bill policy statement from January 2023¹, with a more recent factsheet in September 2023². A ministerial statement and Defra guidance is expected shortly. ii) The removal of anthropogenic pressures - Redundant infrastructure removal option should be given the next second highest weighting, as it will remove pressures for the same feature in the same SAC. Due to the very small area of potential compensation required, the Applicant is confident this option would be deliverable and able to provide sufficient compensation. Measures to recover marine debris and reduction of marine debri

¹ Energy Security Bill Policy
Statement: https://assets.publishing.service.gov.uk/media/65b13f381702b1000dcb1209/energy-security-bill-offshore-wind-environmental-improvement-measures.pdf
² Energy Security Bill Factsheet: https://www.gov.uk/government/publications/energy-security-bill-factsheets/energy-security-bill-factsheet-offshore-wind-environmental-improvement-package

Reference	Question to	Question	Applicant's response
			Relevant guidance was used to produce the roadmap, including the Defra Consultation on policies to inform updated guidance for Marine Protected Area (Defra, 2024) ³ and the National Policy Statement for Renewable Energy Infrastructure (EN-3) (DESNZ, 2023) ⁴ .
ME.1.11	Applicant	New Question Benthic In-combination Assessment Would an in-combination assessment in line with Natural England's Best Practice Guidance (as referenced in E29 [PD2-007]) result in any change to existing in-combination assessment conclusions? If so, what would this be?	A description of the 'tiers' of other developments considered for in-combination assessment in the Report to Inform Appropriate Assessment - Revision B [REP1-016] are shown in Table 9.2. As noted in the report, although the 'tiers' are adapted from the PINS Advice Note 10, it also includes the addition of projects in operation (as described in the table note), that do not form part of the baseline. The guidance from Natural England (as referenced in E29 [PD2-007]) includes 7 'tiers', all of which are represented within Table 9.2 of the Report to Inform Appropriate Assessment - Revision B [REP1-016]. The Applicant believes that a robust and valid list of projects has been considered for the in-combination assessment for benthic sites and that no additional projects would be screened into the assessment when considering Natural England's Best Practice Guidance (as referenced in E29 [PD2-007]). Therefore no change to the existing in-combination assessment conclusions would result from dividing those projects into further tiers (as per the Natural England guidance). The projects screened a number of operational aggregate production areas and marine disposal sites, on a precautionary basis for potential benthic impacts, into the benthic in-combination assessment. There are no
			operational OWFs within the benthic ZoI that were not part of the baseline. Both Greater Gabbard and Galloper are well into the operational phase and any construction activities from these two sites are considered to have existed during the baseline surveys for the Proposed Development.
ME.1.12	Natural England	New Question	Question directed to NE. This is noted by the Applicant.
		Benthic Mitigation With regard to its advice at E30 in [PD2-007], does NE consider that the Applicant should assess alternative cable routes through the MLS SAC? If so, does NE consider that this could	The Applicant would like to note, that the final route for the cables through M&LS SAC (within the assessed offshore ECC) will be determined post-consent, following pre-construction surveys, which will aim to avoid the most sensitive features. The approach to the selection of the ECC and consideration of alternatives is set out in the Site Selections and Alternatives Chapter [APP-066], and was responded to by the Applicant in response to comment F41 in Natural England's relevant representation [REP1-051].
		result in a different assessment outcome or change in its advice?	The Applicant has committed to minimising the length within the M&LS ("final cable routing will seek to take the shortest route through the M&LS SAC where possible" (9.13 Margate and Long Sands SAC Benthic Mitigation Plan [APP-243 Table 9.1]) and has assessed the worst case in the Environmental Statement.
Bird Risk Col	lision Modelling		
ME.1.13	Applicant	New Question Bird Risk Collision Modelling	The updated guidance on bird collision risk modelling for offshore wind developments (JNCC, 2024) will not alter the conclusions drawn in the Report to Inform Appropriate Assessment [APP-040]. The Nocturnal Activity Factors (NAF) are the key parameters updated from the guidance, but the effect will differ by
		Following the acceptance of the application for this Proposed Development, the "Joint advice note from the Statutory Nature Conservation Bodies (SNCBs) regarding bird collision risk modelling for offshore wind developments" was	species. For kittiwake the guidance recommends a change in NAF from 37.5% to 40%. This will increase collision estimates very slightly for this species.

³ Defra (2024) Consultation on policies to inform updated guidance for Marine Protected Area (MPA). Available at: https://consult.defra.gov.uk/offshore-wind-environmental-improvement-package/consultation-on-updated-guidance-for-environmental/ [Accessed: October 2024].

⁴ Department for Energy Security and Net Zero (2023) Policy paper National Policy Statement for renewable energy infrastructure (EN-3). Available at: https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3. [Accessed: October 2024].

Reference	Question to	Question	Applicant's response
		published in August 2024. Are there any implications for the HRA undertaken for the	Whereas for lesser black-backed gull the guidance is to reduce the NAF value from 37.5% to 30%. This will reduce the estimated project alone impacts on lesser black-backed gull slightly.
		Proposed Development as a result of this new guidance? If so, what would they	The NOCs for several other species have also changed but these are also unlikely to alter the impacts considerably.
		be?	The Applicant can provide updated collision risk modelling results based on the updated JNCC (2024) guidance if required at a future deadline.
Designated S	Sites		
ME.1.14	Natural England	New Question	This question is directed at Natural England. It is noted by the Applicant.
		Designated Sites	
		Table 5.1 within NE's Cover Letter to its Relevant Representations [PD2-002] identifies designated sites for which NE is not content that adverse effects on site integrity (as a result of the Proposed	
		Development alone or in combination) can be excluded beyond reasonable scientific doubt.	
		Are you content with the Applicant's conclusions in its Habitats Regulations Assessment in relation to other designated sites not listed in Table 5.1. If not, explain why that is the case?	
NE 4 45	Not on Francis	No. 2 Constitution	This is a first in Province Let Not and English Life in a first life in Annual Const.
ME.1.15	Natural England	New Question	This question is directed at Natural England. It is noted by the Applicant.
		Migrating Bats Is NE content with the Applicant's assessment of the Proposed Development's effects on migrating bats within its updated Response to Relevant Representations [REP1-049] (including at BSH-RR01 and BSH-RR02). If not, explain why that is the case?	
ECOLOGY O	NSHORE (EO)		
EO.1.1	Applicant	New question Protected species and hedgerows	(a) There is no proposed hedgerow removal between 21a and 22b. The scheme design utilises an existing hedgerow gap at the location described.
		(a) During ISH1 hedgerow removal was discussed. The Applicant stated that hedgerow 22a to 22b on Sheet 7 [APP-	The retention of hedgerow does not give rise to additional BMV land take, because trenchless techniques result in "stand off" distance from the feature being avoided, i.e. BMV within approximately 20m of the hedgerow bisected by the ECC would not be directly impacted. The off-route haul route is

Reference	Question to	Question	Applicant's response
		015] would be retained, due to the existence of dormouse habitat in what was identified as important hedgerow. That would give rise to additional BMV	required since pre-existing gaps in the important habitat are not present in the alignment of the ECC. This does however result in larger Order Limits, since the haul route follows existing agricultural access routes/ points where present in order to minimise impacts.
		land take to provide access to the ECC. a) Provide the justification for taking that approach given the proposed removal of part of the same hedgerow to the south of	(b) Yes. There is one instance of trenchless technique being implemented solely to avoid an important ecological feature (and not also for other reasons such as the presence of underground infrastructure, watercourse, ditch, road, PROW etc) that also requires an off-route haul route that crosses BMV land. It is an area of lowland meadow south of Ardleigh Road.
		the ECC (between 21a and 22b), which appears to provide connectivity to another important hedgerow 21b to 19a/19b. b) Are there other examples where BMV land is taken to bypass protected hedgerows/protected species habitat? c) If the answer to b) is yes the Applicant should identify those by reference to the document, sheet number and hedgerow identifier	(c) Lowland meadow - a Section 41 habitat of principal importance in England – that occurs immediately south of Ardleigh Road has been avoided by the scheme via careful design including trenchless crossing (refer to 6.3.4 Onshore Biodiversity and Nature Conservation [APP-086] Figure 4.4 Sheet 20). This area of lowland meadow is long-established and of very high distinctiveness. Google Earth identifies that the area has been grassland as far back as photographs are available. The Land Utilisation Survey Plans from 1931-1938 (available online via the National Library of Scotland map viewer website) also show it to be "meadowland and permanent grass", at the time of that survey, in an area otherwise dominated by arable land. Avoiding the meadow results in the requirement for an off route haul route to the west, which results in larger Order Limits (including more BMV land), since the haul route minimises impacts by following existing agricultural access routes/ points where present, and avoids bat roost trees.
EO.1.2	Applicant	New question Surveys	The Applicant notes that NE provides additional detail in respect of NE RR J1 (confidence in mitigation proposals for protected species is reduced due to limitations of survey results caused by the timing of the
		Natural England in its submission [PD2-012] identified temporal deficiencies in surveys carried out and submitted in support of the Environmental Statement. Explain what you are doing to address the concerns raised by Natural England in [PD-012].	surveys) in NE RR J33, and that its concern relates specifically to badgers. The Applicant assumes that this concern specifically relates to the area north of the A120, where badger survey was undertaken between May and July. The Applicant recognises that whilst badger surveys can be undertaken year-round, summer months are not optimal as dense vegetation may prevent access to or may obscure field signs. This limitation is recorded within Section 2.2 of 6.6.4.21 Protected Species Report and Figures (Confidential) [APP-152], which concludes "This is considered to be a minor constraint to the objectives of this study, since the vast majority of the survey area proved accessible". The Applicant is therefore confident that the assessment is valid, and that the mitigation proposed is appropriate. The Applicant also notes that pre-commencement/ pre-construction surveys will be undertaken for a number of species/ species groups, including badgers, due to the time that will have elapsed since the last surveys and the possibility that species presence or activity could have changed in the intervening period.
			The Applicant confirms that NE's requirement to secure surveys and any appropriate mitigation through the OLEMP is met. Within 9.22 Outline Landscape Ecological Management Plan - Revision B [AS-006], Table 7-1 provides further details of the pre-commencement/pre-construction surveys proposed, including details of proposed survey areas, timings and methodologies. All surveys will be undertaken by suitably experienced/ licensed ecologists who are members of an appropriate professional body, e.g. CIEEM. Mitigation measures in respect of badgers are included in Section 7.9 of 9.22 Outline Landscape Ecological Management Plan Revision B [AS-006]. The results of the pre-commencement/ pre-construction surveys

Reference	Question to	Question	Applicant's response
			will be used to identify whether any changes to the mitigation measures are required and the Final Landscape and Ecological Management Plan will be updated to reflect the survey results, as required.
			On the basis of the above, no further surveys for badgers are necessary at this stage.
NAVIGATION	AND SHIPPING (NS)	
NS.1.01	Applicant	Plan or plans showing the location of navigation and shipping features referred to in the ES and Navigational Risk Assessment (NRA) Figures based on navigation charts have been included in Chapter 9 of the ES (Shipping and Navigation) [APP-078] and the NRA [APP-240], however, it is difficult to identify the names, locations and full extent for some of the cited navigation and shipping features. A simplified and fully legible plan or plans must be submitted showing the offshore Order Limits for the Proposed Development and the names (i.e. legible labels) and extents of navigation and shipping features including, amongst other things: North Hinder Junction; the Traffic Separation Scheme areas; The Sunk, Trinity and DR1 Light Buoy deep water routes; Harwich Deep Water Channel; any other fairways used as routes to and from the ports of Harwich and Felixstowe and the ports accessed via the river Thames and the river Medway; the pilot boarding stations and anchorages serving the ports of Harwich and Felixstowe; the Long Sand Head Two-Way Route; The Sunk Inner and Sunk Outer Precautionary Areas.	Noted.
NS.1.02	Applicant	Addressed in Appendix 3, Figures 2.1 and 2.2 of [REP1-060]. Vessel traffic surveys Explain why it was necessary to obtain from the Maritime Coastguard Agency " an exemption to the MGN 654 24-month requirement between completion of vessel traffic surveys and the submission of the consent application" (paragraph 50 in the Navigational Risk	The winter vessel traffic survey was undertaken in January 2022. The consent application submission was delayed until March 2024 and subsequently the 24-month requirement in Marine Guidance Note (MGN) 654 in relation to the duration between the survey being undertaken and consent application submission was not fulfilled. However, upon the Applicant's request, the MCA provided an exemption in writing in January 2024 on the basis that long-term vessel traffic data has been collected beyond the MGN 654 requirements and

Reference	Question to	Question	Applicant's response
NS.1.03	Applicant	NRA worst case array layout Explain the rationale for the worst case array layout including the proposed offshore substation platforms being "located in proximity to areas	The realistic worst case layout must assess the maximum level of allision risk due to the presence of surface piercing infrastructure. There are a number of factors taken into consideration when selecting a worst case layout for the purposes of risk modelling including:
			> Full build out across the developable area which increases displacement and vessel exposure;
		where exposure to vessel to structure allision risk is deemed to be greatest" (paragraph 77 in the NRA [APP-240]).	> Placing structures such as offshore substation platforms with a larger surface area on the periphery which increases the exposure to passing traffic; and
			> The maximum number of structures which present he maximum surface area and exposure.
			For offshore substation platforms in particular, to ensure the Navigational Risk Assessment (NRA) [APP-240] assessed the worst case they are placed in locations which are considered viable for installation and maximise the allision return period.
NS.1.04	Applicant	NRA array layout Explain the reasoning for the minimum spacing between Wind Turbine Generators (WTGs) of 830 metres and between WTGs and the Offshore Substation Platforms (OSPs) of 500 metres as set out in the offshore design parameters (paragraph 77 in the NRA [APP-240]).	Noted.
		Addressed under Agenda item 3.3 of ISH1 and in [REP1-059].	
NS.1.05	Applicant	Further to the Harwich Haven Authority's representations made in [RR-043] concerning potential concurrent offshore works for the Proposed Development, the proposed North Falls OWF and National Grid's Sea Link, provide an indicative timetable for the offshore construction works for the three previously mentioned projects. The indicative timetable should show any expected concurrency for the three projects' offshore construction works.	The Applicant's approach to managing this impact has been to define and agree the area with the ports where certain activities cannot be conducted concurrently. This approach was discussed in a workshop with Harwich Haven Authority and other shipping stakeholders on 14 June 2024. The commitment on concurrent working is documented in 9.20 Outline Navigation and Installation Plan – Revision B [REP1-039]].
			The Applicant has noted to the IPs for the Navigation Installation Plan (NIP) [APP-252] that the proposed North Falls OWF and Sea Link would be required to accept similar comments as part of their own respective consent applications, as the Applicant's Outline NIP will only control project vessels, and that representations should be at the appropriate time to those projects.
			The Applicant is not able to provide detailed indicative timelines for the breakdown of activities for each project, Nor does the Applicant consider this necessary considering the approach to restricting the concurrency of certain activities will be discussed and agreed with the IPs prior to construction, as per the commitment in the Outline NIP.
			The Applicant has however discussed with Sea Link the high level indicative installation timing and can confirm "based on current assumptions the Sea Link offshore construction works are planned for the period 2028 to 2029." The Applicant anticipates that this will be before the export cable installation for Five Estuaries. The likelihood of concurrency is very low given the low duration of activities in the area (the Applicant considers it likely that the installation of the cables for Sea Link may occur in a single digit number of days in the concurrent working area).
			The North Falls Project Description Chapter provides an indicative programme which only refers to years (year 1, year 2 etc.) and therefore the Applicant cannot comment on the likely installation dates of that project.

Reference	Question to	Question	Applicant's response
NS.1.06	Maritime and Coastguard Agency (MCA), Trinity House, UK Chamber of Shipping, and any other IP	NRA methodology Are you content with the methodology that has been applied to assess the Proposed Development's shipping and navigational risks in the submitted NRA (Chapter 3 in [APP-240])? If you are not content, what are your concerns and how might they be addressed?	The MCA confirmed that they are content with the NRA methodology in ISH1 and reiterated this in their WR submitted at Deadline 1 [REP1-065].
NS.1.07	MCA, Trinity House, UK Chamber of Shipping and any other IP	NRA data sources Are you content that the NRA has been informed by the correct sources of data (Chapter 5 in [APP-240])? If you are not content, what other data do you think should be taken into account when assessing the navigational and shipping risks associated with the Proposed Development?	The MCA confirmed that they are content with the data sources used in the NRA [APP-240] in ISH1 and reiterated this in their WR submitted at Deadline 1 [REP1-065].
SEASCAPE, L	ANDSCAPE AND	VISUAL (SLV)	
SLV.1.01	Applicant	Rationale for the siting of the proposed Onshore substation Explain the rationale for the sighting orientation for the proposed Onshore substation shown on the "Drawing Number 1" (page 17) included in the Outline Landscape and Ecological Management Plan [AS-006].	Subsequent to the site selection North Falls and Five Estuaries commenced a joint design exercise to size and locate the substations, temporary compounds, roads and drainage within the site. During this exercise consideration was given to locating the main infrastructure at as great a distance from view points and residential buildings as possible and share as much infrastructure as possible. This exercise also included the evaluation of the access arrangements between the projects in order to minimize the impact on the residents.
SLV.1.02	Applicant	Onshore substation photomontages for the Proposed Development and the proposed North Falls OWF a) With respect to the photomontages for Viewpoint 1 (Ardleigh Road near Norman's Farm) clarify whether what is depicted in the first image, Figure 2.16d [page 3 in APP-182] shows the substation for the Proposed Development, as per the title for this image "Photomontage showing Project 2 GIS Substation (Left)" or that substation together with a substation for the proposed North Falls OWF as per the image title for the photomontage Figure 2.16e [page 5 in APP-182]. It appears to the ExA that the aforementioned photomontages are identical and that there is an inconsistency between what is shown on the Figure 2.16d left, i.e. two substations, and the title for this image. The photomontage set included in [APP-182] should be corrected and resubmitted.	 a) The photomontages are correct. Figure 2.16d and Figure 2.16e are composed of two frames – a left frame and a right frame used to span the full extent of the Five Estuaries and North Falls onshore substations. The ExA are correct in their observation that Figure 2.16d left and 2.16e left are identical but this is because in the 'e' figure the North Falls onshore substation only features in the right frame. It is important that the left and right frames are considered as one image so that the effects of both onshore substations are considered in conjunction with one another. b) The Applicant retains the choice on switchgear type, however it is considered likely that project will use AIS.

Reference	Question to	Question	Applicant's response
		b) Comment on the likelihood of the Five Estuaries and the North Falls projects having substations with different insulation arrangements, i.e. one substation being air insulated and the other being gas insulated, as depicted in the suite of onshore substation photomontages submitted with the Application.	
SLV.1.03	Applicant	New Question	The Applicant has contacted UKPN who own and run the Lawford substation and 132 kV pylons and lines
		Height of the existing pylons in the vicinity of the proposed onshore substation site	in the area. UKPN has provided the pylon tower type. The Applicant has then independently calculated the height of the pylons based on industry design guides for pylons. It has not been possible to have the independent calculations confirmed by LIKPN by Deadline 2.
		To assist with gauging the height and scale of the onshore substation for the Proposed Development provide details for the height of the pylons and the overhead lines within or crossing Land Plots 17-024, 17-027 to 17-029 and 17-031.	PJ 74 PE 58 PJ 76 PF 59 PJ 76 PF 60 PJ 76
SLV.1.04	Applicant and Suffolk and Essex Coast and Heaths National Landscape Partnership	New Question Duty to seek to further the purpose of conserving and enhancing the natural beauty of the area Is it possible for an offshore wind farm to comply with the duty to further the purpose of conserving and enhancing the natural beauty of the area?	The Applicant notes that this duty was considered by the Secretary of State in determining the Sheringham and Dudgeon Extension Projects DCO (2024). The duty was held to be met because in that case the "the Applicant has taken reasonable precautions to avoid compromising the purpose of the designation". The Applicant would submit that it has also taken reasonable precautions and meets the standard as applied by the SoS.
			The Applicant submits that it cannot be the intention of the duty to outweigh all other considerations, including the considerable policy support for offshore wind on this single factor. It cannot be the policy objective of the duty to prevent development, however needed or beneficial overall, simply because its main

Reference	Question to	Question	Applicant's response
			purpose is not to enhance the landscape. The Applicant considers that the project reasonably <u>conserves</u> the special qualities and features of the Suffolk Coast and Heaths AONB (SCHAONB), including the seascape. Reasonable efforts have been made to avoid or minimise significant adverse impacts on the SCHAONB, as far as the scope of the project allows. The Applicant considers that it has sought to conserve the natural beauty of the SCHAONB through the siting of the VE array areas and mitigation embedded in the project design set out in Table 10.18 of 6.2.10 Seascape, Landscape and Visual Assessment of the ES [APP-079]. This has included siting of the VE array areas at long distance from the SCHAONB (over 37 km), largely behind existing wind farms; a reduction in the spatial extent of the array area to limit the northward spread; and a reduction in maximum height of the WTGs (which has been further reduced at Deadline 1). As a result, although there will be effects on the special qualities of the SCHAONB, these are likely to be Moderate/Minor at worst, and they are not significantly adverse. In addition, the Project landfall, onshore cable route and onshore substation are sited entirely outside the SCHAONB and avoid direct effects on its landscape, therefore conserving its natural beauty with respect to onshore impacts.
			The Applicant considers that it is more difficult for an offshore wind farm to enhance the natural beauty of the area, which cannot readily be achieved through the siting and design of an offshore wind turbine array located outside the area of the designated landscape. The Applicant considers that it must be anticipated that any offshore wind farm NSIP will give rise to some degree of friction with the duty to seek to enhance natural beauty and is unlikely to be entirely consistent with objectives that seek to enhance natural beauty.
			The Applicant notes that NPS EN-1 provides that "For development proposals located <u>within designated landscapes</u> the Secretary of State should be satisfied that measures which seek to further purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development" (5.10.7, emphasis added). This project is not located within a designated landscape.
			As it is outside the designated landscape NPS EN1 the relevant policy test is that "[t]he Secretary of State should be satisfied that measures which seek to further the purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development" (5.10.8) The Applicant takes the strong position that the impact of the Project on the special qualities of the SCHAONB is of low magnitude, not significant (moderate/minor) and indirect, and that the statutory purposes for designation of the SCHAONB will not be compromised. To reiterate further, the project is situated 37 km offshore at its closest point, with the majority of turbines beyond that distance (and behind existing projects) which further supports the conclusion of no significant effects and the very limited impact on the designated landscape.
SLV.1.05	Applicant	New Question Natural England's Design Principles 1, 2 and 3 Explain whether Natural England's Design Principles 1, 2 and 3 have been adopted as embedded mitigation and fully considered. If those principles have not been considered does the Applicant intend to carry out further assessments in line with those principles?	The Applicant recognises the need for Good Design outlined in the Overarching National Policy Statement for Energy (EN-1). The offshore design principles document (9.3 Offshore Design Principles [APP-233]) sets out all considerations that informed the offshore design for the array and the guidance that will be considered going forward. Design mitigation has been included in the Project design as described in Table 10.18 of 16.2.10 Seascape, Landscape and Visual Assessment [APP-079]. The Applicant also notes the expressed support for Critical National Priority infrastructure in NPS EN-1, including the requirement for the Secretary of State to only consider alternatives where they can meet the objectives of the proposed development (NPS EN-1 paragraph 4.3.22). It is not considered that design principles 2 and 3 proposed by Natural England meet this test, as both would lead to significant compromise in the project capacity and energy generation. Design principle 1 has been met, and any further reduction would also unnecessarily limit the generating capacity of the wind farm.
			In relation to Natural England's proposed Design Principles 1, 2 and 3, the Applicant provides the following further comments under each of the proposed Design Principles:

Reference	Question to	Question	Applicant's response
			<u>Design Principle 1</u> : 'Maintain a clear visual gap between VE and the consented EA2 by limiting northward lateral spread of the array'
			The spatial extent of the VE array area has been reduced, providing a reduction in the northern lateral spread of WTGs when viewed from the coast, with a section of the northern array removed to help maintain a clear visual gap between existing wind farms and the consented East Anglia TWO wind farm, as seen from the Suffolk coast. This visual gap is evident in views out to sea from the SCHAONB, particularly from its coastline southwards from Sizewell Beach, noting the views north of Sizewell are some 45km+ from the nearest turbine. The Applicant considers that this design principle to maintain a visual gap has been fully considered and adopted. The Applicant is unable to further reduce the northern spatial extent of WTGs in the array area, given the lack of significant effects arising and the ultimate purpose and functionality of the development to maximise renewable energy generation in line with National Planning Policy (NPS EN1), which recognises the urgent need for critical national priority (CNP) infrastructure to achieve our energy objectives (Section 4.2) (DESNZ, 2023a).
			<u>Design Principle 2</u> : 'Locate as many turbines as possible on the eastern side of the Northern Development Area in order to increase the separation distance and therefore reduce the apparent height of the WTGs'
		Requiring the project to condense the northern array to the east would significantly impact potential project capacity and efficiency, reducing its commercial viability. Further it would likely result in an array not in compliance with the search and rescue requirements of MGN654 and would have a negligible influence on the visual impact, given the closest turbine is already over 37km offshore. The VE array areas are already sited at a long distance offshore with a large separation distance from the SCHAONB, and the maximum height of the VE WTGs has been reduced from 424 m blade tip height to 399 m blade tip height (above LAT) (which has since been reduced further to 370m), which therefore reduces the apparent height of the WTGs. The Applicant considers that the principle to reduce the apparent height of the WTGs has been achieved and is unable commit to locating as many turbines as possible on the eastern side of the Northern Development Area.	
			<u>Design Principle 3</u> : Ensure that the layout does not create a new distinct object on the far horizon visible from the SCHAONB
			The Applicant considers that Natural England's recommendation in Design Principle 3 is flawed because it implies that the Project should not have visible elements on the horizon, which is not a realistic or reasonable design aim for an offshore wind farm project. Criteria for good design in Section 4.7 of NPS-EN1 recognise the functionality of an object is equally important to its visual appearance. The Applicant has sought to limit the northerly spread of WTGs as far as possible, and has reduced the maximum height of the WTGs, to an extent that the effect of the VE array area on the special qualities of the SCHAONB has been assessed as not significant in the ES and by other Interested Parties (East Suffolk District Council and Sussex County Council). The Applicant has not adopted Design Principle 3 as it is unable to commit to ensuring that the layout does not create a new object on the far horizon visible from the SCHAONB.
SLV.1.06	Applicant	New Question Curtaining Effect In light of Natural England's concerns about the Applicant's assessment of the "curtaining effect", is the Applicant intending to carry out further consideration and identify potential mitigation in	The maximum WTG height has now been further reduced to 370m blade tip height (above LAT) due to MOD requirements, which will result in an incidental reduction in visual effects in views out to sea from the SCHAONB. The Applicant has submitted SLVIA wireline visualisations at Deadline 2 (see 10.21.1 Updated SLVIA Viewpoint 1 to 10.21.8 Updated SLVIA Viewpoint 10) showing these 370m WTGs from a series of key viewpoints along the SCHAONB coastline ⁵ . The reduction in apparent height is noticeable when compared to the ES wirelines (399m blade tip height above LAT) and should influence Natural England's

⁵ Wirelines should be considered alongside the ES photomontages, as they show the theoretical visibility of WTGs in red and do not show the likely visibility/appearance of the WTGs

Reference	Question to	Question	Applicant's response
		relation to the direct views out to sea along the Suffolk Coast and Heaths Area of Outstanding	findings on apparent height (Table 1 of their relevant representation), noting that the Applicant does not agree that this quantitative approach is appropriate for concluding the significance of effect.
		Natural Beauty and Suffolk Heritage Coast - Orford Ness to Dunwich stretch?	The sequence of wirelines submitted at Deadline 2 (see 10.21.1 Updated SLVIA Viewpoint 1 to 10.21.8 Updated SLVIA Viewpoint 10) also clearly demonstrates the widening visual gap between Galloper OWF and the consented EA2 array moving south and closer to the VE array along the SCHAONB coastline. It should be noted that the wirelines provide an illustrative and theoretical representation of how much of the turbines could be viewed from a given location. These should be considered alongside the photomontages submitted with the application to appreciate the level of visibility, particularly for those viewpoints over 40km.
			In respect of the potential 'curtaining effect', the Applicant has provided further consideration in its response to Natural England's relevant representation submitted at Deadline 1 [REP1-051]. This includes further information on the Horizontal Field of View (HFoV) (in degrees) of the gap remaining between VE and the EA2 array for viewpoints within the SCHAONB.
			The Applicant considers that VE will only fully 'bridge the gap' between Galloper OWF and the consented EA2 array in one viewpoint – Viewpoint 1 Southwold [APP-204], also see updated Viewpoint 1(10.22.1) submitted at Deadline 2. This viewpoint is however, the most distant viewpoint presented (48.2km) and not significant effects arise due to the visibility and apparent height of turbines at such long range (which is acknowledged by Natural England in its relevant representation, Table 1).
			In all other viewpoints, there is some visible gap between the VE array and EA2 to the north. This gap is narrower, but evident, in viewpoints to the north such as from the Dunwich area (Viewpoint 2 and 3 [APP-205 and APP-206], see updated figures submitted at Deadline 2 at 10.22.2 and 10.22.3 respectively). Moving south, the gap between the VE array area and EA2 becomes wider and clearly apparent with views out to sea through the gap, in all other viewpoints southwards from Sizewell Beach, including Viewpoints 4, 5, 6, 7, 8, 9, 10 and 11 [APP-207 to APP-214] within the SCHAONB, in these closer viewpoints where the gap is more likely to be appreciable. This visual gap is particularly appreciable for example in Viewpoint 9 Orford Ness [APP-212] and Viewpoint 10 Shingle Street [APP-213] (see updated Viewpoints 9 and 10 which were submitted at Deadline 2, 10.22.7 and 10.22.8 respectively).
			The Applicant's position is that on balance, the 'curtaining' effect is not significant given the retention of this gap between VE and EA2 in the majority of views; the very long distance of the viewpoints where the gap is narrowest; the relatively narrow additional increase in lateral spread of the VE WTGs; their introduction as elements that are similar to those that are present or consented; and their very long distances from the SCHAONB on the sea skyline, all of which diminishes the potential 'curtaining' effect, and limits the cumulative effect to occurring in only the most optimum, infrequent, visibility conditions. As such the Applicant does not intend to develop further mitigation to reduce the northward lateral spread of the VE array.
TERRESTRIA	L TRANSPORT A	AND TRAFFIC (TT)	
TT.1.01	Applicant	Scope of the traffic and transportation issues assessed The Traffic and Transport Chapter of the Environmental Statement (ES) [APP-090] focuses on the implications of the onshore works of the Five Estuaries project for terrestrial traffic and transportation. a) Are the offshore elements of the Proposed Development anticipated to generate any	

Reference	Question to	Question	Applicant's response
		onshore vehicular movements, particularly during the construction phase? b) If yes, what would be the expected volume of onshore vehicular movements resulting from offshore activities during the construction and operational phases? Why do these not appear to have been acknowledged in the ES assessment of onshore traffic and transport implications?	
		Addressed by the Applicant under Agenda item 3.7 of ISH1 and in [REP1-059].	
TT.1.02	Applicant	Implications of the onshore cable route for railway services How would the safe running of the Sunshine Coast Line train service during construction (and also any subsequent maintenance) of the onshore cable route be ensured where it intersects with the railway track between the Thorpe le-Soken and Kirby Cross stations? Would there be any disruption to the timetable for this service as a result of the proposed works? Addressed by the Applicant under Agenda item	Noted.
TT.1.03	National Highways, Essex County Council, Suffolk County Council and any other IP	Development, as set out in Chapter 8 of the ES [APP-090] and the Traffic and Transport Baseline Report [APP-172 and APP-173] addresses all relevant issues? If not, what are your concerns and how might	Noted.
TT.1.04	Applicant and National Highways	New Question Routing for Abnormal Indivisible Loads (AIL) During the course of ISH1 there was discussion of the use of the A120 westbound (from Harwich) as part of the route for AILs (of up to 400 tonnes) needing to access the proposed onshore substation site via Bentley Road. National Highways in its post ISH1 written submission [REP1-066] has commented (paragraph 1.4) that AILs travelling from Harwich on the A120 would	a) This part of the question is directed at National Highways. b) i) The Applicant confirms for the AIL route from Harwich to the onshore substation the proposal is to turn into Bentley Road from the A120 east (travelling from the Horsley Cross roundabout.) via a contraflow using the eastbound carriageway for a section of around 200m. This was the preferred approach indicated by National Highways. Further details of the proposal for the AIL delivery is included in Section 4.1 of the Outline Construction Traffic Management Plan – Revision B [REP1-043]. Details of the proposed AIL route and the swept path drawings for the contraflow turning from the A120 into Bentley Road are provided in Appendix Y of 6.6.8.2: Traffic and Transport Baseline Report - Part 6 [REP1-032]. ii) No physical improvement works are proposed to either roundabout to accommodate the works. As is normal for AIL deliveries, street furniture may need to be temporarily removed along the route to

Reference	Question to	Question	Applicant's response
		need to make a 360 degree turn at the "next" roundabout (presumed by the ExA to be the A120's junction with Harwich Road) in order to enter Bentley Road. In section 4.3 of [REP1-066] National Highways refers to AlLs switching carriageways at the Horsley Cross Roundabout.	accommodate the deliveries. Further detail on this process is set out in is set out in Section 4.1 of the Outline Construction Traffic Management Plan – Revision B [REP1-043] and 10.20.3 Technical note: Abnormal Indivisible Loads submitted at Deadline 2.
		 (a) For National Highways – Clarify what your understanding of the Applicant's AIL routing proposals for accessing Bentley Road via the A120 are, i.e. making 360 degree turns at the A120's junction with Harwich Road or undertaking lane switches at the Horsley Cross Roundabout. (b) For Applicant – In light of what National Highways has said about the AIL route to Bentley Road in paragraph 1.4 and section 4 of [REP1-066] clarify: i. whether the intention is for 360 degree turns to be made at the A120's junction with Harwich Road or lane switching at the Horsley Cross Roundabout. ii. whether any physical works would need to be undertaken to either of the roundabouts referred to in b)i to accommodate an AIL of up to 400 tonnes and how the undertaking of any such works would be secured under the provisions of the dDCO. 	
TT.1.05	Essex County	New Question	Noted.
	Council	Construction vehicles crossing roads	
		Are you content with the measures suggested by the Applicant in Section 3.5 of the Outline Construction Management Plan [APP-257] to ensure the safety of all road users at the identified locations where construction vehicles would cross the public highway?	
TT.1.06	Applicant	New Question	The assessment of the potential effect on amenity was not proposed in the 6.1.6 Scoping Report [APP-068]; however pedestrian amenity and fear and intimidation have been assessed in the 6.3.8 Traffic and
		Transport Assessment methodology	Transport Chapter [REP1-018] following comments in the 6.1.6 Scoping Opinion [APP-068].
		As queried by Essex County Council in its Deadline 1 submission [REP1-062] explain the rationale for why only pedestrian amenity has	Walking, cycling and horse-rider management measures, including specific reference to locations where warning signage should be considered, is set out in Section 4.3 of the 9.24 Outline Construction Traffic Management Plan – Revision B [REP1-043].

Reference	Question to	Question	Applicant's response
		been considered, rather than the amenity of all relevant nonmotorised users, as set out in section 8.4 of Volume 6, Part 3, Chapter 8: Traffic and Transport of the Environmental Statement [APP-090].	Notwithstanding the above, it is possible using Table 8.5 in the Traffic and Transport Chapter [REP1-018] for the effect of pedestrian amenity to consider the effect of other non-motorised user amenity, the highway links that would require formal assessment would be Bentley Road, the B1035 Tendring Road and Little Bromley Road/ Ardleigh Road, where the increase in HGVs is greater than 100%.
		Ctatement par 1 coop.	Using professional judgement, as the B1441 Clacton Road and B1032 Frinton Road are part of a promoted cycle route (see Appendix N of Volume 6, Part 6, Annex 8.2: Transport Assessment – Part 3 [REP1-029]) and there is a horse-riders warning sign on the B1441 Clacton Road, these links should also be assessed.
			 Bentley Road (low sensitivity) – whilst there would be a noticeable increase in the number of vehicles on Bentley Road, with the proposed segregated non-motorised user path and the reduction in vehicle speeds with the proposed temporary speed limit reduction from 60mph to 40mph, the Applicant considers there would be a low magnitude of impact in terms of amenity and therefore a minor adverse effect, which is not significant in EIA terms.
			 B1035 Tendring Road (medium sensitivity) – The forecast baseline daily traffic flow in 2027 is 1,576 (including 43 HGVs) and would be subject to construction traffic of up to 317 vehicle movements (including 83 HGV movements). Peak daily VE construction traffic would result in an increase of 20.1% for all vehicles and 190.3% for HGVs. Receptors along the link would experience a peak increase in approximately seven HGV movements per hour and an average of approximately four HGV movements an hour. Given the peak number of daily HGVs on the B1035 Tendring Road for VE is forecast to be 83, the magnitude of impact is considered to be low, which would result in a minor adverse effect, which is not significant in EIA terms.
			• Little Bromley Road/ Ardleigh Road (low sensitivity) – Whilst an increase of 42 HGVs per day at the peak of construction of VE is considered to be a low magnitude of impact on pedestrian amenity in the Traffic and Transport Chapter [REP1-018], given the likely very low number of pedestrians walking in the carriageway, as there are likely to be a greater number of existing cyclists and horse-riders using this link, the magnitude of impact can be considered to be medium, which would result in a moderate adverse effect, which is significant in EIA terms. However, with the proposed speed limit reduction from 60mph to 30mph included within the Change Request, warning signage (and other potential measures as part of a final Construction Traffic Management Plan) and a relatively convenient alternative route via Byways (BY 52 172 and B7 57 170) and Grange Road, which could be signed during construction period, the magnitude of impact can be reduced to low, resulting in a minor adverse effect, which is not significant in EIA terms.
			B1032 Frinton Road (high sensitivity) – The forecast baseline daily traffic flow in 2027 is 7,251 (including 127 HGVs) and would be subject to construction traffic of up to 374 vehicle movements (including 106 HGV movements). Peak daily VE construction traffic would result in an increase of 5.2% for all vehicles and 72.8% for HGVs. Receptors along the link would experience a peak increase in approximately nine HGV movements per hour and an average of approximately six HGV movements an hour. Given this the magnitude of impact is considered to be low, which would result in a minor adverse effect, which is not significant in EIA terms.
			 B1441 Clacton Road (high sensitivity) - The forecast baseline daily traffic flow in 2027 is 5,955 (including 153 HGVs) and would be subject to construction traffic of up to 188 vehicle movements (including 77 HGV movements). Peak daily VE construction traffic would result in an increase of 3.2% for all vehicles and 50.1% for HGVs. Receptors along the link would experience a peak increase in approximately six HGV movements per hour and an average of approximately four HGV movements an hour. The Applicant considers, the peak increase in HGVs would be a negligible magnitude of impact, taking the measures included in Section 4.3 of the Outline Construction Traffic Management

Reference	Question to	Question	Applicant's response
			Plan (Revision B) [REP1-043], which would result in a minor adverse, which is not significant in EIA terms.
			In terms of potential cumulative effects on amenity:
			The Applicant would draw the same conclusions for Bentley Road, based on the mitigation proposed.
			• The magnitude of impact for the likely cumulative number of HGVs on Little Bromley Road/ Ardleigh Road would be high, with the HGVs associated with NGET EACN being the highest proportion. However, with the proposed speed limit reduction from 60mph to 30mph, warning signage (and other potential measures as part of a final Construction Traffic Management Plan), a relatively convenient alternative route via Byways (BY 52 172 and B7 57 170) and Grange Road, which could be signed during construction period and the proposed improvements to Ardleigh Road by NGET, the magnitude of impact can be reduced to medium, resulting in a minor adverse effect, which is not significant in EIA terms. Also, it is unlikely pedestrian, cyclists or horse-riders would choose to use this section of Little Bromley Road/ Ardleigh Road with the presence of construction traffic, particularly with the alternative route available.
			> Peak daily VE, with NF OWF construction traffic on the B1032 Frinton Road would result in an increase of 148 HGVs per day, which is around three HGVs per hour greater than the scenario with VE alone. The average number of HGVs across the construction programme would increase by 1, to 77. Given this the magnitude of impact is considered to be low, which would result in a minor adverse effect, which is not significant in EIA terms.
			Peak daily VE, with NF OWF construction traffic on the B1035 Clacton Road would be the same as the scenario with VE alone. The average number of HGVs across the construction programme would increase by 4, to 53. Given this the magnitude of impact is considered to be low, which would result in a minor adverse effect, which is not significant in EIA terms.
			 North Falls OWF is not proposing to use the B1441 Clacton Road as a construction access route and therefore a cumulative impact assessment is not relevant for this link.
TT.1.07	Essex County Council and Suffolk County Council	New Question Transport impacts at ports During ISH1 you made the case that the Applicant should prepare and submit an Outline Port Construction Management Plan to manage the impacts of traffic at ports during the construction and operation of the offshore elements of this proposed development. Given the Applicant's comments on their offshore activities and resulting onshore traffic impacts at ports in paragraphs 2.7.4 to 2.7.7 of [REP1-059], do you still consider such an Outline Port Construction Management Plan should be submitted?	Although not directed at the Applicant. The Applicant notes both Essex County Council and Suffolk County Council raised this in their Deadline 1 submissions. The Applicant has provided a response in 10.19 Applicant's Response to Deadline 1 Submissions submitted at Deadline 2.
TT.1.08	Applicant	New Question	The Applicant has noted Essex County Councils Deadline 1 response and is engaging with them on the
		Management of construction traffic	points raised. An update will be provided at a future deadline but the Applicant agrees that 9.24 Outline Construction Traffic Management Plan [REP1-043] and/or the 9.26 Outline Workforce Travel Plan [APP-259] may need to be revised.

Reference	Question to	Question	Applicant's response
		Essex County Council in its Deadline 1 submission [REP1-062] has set out in the section entitled "Controls and Mitigation" a number of additional proposals to help control and monitor construction traffic. In light of those comments, do you consider that the Outline Construction Traffic Management Plan [APP-257] and/or the Outline Workforce Travel Plan [APP-259] should be updated?	
ONSHORE W	ATER, HYDROLO	GY AND FLOOD RISK (WE)	
WE.1.01	Applicant	(a) Hydrology, Hydrogeology and Flood Risk In [APP-088] it is indicated that there are existing systems of agricultural irrigation/drainage infrastructure within the Order limits. What evidence is there that the subsurface infrastructure, including trenches, cable connection at the proposed OnSS and joint pits for the ECC would not need to be buried at greater depths to avoid compromising the function of the irrigation/drainage required for agriculture? (b) New question: — In Table 6-12 in [PD-088] it is stated "Surface water flowing into the trenches and work areas during the construction period will be pumped via settling tanks or ponds to remove sediment and potential contaminants, before being discharged into local ditches or drains via temporary interceptor drains. Where topographic or hydraulic gradients on site are significant, cable trenches will include a hydraulic break (bentonite or natural clay seals) to reduce flow rates along trenches and hence reduce local erosion". What would the potential impacts of introducing a hydraulic break into an existing field drainage system?	a) Where existing sub-surface irrigation or drainage systems are present, these will be identified through pre-construction surveys. It is anticipated that cables will likely be buried below these systems this would be identified during detailed design. Burying the cables below existing drainage systems requires these systems to be intercepted to allow trenching and ducting before being reinstated and the systems reconnected. During construction existing agricultural land drains will be appropriately marked; the location of intercepted drains will be photographed, given a unique reference, and logged using GPS coordinates. The actual condition and characteristics (e.g. depth of installation, pipe type and diameter) of the existing drainage will also be recorded upon excavation. The reinstatement of agricultural land and associated drainage systems is set out in the 9.21 Code of Construction Practice – Revision B [REP1-041]. b) The Applicant believes the reference in section (b) relates to APP-088 as with part (a) not PD-088 as written. The existing field drainage systems typically include buried perforated pipes. As clarified in a) it is likely that these are above the required cable depth, meaning that these will need to be intercepted to allow trenching and ducting underneath before being reinstated. This will be considered in detail in the Pre-Construction drainage designs as set out in the 9.21 Code of Construction Practice – Revision B [REP1-041]. Any temporary interceptor drains that are included would be temporary during construction when the trench is open and would be removed during the reinstatement. Hydraulic breaks introduced within cable trenches would be used to facilitate settlement and prevent erosion. If these are used they will be considered in the post construction drainage design, however the perforated pipes will take water through these. The principal contractor(s) will be responsible for developing and implementing a temporary surface water drainage strategy will ensure ongoing drainage

Reference	Question to	Question	Applicant's response
WE.1.02	Farming Affected Persons	Agricultural Irrigation and Drainage a) Provide land maps showing the locations of known agricultural irrigation/drainage infrastructure. These maps should also show the relevant Land Plots, as identified on the onshore Land Plans [APP-008]. b) Identify the maximum depth, citing Land Plot number to which it relates, of the agricultural irrigation/drainage infrastructure?	Noted.
WE.1.03	Applicant	Hydrology, Hydrogeology and Flood Risk In paragraph 6.7.33 of [APP-088] it is stated "This ground investigation data indicates groundwater levels typically between 2.3 m and 3.3 m below ground levelit should be noted that the investigations were completed in mid May and mid October respectively and therefore winter peak water levels will potentially be higher". a) Have further The Applicant stated during ISH1 that ground investigations were ongoing and that been undertaken or piezometric monitoring points been installed to establish winter peak water levels. The Applicant is requested to provide an addendum to [APP-088] updating the evidence baseline for groundwater depths using empirical data gathered since the drafting of APP-088. The update must include measurements taken during the months of November and December for submission by Deadline 6. b) Paragraph 6.10.33 in [APP-088] states " Excavations for the cable route will be shallow (up to 2 m depth)" and paragraph 1.4.16 in [AS- 004] advises " Where water enters the trenches during installation, this will be pumped via settling tanks or ponds to remove sediment, before being discharged into local ditches or drains via temporary interceptor drains." i) Given that ground investigations were only carried out mid May and mid October, how confident is the Applicant that the proposed pumping would be sufficient to cope with infiltration during wetter periods of the year? ii) How would these drainage measures interact with existing field irrigation/drainage systems and	 a) Please see response WE.1.04 b) It is acknowledged that there is uncertainty as to the volumes of water which will need to be managed, however given the shallow depth of excavations it is not feasible for significant groundwater to be encountered. Before detailed design additional boreholes and monitoring will be conducted to inform the detailed design. Where dewatering is required, localised assessments as to the volumes of dewatering required and the capacity of receiving discharge points would be undertaken to ensure that water can be suitably managed. Where there is insufficient capacity available, alternate options for discharge would be assessed such as discharge to ground or tankering. Any abstractions required will be in accordance with the 'water abstraction and impoundment (exemptions) regulations 2017' and any abstraction which does not meet the exemption (greater than 6 months of dewatering or exceeds either 100m³ per day (or 50m³ per within 250m of a water supply)) will require an abstraction licence prior to any dewatering taking place. ii) As outlined above, the capacity of any receiving discharge point would be reviewed to confirm there is sufficient capacity at the discharge point and ensure any discharge does not adversely impact on local drainage networks. c) i) and ii) The Groundwater Risk Assessment [APP-159] included standard analytical equations to assess the permeability of the superficial deposits and to assess the worst-case radius of influence from any dewatering required (calculated between 80m and 163m, however a radius of 250m was used within the assessment as a conservative worst case). This analysis was used to identify two licenced abstractions and five private water supplies which could feasibly be impacted by any dewatering and for which additional investigation, monitoring and assessment will be undertaken. Baseline sampling of the private water supplies within the vicinity of the cable route (using an area much larger than indic

Reference	Question to	Question	Applicant's response
		not compromise their efficiency? c) Table 6-8 "Permitted Abstraction Points" and Table 6-9 "Private Water Supplies" in [APP-088] i) Should it be necessary to carry out dewatering for prolonged periods, provide evidence demonstrating that activity would not adversely impact on the abstraction points and private water supplies in and around the ECC. ii) What modelling has been undertaken to demonstrate that there would be no adverse impacts arising from prolonged periods of dewatering?	
WE.1.04	Applicant	New Question Monitoring points for groundwater The Applicant has indicated (see WE.1.03 above) that monitoring of groundwater is ongoing. Provide a plan or annotate the existing plans contained in [APP-088] identifying the monitoring locations in and around the ECC and OnSS?	The Applicant does not propose to identify the precise locations of its ongoing monitoring boreholes on a plan for security reasons. However, it can confirm that boreholes have been conducted at sections along the cable route where information was needed to confirm the feasibility of the design solution proposed. This was due to the complexity of the crossing and sensitivity of the assets present, and where the data is not available from other sources. Where ground is a considered to be a risk to the feasibility piezometers have been installed. These locations include: • 4 Boreholes in 3 locations at the landfall. 3 stand pipe piezometers installed for water level monitoring. • 3 Boreholes in the vicinity of the Swan Road crossing. 1 standpipe piezometer for water level monitoring. • 2 Boreholes at the Railway Crossing. 2 standpipe piezometers installed for water level monitoring. • 2 Boreholes at Little Clacton Road crossing. The Applicant will have access to the boreholes and stand pipe piezometer monitoring that is being conducted at the National Grid site adjacent to The Applicant's OnSS site and which has consistent geology, topography and hydrogeological conditions to the Applicants OnSS site. The Applicant is not able to submit the actual monitoring data due to commercial implications and confidentiality clauses, however the Applicant can provide a revision to 6.6.6.1 Groundwater Risk Assessment [APP-159] which includes the available data for Deadline 6.
WE.1.05	Applicant	New Question Mitigation relating to hydrology, hydrogeology and flood risk a) In Table 6-12 in [APP-088] is stated "Any stockpiles along the cable route will have gaps to allow surface water runoff to pass through' and 'If applicable, storage of stockpiled materials should be covered when not in use to prevent materials being dispersed by wind or rainfall runoff". In the	Existing field drainage comprises land drains (which are typically perforated pipes in fields), combined with ditches at the edges of fields. The Applicant understands the question from the Examining Authority to be inquiring about pooling / ponding around the existing field drainage systems (land drains and ditches) and whether this would be altered during construction of the project. As set out in the 9.21 Code of Construction Practice – Revision B [REP1-041] section 4.9 the Applicant will appoint a specialist drainage consultant to conduct a survey of the existing drainage systems and water courses they feed into (noting the field land drains are covered and information on these must be provided

Reference	Question to	Question	Applicant's response
		what assurance can the Applicant provide to land users that surface water run-off will not	by the land owners where they are not visible). The aim is to determine the capacity of the existing systems, and what they could be (for example if the ditches were cleared). This is a greater level of detail than is commonly available prior to construction, however the Applicant is conscious of the risk.
		compromise the existing field drainage systems or result in pooling/ponding, due to insufficient capacity of existing field drainage systems to	This information will be available to the ground works contractor who will be responsible for the Pre and Post construction drainage design.
		accommodate percolation of additional surface water?	The Applicant will engage with the landowners when draft pre and post construction designs are available. This approach has been reflected in the Heads of Terms.
			With regard to runoff from areas of stockpiling, the 9.21 Code of Construction Practice – Revision B [REP1-041] sets out principles for pollution control and temporary site drainage during construction. The principal contractor(s) will be responsible for developing and implementing a temporary surface water drainage strategy for each working area, to minimise water within the work areas, including any water drainage from areas of stockpiling. The temporary surface water drainage strategy will ensure ongoing drainage of surrounding land and to ensure that there is no increase in surface water flood risk.
WE.1.06	Applicant	New Question	The Applicant is not able to provide a technical note on the discussions relating to the Sea Defences /
		Sea Defences/Holland Haven SSSI	Holland Haven SSSI, The Applicant is still to meet with the Environment Agency (EA) to discuss the points raised. The Applicant is happy to provide an update on discussions with the EA at a later Deadline or cover
		The applicant confirmed during ISH1 that discussions with the Environment Agency (EA) were pending to address the protection of the landfall sea defences from 'frack out'. Can the Applicant confirm that discussions have been held and that a technical note will be issued by Deadline 2 outlining the mitigation measures agreed with the EA in respect of sea defence protection, including incidental protection for the Holland Haven SSSI, during construction?	these points through the Statement of Common Ground. The Applicant does note that the response from the Environment Agency does not mention the hydrofracture or "frac out" in the SSSI area. The Applicant would like to mention that preliminary
			calculations have been conducted in this area and there is negligible risk due to the depth of the HDD necessary to achieve the clearance under the seawall (over 19m from top of the seawall and circa 15m below Holland Haven Marshes ground level) and reach the proposed exit pit location.
LAND USE A	ND AGRICULTUR		
LU.1.01	Applicant	Mineral Safeguarded Areas Provide maps showing the relationship between the proposed onshore cable corridor and the mineral safeguarded areas in the Essex Minerals Local Plan.	The proposed route of the Onshore Export Cable Corridor and the Mineral Safeguarding Areas (MSA) in the Essex Minerals Local Plan are shown on Drawing 02 'Mineral Safeguarding Area' within the 9.5 Mineral Resource Assessment [APP-235]. The MSA's shown on the plan were obtained as a digital data set from Essex County Council Minerals and Waste Planning Team.
LU.1.02	Applicant	Outline Landscape and Ecological Management Plan (OLEMP) [AS-006] Paragraphs 2.6.7 and 2.6.26 in [AS-006] refer to the management of soils during construction and decommissioning. Given those references, the Applicant appears to be committing to reinstating the OnSS site back to agricultural land use. However, in Table 1.14 of the Onshore Project Description [AS-004] top soil is identified as waste for use elsewhere. Table 1.9 also	b) "Native soil" (also commonly referred to as "Indigenous Soil") refers to soils that naturally exist in a particular location, encompassing a range of textures and composition determined by local climate, vegetation, and geology.

Reference	Question to	Question	Applicant's response
		identifies 134,084 tonnes of Native Soils as waste. a) Given that to restore land back to agriculture, the preservation and correct storage of soils is important, confirm whether the Applicant is committed in principle to restoring the OnSS site back to BMV? b) Clarify what is meant by "Native Soil"? c) Given the importance of preserving BMV soils and the statement at paragraph 2.6.26 in the OLEMP, why is there no indication that topsoil/sub-soil would be stored for the reinstatement of the site to Grade 1 following decommissioning? Items a) and c) addressed during ISH1 and in the Applicant's Deadline 1 submission [REP1-	
LU.1.03	Applicant	Ground Conditions and Land Use [APP-087] Tables 5.4 and 5.5 in [APP-087] provide analysis of the sensitivity and magnitude of loss of Grade 1 BMV land. Table 5.9 identifies the distribution of Grades 1 and 2 BMV land but does not differentiate Grade 3a and 3b. Table 5.9 provides a percentage value to BMV as follows: · Within DCO Order Limits: Grade 1 – 29.79%, Grade 2 – 19.58%, Grade 3 (undifferentiated) 39.47%; and · Within Essex: Grade 1 – 1.77%, Grade 2 – 0.04%, Grade 3 (undifferentiated) 0.08%. a) Have ground investigations been undertaken to establish the full extent of BMV Grade 3a within the ECC? b) Has any assessment been carried out (and by whom) as to whether the restored land would be of the same or better agricultural land classification prior to any construction works being undertaken?	 a) In the assessment the Applicant has classified all of the Grade 3 land as Grade 3a land, therefore qualifying as Best Most Versatile land in order to present a worst case scenario of the potential impacts. No agricultural land classification (ALC) surveys have yet been undertaken to establish the extent of Grade 3a vs Grade 3b within the ECC. However, the Applicant has committed to pre-commencement soil condition surveys according to best practice (typically one intrusive investigation per 100 m for linear routes or 1 per hectare elsewhere). Surveys will be carried out post-consent will and prior to construction. The Grade 3 subgrades will be confirmed during pre-construction soil surveys, in order to inform soil management during construction. b) The Applicant has committed to conduct soil surveys that comprise of hand augers every 100m along the cable route and at the onshore substation. The results of this survey will be Agricultural Land Classification plots and various guidelines that The Applicant will use to guide the evaluation of the contractor's proposals. These pre-construction soil condition surveys will record the soil target profile and agricultural conditions to be achieved upon reinstatement. Further detailed post-construction soil condition surveys will identify if the target soil profile has been achieved. In discussion with landowners the contractor will remedy any loss of nutrients according to best practice guidance at the time of works completion. Furthermore, the Soil Management Plan (SMP) to be submitted and approved pursuant to Requirement 13 of the draft DCO, will provide details of mitigation measures and best practice handling techniques to safeguard soil resources by ensuring their protection, conservation and appropriate reinstatement during the construction of the onshore works.

Reference	Question to	Question	Applicant's response
LU.1.04	Applicant	Ground Conditions and Land Use [APP-087] With respect to soil management in Table 5.13 of [APP-087] reference is made to the Construction Soil Management - Best Practice cites 'Good Practice Guide for Handling Soils (Institute of Quarrying, 2021) and it is stated "No decision has yet been made regarding the final approach to decommissioning for the Project as it is recognised that industry best practice, rules and legislation change over time". a) Explain why that quote has been included as best practice, given there is no provision in the CoCP for the long-term storage of topsoil and sub-soil in respect of the OnSS site. b) Given the lack of commitment to a restoration strategy and as a precaution, the Applicant should provide details for the long-term storage of topsoil and sub-soil for the restoration of the OnSS site back to Grade 1 BMV land. Addressed during the course of ISH1 and in [REP1-059].	a) There is no proposed long term storage of topsoil or subsoil on the OnSS site for use in decommissioning. However, soil should still be handled in accordance with best practice for reuse across the wider OnSS site. The CoCP 9.21 Code of Construction Practice — Revision B [REP1-041] paragraph 4.1.4 states that "Any surplus soils from the OnSS works to be re-used for landscaping, offered to landowners or disposed of in an appropriate manner off-site." Soil removed from the substation will not be stored until decommissioning. Soil stored for the length of time envisaged (around 40 years) would not retain the qualities which currently render it grade 1 BMV land. It is unrealistic to store soils long-term in a way that they will retain their current BMV status, especially for the length of time required. Stored soils will succumb to natural regeneration, through top growth of vegetation including trees, and fibrous roots, the soil will be rendered unsuitable for agricultural use.
LU.1.05	Applicant and North Falls Offshore Windfarm Limited	Proximity of the onshore ECCs for the Proposed Development and the proposed North Falls OWF Further to the Relevant Representation submitted by Brooks Leney on behalf of various farmers and landowners [RR-010]: a) Would there be any sterilisation of farm land between the proposed onshore ECC easements for the Proposed Development and the proposed North Falls OWF? If so, the sterilised land must be identified on a plan and the area of affected land should be quantified; and b) What steps are being taken by the respective projects to minimise any sterilisation of farmland?	 a) The concern put forward by some of the landowners' agents is that should there be a gap between the two easements, then there is a risk of this land between each Project's easement being 'sterilised' for future development. Whilst the Applicant will endeavour to construct and install their infrastructure with no gap between their respective easement and that of North Falls, there may be obstacles or other engineering reasons which may prevent the two easements abutting one another along the entire cable route. The land the Projects are seeking rights in is of agricultural use and set in open countryside, predominantly away from the curtilage of existing development. The Projects' infrastructure will be predominantly underground and the rights sought do not apply any restriction on normal farming activities meaning the land can be used in the same way as prior to the works commencing. The land will be reinstated to its original use following the conclusion of the works. Therefore, if a gap was to exist between the two easements, both Projects consider this will have no impact on the use or value of the land currently in agricultural use. Consequently, the Applicant does not consider there to be any sterilisation of land either between or over the easements. b) North Falls and Five Estuaries have actively collaborated on a coordinated solution to minimise the impact; the most coordinated solution possible involves whichever wind farm that goes first laying the ducts for the other; this is Scenario 1 as set out in 9.30 Coordination Document [APP-263]. Both parts of this response have been agreed with North Falls OWF.

Reference	Question to	Question	Applicant's response
LU.1.06	Farming Affected Persons	Crop Rotation and Crops a) Provide the proposed crop rotation schedule for land subject to the ECC for any five year period. This information can be provided in tabular form referencing Land Plot numbers/Year or illustrated and annotated on scaled plans; b) Provide the proposed crop rotation schedule for land subject to the construction of the OnSS for any five year period. This information can be provided in tabular form referencing Land Plot numbers/Year or illustrated and annotated on scaled plans; and c) In providing the information requested in a) and b) an overview of the management of individual crop types within any 12 month period i.e. land preparation, planting, spraying, irrigating, harvesting, should be provided.	Noted.
LU.1.07	Cobra Mist Ltd (Mines and Minerals)	RR-014 states "submitted plan seem to indicate the encroachment onto unsuitable or unacceptable areas" a) Provide a plan showing the precise area referenced in RR-014 (include Land Plot numbers); and b) Explain why these areas are unsuitable or unacceptable.	Noted.
LU.1.08	Farming Interested Parties and Affected Parties	New Question Agricultural Equipment Manoeuvring In agricultural operational terms what is the minimum width in metres for a field margin to allow the turning of agricultural vehicles?	Noted. The Applicant notes that crops grown, machinery used, and the size of machinery or towed / mounted equipment used impact the turning of agricultural vehicles, mounted and towed equipment. All of these scenarios will impact the margins required along the cable route to a varying scale, which will vary between farms and cropping cycles within farms and will be discussed on an individual basis with each landowner.

2.1 TABLE 1A: AFFECTED PARTIES IDENTIFIED POST STAGE 2 & 3 STATUTORY CONSULTATION

Party ID	Name	Reason for addition	s.56 letter sent?
17473	Mountview Estates PLC	Rights of access identified though site walkover	Yes
157599	Orsted Energy Solutions (UK) Limited	Updated utility information revealed apparatus	Yes
268888	Port Of London Authority	Rights of access identified though site walkover	Yes
275981	Gunfleet Boating Club	Rights of access identified though site walkover	Yes
276056	Brian Leonard Cross	Rights of access identified though site walkover	Yes
276055	Irene Cross	Rights of access identified though site walkover	Yes
269897	Reedlands Farm Angling Club	Rights of access identified through landowner meeting	Yes
275982	Rob Long	Notified of occupier by freeholder post s.42 through returned landowner questionnaire	Yes
277172	Stephen Nigel Mangham	Identified as having rights of access post s.42	Yes
277177	Joanna Mangham	Identified as having rights of access post s.42	Yes
160267	Lisa Jiggens	Identified as having rights of access post s.42	Yes
277409	Mr Arron	Identified as having rights of access post s.42	Yes
284111	Harry Weavers	Identified as having rights of access post s.42	Yes
268904	The Executor of the Estate of the Late Kerstin Jane Dimond	Executor revealed post s.42 - (cat 1 in respect of subsoil rights)	Yes

2.2 TABLE 2B: AFFECTED PARTIES IDENTIFIED POST S.56

Party ID	Name	Reason for addition	102A letter sent?
154515	Skipton Building Society	New mortgagee after land sold	Yes
160037	Linda Maureen Clachan	Updated register provided Linda as a new freeholder	Yes
293054	Christine Barber	Confirmation as the executor of the estate for the late James Hendrie Fairley and the late June Mary Fairley	Yes
295319	James Francis Fairley	Confirmation as the executor of the estate for the late James Hendrie Fairley and the late June Mary Fairley	Yes
295371	Rebecca Mason	Confirmation as the executor of the estate for Charles Tabor	Yes
295372	Michael Hughes	Confirmation as the executor of the estate for Charles Tabor	Yes
298422	Julie Watson	Land agent has confirmed livery licence	Yes
298423	Barry Cullum	Land agent has confirmed livery licence	Yes
298425	Courtney Byrne	Land agent has confirmed livery licence	Yes
298427	Victoria Oxland	Land agent has confirmed livery licence	Yes
298428	Andrew Robinson	Land agent has confirmed livery licence	Yes
298434	Wendy Robinson	Land agent has confirmed livery licence	Yes
298435	Lindsey-Cher Johnson	Land agent has confirmed livery licence	Yes
298436	Mazy King	Land agent has confirmed livery licence	Yes
298437	Pat Watson	Land agent has confirmed livery licence	Yes
298440	Louisa Thatcher	Land agent has confirmed livery licence	Yes
298441	Katy O'Donnell	Land agent has confirmed livery licence	Yes
298442	Tanya Wheeler	Land agent has confirmed livery licence	Yes
304144	David Graham Roscoe	Updated register provided Mr Roscoe as a new category 3 freeholder	Yes
304145	Barbara Jane Roscoe	Updated register provided Ms Roscoe as a new category 3 freeholder	Yes

THE NATIONAL GRID COMPANY plc

NGC SUBSTATIONS AND THE ENVIRONMENT: GUIDELINES ON SITING AND DESIGN

Section 1 INTRODUCTION

- The National Grid Company plc's (NGC's) policy statement on the environment recognises the importance of giving due regard to protecting and enhancing the environment and taking into account the environmental effects of the Company's actions. The Company has statutory duties in relation to preservation of amenity under Schedule 9 of the Electricity Act 1989, and has published a Schedule 9 Statement setting out the manner in which it proposes to meet these duties.
 - NGC has a statutory duty under the Act to develop and maintain an efficient, co-ordinated and economical transmission system of electricity for England and Wales. New transmission lines, new substations, sealing end compounds, line entries, additions and extensions to existing substations may be required to provide new connections for customers or reinforcement of the national grid system arising from changes in the demand for and generation of electricity.
- This document explains the approach NGC takes towards such developments (Section II) and contains Guidelines (Section III) to assist those responsible for siting and designing substations to mitigate the environmental effects of such developments and so meet the Company's policy. The document complements the Company's Holford Rules guidelines on the routeing of high voltage transmission lines and when appropriate should be used in conjunction with them.
- The guidelines are to be used by NGC staff, their consultants, and contractors in the siting and design of new substations and extensions to substations. They reflect the criteria the company requires its staff, consultants and contractors to satisfy.
- As recognised in its Schedule 9 Statement NGC places importance on consultation with statutory planning and amenity bodies over its proposals for new developments. NGC believes that the availability of these guidelines will assist in such discussions by referring to the main considerations relevant to substation siting, and will thereby assist in achieving the most appropriate siting and design solutions.

Section II NGC'S APPROACH TO DESIGN AND SITING OF SUBSTATIONS

Approach to the Environment

- NGC's environmental policy recognises the importance of giving due regard to protecting and enhancing the environment and taking into account the effect on the environment of all the Company's actions. Following the principle of integrating environmental considerations into all its activities, NGC seeks to keep known adverse effects on the environment to a reasonably practicable minimum and, in accordance with its duties under Schedule 9 of the Electricity Act, the Company gives due regard to the preservation of amenity and takes reasonable steps to mitigate the effects of its relevant proposals. To achieve these aims the Company therefore has to balance technical, economic and environmental considerations to reach reasonably practicable development proposals.
- The guidelines (Section III) deal with the amenity issues associated with the siting and design of new substations and major extensions or major modifications to existing substations. They cover a range of key issues from the time options are initially considered to final design, including form, silhouette and colour of the entire development in relation to the surrounding area, and also related issues such as overhead line entries, since these are dominant features in any substation.

Environmental Report

In order to achieve these objectives, the environmental effects of new substations and extensions or modifications to existing substations will be assessed and where appropriate an environmental report prepared describing the effects and mitigative measures. Items to be considered are summarised in Appendix A.

Integrating Environmental Considerations into Power System Planning

- 9 The nature of transmission system planning is such that scheme proposals and options may go through various stages before it is finally decided to proceed with construction.
- The purpose of each proposal for substation, sealing end compound or line entry development should be set out in a brief, and a range of system and siting options should be evaluated and documentated as part of the selection of the preferred solution. In each case the effects of the overall development on the environment should be assessed, prior to a commitment to a particular site or design.
- When it is clear a project is likely to proceed, an assessment should be made of any additional skills required to deal effectively with the range of environmental, land use, planning and design issues. Consideration should also be given to consultation as soon as reasonably possible with appropriate statutory planning and amenity bodies.

Liaison with other Electricity Companies

NGC will encourage and recommend other parties such as power generators or regional electricity companies to adopt these guidelines when

working with NGC on proposals for substations, sealing end compounds or line entries.

Post Construction Review

Following completion of the project, a review should be undertaken to check that the necessary measures identified in the environmental report have been implemented.

Section III GUIDELINES

Overall System Options and Site Selection

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.

Amenity, Cultural or Scientific Value of Sites

The siting of new NGC 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.

Notes:

1 Internationally and nationally designated areas of highest amenity, cultural or scientific value are:

National Parks; Areas of Outstanding Natural Beauty; Heritage Coasts; World Heritage Sites; Ramsar Sites:

Sites of Special Scientific Interest:

National Nature Reserves;

Special Protection Areas:

Special Areas of Conservation.

- 2 Care should be taken in relation to all historic sites with statutory protection eg Ancient Monuments, Battlefields and Listed Buildings.
- 3 Account should be taken of Government Planning Policy Guidance and established codes of practice.
- 4 Account should be taken of any development plan policies relevant to the siting or design of substations.
- 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.

Local Context, Land Use and Site Planning

4 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.

Notes:

- 1 A preliminary study should be undertaken to identify the extent of land required to meet both operational and environmental needs.
- 2 In some instances it may be possible to site a substation partially or fully enclosed by existing woodlands.
- 3 Topographical information should be obtained at an early stage. In some cases a geotechnical survey may be required.
- The proposals should keep the visual, noise and other environmental effects to a reasonably practicable minimum.

Notes:

- 1 Allow sufficient space for screening of views by mounding or planting.
- 2 Consider appropriate noise attenuation measures where necessary.
- 3 Use security measures which minimise visual intrusion from lighting.
- 4 Consider appropriate on-site water pollution prevention measures.
- 5 Consider adjoining uses and the amenity of local inhabitants.
- The land use effects of the proposal should be considered when planning the siting of substations or extensions.

Notes:

- 1 Issues for consideration include potential sterilisation of nationally important land, eg Grade 1 agricultural land and sites of nationally scarce minerals.
- 2 Effects on land drainage.

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.

Notes:

1 With outdoor equipment, a preference should be given normally to a low profile design with low height structures and silhouettes

- appropriate to the background.
- 2 Use lightweight narrow section materials for taller structures especially for gantries over about 6 metres in height.
- 3 Commission exterior design and colours appropriate to the surroundings.
- 4 Materials and colours for buildings, equipment and fencing should be chosen to harmonise with local surroundings.
- 5 Where possible avoid the use of prominent insulators by consideration of available colours appropriate to the background.
- 6 Where possible site buildings to act as visual screens for switchgear.
- 7 Ensure that the design of high voltage and low voltage substations is co-ordinated by early consultation between NGC and its customers.
- 8 Where there are particular technical or environmental constraints, it may be appropriate to consider the use of Gas Insulated Switchgear (GIS) equipment which occupies less space and is usually enclosed within a building.
- 9 Early consideration should be given to the routeing of utility service connections.
- 8 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.

Notes:

- 1 Assess the benefit of removing redundant substation equipment from existing sites where this would improve their appearance.
- 9 The design of access roads, perimeter fencing, earthshaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings.

Line Entries

- 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.

NGC SUBSTATIONS - ENVIRONMENTAL REPORT

Introduction

All proposals for significant extensions of existing substations or for new substations and associated development should be the subject of an environmental appraisal and an environmental report should be produced. The project manager will be responsible for ensuring that an appropriate appraisal is undertaken and report prepared, with due regard to expert advice available to the team.

For a major development a scoping exercise should be undertaken with the contribution of appropriate skills to establish the range and depth of the appraisal. It will generally be appropriate at this stage to consider consultation with the local planning authority.

A clear distinction should be drawn between the preparation of an environmental report which will be undertaken in most cases and a full environmental statement (ES) which may on occasion be required under UK environmental assessment legislation, for example where the substation forms part of a major new power station for which an ES may be needed.

Recommended Content of Environmental Reports for Substations

Section 1

Information describing the project during construction, when operational and on decommissioning including:-

- 1.1 Purpose and physical characteristics of the project, including details of access and transport arrangements and employment.
- 1.2 Land use requirements and other physical features of the project.
- 1.3 Operational features of the project and relevant measurements of emissions such as noise, vibration, light, heat and electric and magnetic fields.
- 1.4 Main alternative sites considered and reasons for final choice.

Section 2

Information describing the site and its environment including:-

- 2.1 Physical features such as
 - -Flora and fauna
 - -Soil: agricultural quality, geology
 - -Water courses including land drainage generally
 - -Climatic factors

- -Historic heritage and archaeological sites
- -Landscape and topography
- -Local recreational uses
- -Proximity of population and any other relevant environmental features.

2.2 The policy framework

The policy framework including all relevant statutory designations such as national nature reserves, sites of special scientific interest, national parks, areas of outstanding natural beauty, heritage coasts, special protection areas, special areas of conservation, regional parks, country parks, national forest parks, local nature reserves, areas affected by tree preservation orders, water protection zones, minerals protection zones, nitrate sensitive areas, conservation areas, listed buildings, scheduled ancient monuments, and designated areas of archaeological importance. It should also include references to Structure, Unitary and Local plan policies applying to the site and the surrounding area which are relevant to the proposed development as well as to any international designations.

Section 3

Assessment of effects on the surrounding area and landscape including:-

- 3.1 Visual effects, emissions during normal operation, noise, light, impact on local roads and transport.
- 3.2 Effects of the development on buildings, the architectural and historic heritage and archaeological features.
- 3.3 Loss of, and damage to flora, fauna and geology.
- 3.4 Land use/resource effects such as
 - quality and quantity of agricultural land to be taken
 - sterilisation of mineral resources and alternative uses of the site.
- 3.5 Changes to hydrographic characteristics.
- 3.6 Air and Climate
- 3.7 Indirect matters such as
 - traffic (road, rail, air, water) related to the development,
 - development associated with the project, eg new roads, sewers, power lines, pipelines, telecommunications etc.

Section 4

Mitigation measures

- 4.1 Where significant adverse effects are identified, a description of the measures to be taken to avoid, reduce or remedy those effects, eg
 - a) site planning;

- b) technical measures eg equipment selection, recycling of waste or redundant parts, pollution control and treatment, containment (eg shielding of transformers and bunding)
- c) aesthetic and ecological measures eg
 - mounding, design, colour, landscaping, tree planting
 - measures to preserve particular habitats or create alternative habitats
 - recording of archaeological sites
 - measures to safeguard historic buildings or sites.

END



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